11.8 THE SITUATION OF THE STUDY AREA

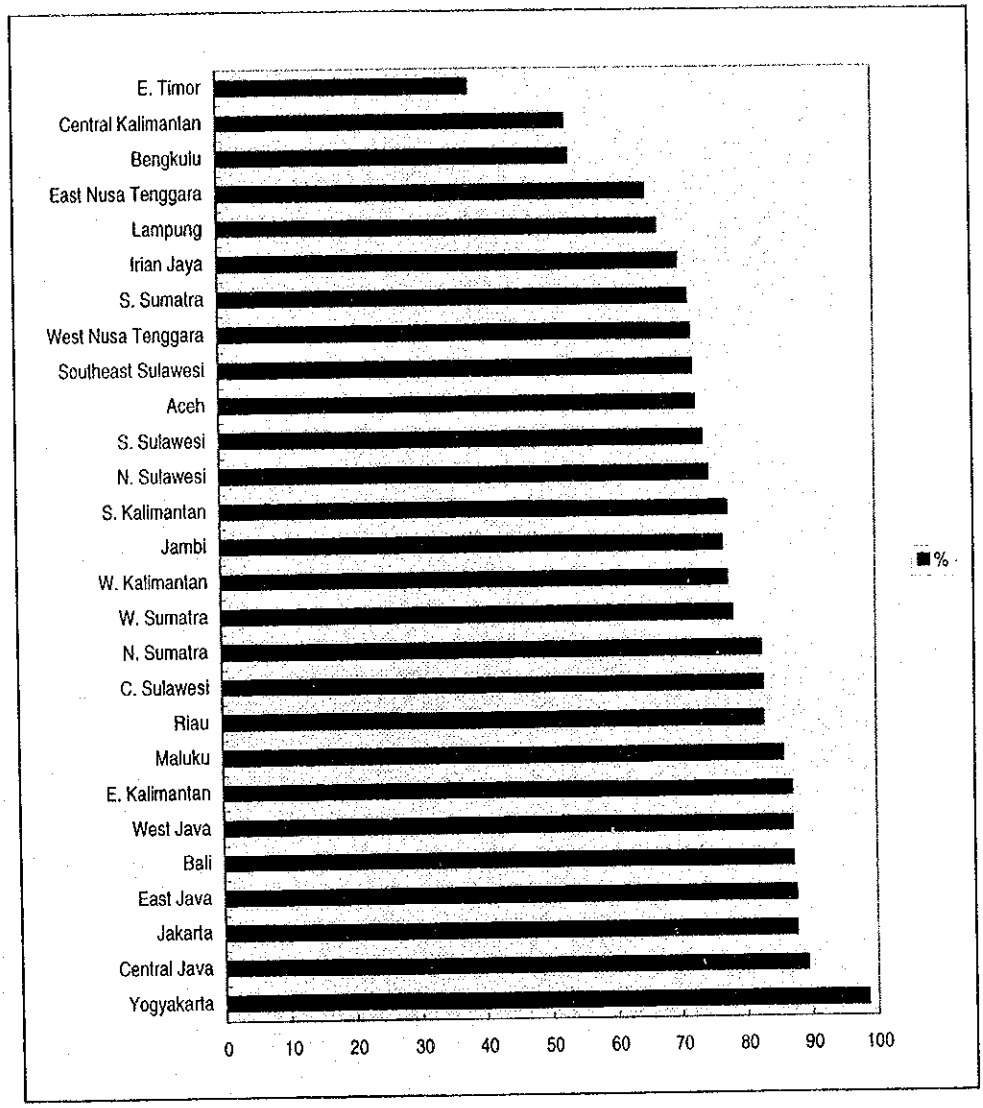
11.8.1 Basic Education

(1) Overview

At the national level, the GER of SD reached 112% in 1996/97. The rate of more than 100% explains the fact that a great number of children, who do not fall into expected schooling age (7-12 years old), are enrolling in SD. In 1997/98, that of West Kalimantan is 107% and 100% in Central Kalimantan. Concerning NER, those of West and Central Kalimantan are only 85% and 88% in 1997/98 respectively while the national average reached 95% in 1996/97. In reference to SD retention rate, Figure 11.8.1 shows that Central Kalimantan was positioned as the second lowest among all provinces where only 53% of the pupils were supposed to have completed SD education in 1994/95. The rate of West Kalimantan was 77.6% in the same period, which was better than that of Central Kalimantan, but still lower than the national average (81.7%).

In the case of SLTP, the growth of the student enrollment has been stagnant. Figure 11.6.3 (see previous section) indicates that the level of enrollment is very low in comparison with other provinces. In 1996/97, the GER and the NER of Central Kalimantan are slightly better (57% and 44%) than those of West Kalimantan (55% and 40%).

Figure 11.8.1 SD Retention Rates by Province 1994/95



Source: World Bank, ibid., 1997
Note: Average for Indonesia = 81.7

Moreover, as found in the previous section of 11.6, there are larger educational wastage in both provinces than in the other provinces (See Figure 11.6.1 and 11.6.4). It means a significant number of students/pupils give up school and/or stay at school longer than the expected schooling years in SD as well as SLTP.

In contrast with poor student enrollment and high wastage, the physical settings of both provinces is above or as good as the national average: less number of pupils/students in one school, and low ratio of pupils/students to teachers in SD as well as SLTP (See Table 11.8.1 and 11.8.2).

Table 11.8.1 Ratio of Pupils/Students to Schools by Province 1995/96

	Primary school (SD)			Junior secondary school (SLTP)	
1	Central Kalimantan	103	1	Central Kalimantan	175
2	North Sulawesi	114	2	Central Sulawesi	176
3	Central Sulawesi	122	3	North Sulawesi	192
4	South Kalimantan	125	4	Jambi	198
5	Bali	126	5	West Kalimantan	203
6	Jambi	134	6	South Kalimantan	203
7	Irian Jaya	135	7	Maluku	203
8	DI Yogyakarta	137	8	Riau	209
9	South Sulawesi	138	9	East Nusa Tenggara	222
10	Maluku	140	10	East Timor	222
11	Nusa Tenggara East	150	11	South Sulawesi	227
12	East Java	153	12	Southeast Sulawesi	239
13	West Kalimantan	157	13	West Nusa Tenggara	243
14	Southeast Sulawesi	157	14	Irian Jaya	246
15	Bengkulu	160	15	Lampung	249
16	West Sumatra	171	16	Kalimanta Timur	253
17	Central Java	173	17	DI Aceh	256
18	Kalimanta Timur	174	18	Bengkulu	262
19	Riau	177	19	South Sumatra	266
20	DI Aceh	179	20	North Sumatra	279
21	West Nusa Tenggara	184	21	DI Yogyakarta	306
22	East Timor	188	22	West Sumatra	326
23	South Sumatra	189	23	Bali	355
24	North Sumatra	191	24	West Java	357
25	West Java	192	25	East Java	357
26	Lampung	224	26	Central Java	367
27	DK Jakarta	262	27	DK Jakarta	390
	National average	169		National average	299

Source: MOEC, ibid., 1997
Note: Including Islamic schools (MI, MTs and MA)

Table 11.8.2 Ratio of Pupils/Students to Teachers by Province 1995/96

	Primary school (SD)			Junior secondary school (SLTP)	
1	North Sulawesi	13	1	DI Yogyakarta	13
2	Central Kalimantan	15	2	South Kalimantan	13
3	Bali	15	3	North Sulawesi	13
4	DI Yogyakarta	16	4	Bali	13
5	South Kalimantan	17	5	West Nusa Tenggara	13
6	South Sulawesi	18	6	DI Aceh	14
7	Bengkulu	19	7	Jambi	14
8	East Java	20	8	Lampung	14
9	East Kalimantan	20	9	Central Sulawesi	14
10	Central Sulawesi	20	10	South Sulawesi	14
11	Southeast Sulawesi	20	11	Maluku	14
12	West Nusa Tenggara	20	12	West Sumatra	15
13	Irian Jaya	20	13	West Kalimantan	15
14	East Timor	20	14	Central Kalimantan	15
15	Jambi	21	15	East Timor	15
16	West Kalimantan	21	16	East Java	16
17	Central Java	22	17	Bengkulu	16
18	DI Aceh	22	18	East Kalimantan	16
19	East Nusa Tenggara	22	19	Southeast Sulawesi	16
20	West Sumatra	23	20	East Nusa Tenggara	16
21	Lampung	23	21	DKI Jakarta	17
22	Maluku	23	22	West Java	17
23	North Sumatra	24	23	Central Java	17
24	DKI Jakarta	25	24	North Sumatra	17
25	Riau	25	25	South Sumatra	17
26	South Sumatra	25	26	Riau	18
27	West Java	30	27	Irian Jaya	18
	National average	22		National average	16

Source: MOEC, ibid., 1997
Note: Including Islamic schools (MI, MTs and MA)

These facts provoke the following questions: why can children not enroll in the school, and why can they not complete school even though the number of schools and teachers seems enough? Before answering these questions, a detailed analysis within each province is conducted below.

(2) Regional Disparities within the Province

1) SD

Table 11.8.3 and 11.8.4 show the ratio of pupils/students to schools and teachers, and the ratio of teachers to schools by districts. In West Kalimantan, large amounts of students are accommodated at schools located in highly urbanized areas of dense population, especially in the Pontianak municipality and the Sambas district. However, there is, overall, a small ratio of students per teacher but this does not infer a surplus of teachers. In fact, there is a shortage of teachers, particularly in the rural areas such as the districts of Sintang, Sanggau, Kapuas Hulu and Ketapang where a teacher might teach more than one grade-class in a school with less than the minimum requirement of 6 teachers. In remote areas where one school has a very small number of pupils, it is not an unusual situation that there is only one or two teachers in one school[22]. In Central Kalimantan, the ratio of pupils both to schools and to teachers is acceptable level as a whole. Although a number of students in the Palangkaraya municipality is much more than the other districts, it is still below the national average and there is a enough teachers. However, there are 3 districts (Kotawaringin Barat, Kotawaringin Timur and Barito Utara) whose average number of teachers per school is less than 6.

Table 11.8.3 The Situation of Pupils/Students, Schools, and Teachers of SD in West Kalimantan 1997/98

	No. of pupils	No. of schools	No. of teachers	Pupils/Schools	Pupils/Teachers	Teachers/Schools
Pontianak Municipality	64900	225	2922	288	22	13.0
Pontianak	136990	915	6230	150	22	6.8
Sambas	147954	735	6537	201	23	8.9
Sanggau	88256	649	3852	136	23	5.9
Sintang	73977	516	2926	143	25	5.6
Kapuas Hulu	28916	367	2063	79	14	5.6
Ketapang	61765	483	2718	128	23	5.6
Province	602758	3890	27248	155	22	7.0
Province in 1995/96				157	21	7.0
Indonesia in 1995/96				169	22	8.0

Source: Kandep, *Laporan Profil Pendidikan Tahun 1997/98*, Kalimantan Barat (District level education statistics)
Note: Including MI

[22] KOMPAS, " Potret Buram Pendidikan Dasar di Kalbar", 10 January 1998.

Table 11.8.4 The Situation of Pupils/Students, Schools, and Teachers of SD in Central Kalimantan 1997/98

	No. of pupils	No. of schools	No. of teachers	Pupils/Schools	Pupils/Teachers	Teachers/Schools
Kotawaringin Barat	33977	312	1806	109	19	5.8
Kotawaringin Timur	77976	716	3677	109	21	5.1
Kapuas	87778	880	5605	100	16	6.4
Barito Selatan	27911	311	2227	90	13	7.2
Barito Utara	32792	338	1806	97	18	5.3
Palangkaraya Municipality	21588	141	1121	153	19	8.0
Province	282022	2698	16242	105	17	6.0
Province in 1995/96				103	15	7.0
Indonesia in 1995/96				169	22	8.0

Source: Kandep, *Laporan Profil Pendidikan Tahun 1997/98*, Kalimantan Tengah (District level education statistics)
Note: Including MI

2) SLTP

The number of students per school in the Pontianak municipality in West Kalimantan and the Palangkaraya municipality in Central Kalimantan is tremendously more than those of other districts while the conditions of these two provincial capitals are much better than the other areas from the viewpoint of the number of teachers (Table 11.8.5 and 11.8.6). On the contrary, there are some areas where there are a fewer number of students in one school but one teacher covers more students. Four districts are identified as such areas: Pontianak and Kapuas Hulu districts in West Kalimantan, and Kotawaringin Barat and Kotawaringin Timur districts in Central Kalimantan. It is notable that there are only 5-7 teachers in one school on average in these. Since SLTP teachers are not class teachers but subject teachers and there are more than 10 subjects taught at school, it means that one teacher handles more than one subject than that of his/her major.

Table 11.8.5 The Situation of Pupils/Students, Schools, and Teachers of SLTP in West Kalimantan 1997/98

	No. of students	No. of schools	No. of teachers	Students/Schools	Students/Teachers	Teachers/Schools
Pontianak Municipality	29180	81	1752	360	17	21.6
Pontianak	33029	183	807	180	41	4.4
Sambas	31756	149	1856	213	17	12.5
Sanggau	18734	95	1047	197	18	11.0
Sintang	14342	69	850	208	17	12.3
Kapuas Hulu	7752	52	250	149	31	4.8
Ketapang	12754	54	288	236	44	5.3
Province	147547	683	6850	216	22	10.0
Province in 1995/96				203	15	13.0
Indonesia in 1995/96				299	16	19.0

Source: Kandep, *Laporan Profil Pendidikan Tahun 1997/98*, Kalimantan Barat (District level education statistics)
Note: Including MTs

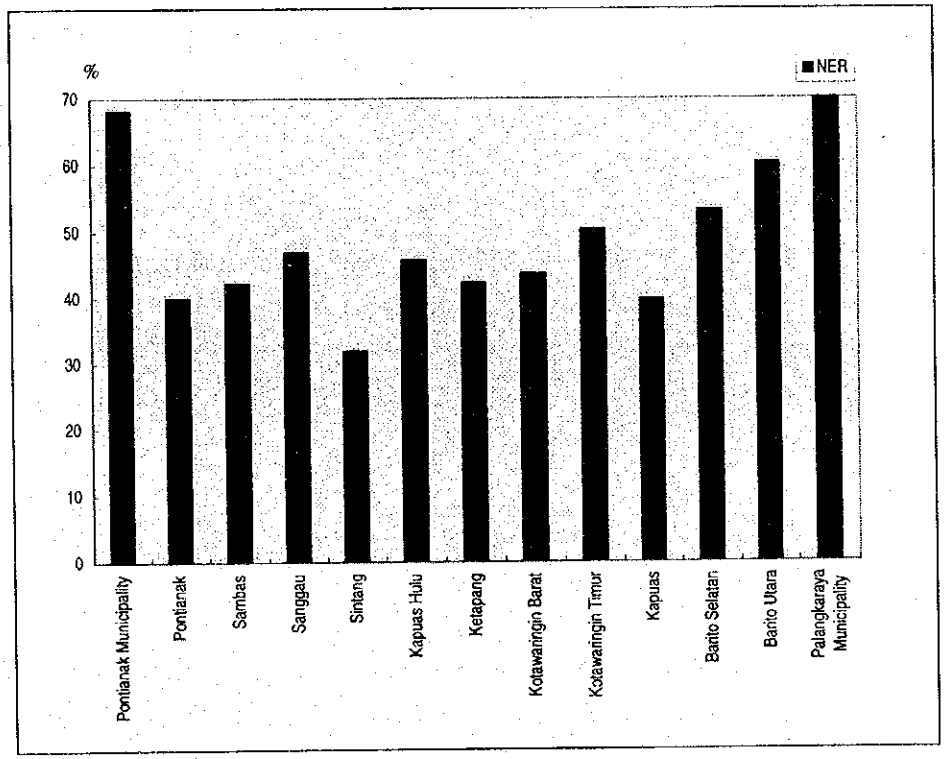
Table 11.8.6 The Situation of Pupils/Students, Schools, and Teachers of SLTP in Central Kalimantan 1997/98

	No. of students	No. of schools	No. of teachers	Students/Schools	Students/Teachers	Teachers/Schools
Kotawaringin Barat	8512	49	230	174	37	4.7
Kotawaringin Timur	18560	98	701	189	26	7.2
Kapuas	20832	103	1026	202	20	10.0
Barito Selatan	7825	49	615	160	13	12.6
Barito Utara	6958	54	366	129	19	6.8
Palangkaraya Municipality	8618	31	611	278	14	19.7
Province	71305	384	3549	186	20	9.2
Province in 1995/96				175	15	12.0
Indonesia in 1995/96				299	16	19.0

Source: Kandep, *Laporan Profil Pendidikan Tahun 1997/98*, Kalimantan Tengah (District level education statistics)
Note: Including MTs

If compared with school-poor areas (two provincial capitals) to teacher-poor area (the above four districts) from the viewpoint of the enrollment rate, the NER of school-poor areas are much better than those of teacher-poor areas as Figure 11.8.2 shows. It indicates that a teacher is more significant factor in affecting student enrollment than a school. In case of Ketapang district in West Kalimantan and Kapuas district in Central Kalimantan, poor conditions of both school and teacher are reflected in the low NER in the areas.

Figure 11.8.2 NER of SLTP by District 1997/98



Source: Kandep, ibid., Kalimantan Barat, dan Kalimantan Tengah
Note: Including MTs

Actually however, so many other factors aside from teacher, such as access to school and the parents economic conditions, relate to SLTP enrollment especially in rural areas. The next part will give an explanation about these factors.

(3) The Actual Situation in the Rural Area: Case Studies

This part aims at finding the constraints hindering universal basic education in the rural area by describing the situation of two villages where the JICA study team conducted the social survey (2): one in the Sanggau district in West Kalimantan, and the other in the Kapuas district in Central Kalimantan.

The village (*dusun*) in West Kalimantan is located in an inland area and connected with its subdistrict town by river and road. It takes about 30-40 minutes to go to the subdistrict town down stream by boat with small engine, but one and half hours is required to come back. The road is narrow, muddy, winding and up-and-down. The only possible transportation means by land is 40 minutes by motorcycle or one hour on foot by a shortcut. However, during heavy rains, the road becomes almost impossible.

The all Dayak village population is 525 people. All 114 households are engaged in swidden agriculture. There is one public SD, which was established in 1976, with 52 pupils. The nearest SLTP is situated in the subdistrict town.

The largest problem of education in this village stems from the fact that the SD is not open regularly because teachers do not come to teach every day.

There are three teachers: a schoolmaster who was posted 6 years ago; a teacher who was posted just 3 months ago; and the other, originally from East Nusa Tengara, who has been staying in the village and teaching in the school for more than 17 years. The former two, both of whom are from Java, commute to the school from the subdistrict town together by one motorcycle. According to the villagers, when the schoolmaster does not come to school for whatever the reason, the other teachers also do not come so that the school is not open. In the rainy season, bad road conditions make it impossible for two of them to come to the village. River transportation by boat is too expensive at Rp 15,000 for a one-way trip. Some child also have said that teachers come and teach earnestly for only a few weeks after payday and the average number of schooling days per week are only 3 days.

This has been the usual situation in this village for long time. There have been, so far, no teachers from the village. Teachers who come from outside do not tend to stay in the village but move to other schools after a certain period of service. Generally speaking, non-local teachers

do not want to stay in remote areas and the rotation system here contributes to this by giving them a chance to move after serving several years in a remote area if a post is available.

At present, there are 52 pupils in the school and classification of sex and grade is as follows:

Grade	Boys	Girls	Total
I	7	11	18
II	2	6	8
III	8	3	11
IV	2	3	5
V	3	2	5
VI	3	2	5
Total	25	27	52

It is not natural that the higher grade have only half of the number of pupils compared to those of the lower grades. It implies that the dropout rate is high. According to the schoolmaster, 7-8 children drop out every year. This is more than 10% out of total pupils, but, surprisingly, he perceives that it is not so much. Dropout happens mostly at grade II and III because children at that age[23] are big enough to help their parents and tend to lose interest in learning after a few years of schooling. The second reason is, ironically, self-evident, that of poor teachers' performance. In addition, another teacher mentioned that the frequent absence of pupils, which often happens during the agricultural season, in order to help their families work, results in their poor learning performance.

Teachers tend to attribute all problems to the parents' poor economic condition while villagers complain about the lack of teachers' dedication to education. Even though they admit to their economic difficulty, they really want to give their children the best education possible. At least, one can clearly say that the lack of teachers' dedication discourages children's attitude to learn, not vice versa. In such circumstances, it is no wonder that trust and cooperation between teachers and community has never been fostered.

In reference to transition from SD to SLTP, 3-4 out of 7 SD graduates have proceeded to SLTP annually over the last 3 years since 1994 when the nine-year compulsory education was introduced. At present, there are 12 SLTP students from the village as classified below:

	Boys	Girls
a) Going to SLTP in subdistrict town		
-stay in the town	2	4
-going to school from the village	2	1
b) Staying in another subdistrict town and going to SLTP there	2	1
Total	6	6

[23] Normally, 8-9 years old is supposed to be the age of children at grade II or III. In this village, however, children are already more than 10 years old at that grade because of late enrollment.

Some SLTP students are much older than the expected schooling age. In addition to their late start in schooling, teachers' frequent absence have forced them to take more than 6 years to complete their study in SD. There are three major reasons of discontinuity from SD to SLTP and SLTP drop-out: lack of basic learning ability to follow classes, family's poor economic condition and long distance to the school from the village.

Lack of basic learning ability, mainly because of extremely poor learning environment of SD, is the first obstacle for children during their school days in SLTP. In addition to the difficulty to follow the classes, they have less time to study. The students, who go to school from the village, spend 2 hours for commuting every day and help their families to work after coming back from school. Some are even collecting fire wood and fruits from the forest by themselves to sell in order to make money to buy stationary since support from the parents is not enough. The students, who stay in the subdistrict town, also help with household work or in the businesses of the families that they are boarding with in return for their stay.

Economic problem can not be solved by the efforts of education sector alone. However, it is possible that some pupils / students do not need to give up school if their SD teachers do their own duty.

The above example likely implies that some of the problems might be solved to great extent if the teacher from his/her locality is posted in the school of his/her own village. However, even in the area where almost all the teachers are local and staying in the village, the problem still exists as the following case exemplifies.

The village (*desa*) in Central Kalimantan is situated alongside the Kahayan river. It takes more than 2 hours from the provincial capital by speedboat. There are 71 households with a population of 221 which are almost all Dayak. Their main economic activity is swidden agriculture along with timber cutting and gold mining. The village is connected to the nearest subdistrict town by provincial road which is unpaved, sandy, and heavily up-and-down. It takes 20 minutes to ride by motorcycle to the subdistrict town. It is more convenient to use river transportation which goes to the subdistrict town in about 5 minutes by boat with small engine. There are 3 motorcycles, 20 bicycles, and 16 big and 55 small boats all of which are privately owned in the village.

There is one public SD in the village which was built in 1979 with 68 pupils. The nearest SLTP and SMU are located in the subdistrict town. There are 7 SD teachers in the village consisting of 4 males and 3 females, and a male schoolmaster. All of them, except for one who commutes from a neighboring village 30 minutes away by foot, live in the village. They are all the village origin or from neighboring villages and have taught here for many years. The schoolmaster, for instance, has been teaching for 28 years. According to the teachers, the major problem in SD

education is the high dropout rate. Last year, there were 10 dropouts which is more than 10 % of the total the same as the village in West Kalimantan. Most of their families are engaged in gold mining. Frequent absences in order to follow the family, which moves from one place to another to find gold, discourages children to continue studying[24]. Except for the high dropout rate, it is likely that there is no other problem in this SD. Transition rate from SD to SLTP has been 100% since about 6 years ago.

Actually, however, the interview with a villager, who came from outside and settled in the village, revealed the fact that those teachers were not coming to school to teach every day, but averaged about 3 days per week. He criticized that they pretended to do their duty when outsiders like us or supervisors from the subdistrict office come. Other villagers, according to him, also have same criticisms but they just accept it as is because they cannot choose another SD. If what he said is true, such a situation must be one of the reasons for the high dropout rate. Moreover, it is understandable why villagers did not speak out when the social position of the teachers in the village was concerned. They are apparently better-off, and seemed to play an active role in the community. For example, when the study team conducted participatory rural appraisal and planning, they as well as the elders and members of the village development committee, are the most active in explaining their daily lives, village profile and constraints on village development. On another day, one female teacher led monthly child-mother care activity (*posyandu*).

From observation, the following interpretation might be drawn: the teachers were originally from well-off families so that they could receive higher education than the others and came back to their own villages as teachers, namely, national government officials. In addition to stable income and provided housing, it was relatively easy for them to possess their own farming field, from which they could earn an extra income, like their village counterparts. Actually, most of them have rubber groves and rice fields, and some even have machines for gold mining. The increase of economic status and higher educational attainment led them to a socially high position in the village. Therefore, it is difficult for ordinary villagers to criticize them. It is ironic that there is no parents' association in the SD and schoolmaster seems to consider this good for the villagers because they do not need to contribute money for it.

In the case of SLTP education, distance to the school in subdistrict town and no access to public transportation means discourage some students to continue their study, like in West Kalimantan. The significance of economic difficulty is less because the average living standard is high enough to cover education costs.

[24] The research in West Kalimantan indicates that gold mining activities did not affect the children's education because SD children are too small to work in mining. However, workers from a distance bring their families, so their children temporarily join the school nearby and move to other places if gold exploitation is over (Tim peneliti Jarlit Dikbud,

As the above two examples illustrate, the critical points are lack of: 1) the teacher's own sense of responsibility and dedication to education; 2) community participation in education; and 3) incentives to encourage or oblige teachers to devote themselves to their own job.

(4) Factors Discouraging Teacher's Dedication

All public school teachers receive a base salary and fringe benefits on par with other national government employees. It ranges from Rp 150,000 (starting salary) to Rp 600,000 depending on the rank. Actually, teachers are getting relatively higher salary than others because of additional allowances such as functional and remote area allowance. Nevertheless, according to staff of the local office of education and culture, teachers' salaries are generally perceived as low compared with their workload, whereas the main duties of government office staff are routine desk-work. Therefore, school teachers have not been popular among the young. As a result, students who were not able to enter other kinds of higher education institutes have chosen the school teacher career unwillingly. It is one of the reasons for the lack of their dedication to children's education. Especially for SD teachers, there are very few incentives to work in remote areas for several reasons:

- Life in such an area that is agriculture-oriented and relatively self-sufficient, is not so convenient for salaried persons unless they come from that locality and there is no opportunities to find a secondary job to get a supplement income.
- The area is too far from the reach of the administrative line of the government to receive the necessary support and supervision so it makes them feel isolated and ignored. For example, some SD in remote area in West Kalimantan have never been visited by supervisors from the local offices for many years[25] .
- The second reason induces the delay of salary payment and few chances to receive in-service training. Thus, it is understandable that SD teachers sense that they are not appreciated and rewarded enough.

Moreover, it should be remarked that the recent changes of educational qualification tends to worsen the situation because high investment in getting higher education cannot be rewarded by a good return. It also narrows opportunities to become a teacher for rural people who are willing to become teachers and work in their locality but cannot afford the cost of higher education.

(5) The Situation of the Urban Area

Propinsi Daerah Tingkat I Kalimantan Barat, *PENUNTASAN PEMERATAAN KESEMPATAN MEMPEROLEH PENDIDIKAN DASAR 9 TAHUN DI PROPINSI KALIMANTAN BARAT*, 1995/96.)

[25] KOMPAS, "Antara Sekolah dan Karet", 21 October 1997

In urban area, school parents' associations are quite actively involved in school activities. Especially, financial contributions from them are quite large. In the case of one public SD in Pontianak, the school requests parents to contribute Rp 2000 per month at least. Even though the school does not force them to pay if they cannot, the average contribution per student is more than Rp 3000. For example, Rp 1,600,000 was gathered of which Rp 1,200,000 was spent in a certain month. About 45% of the total went to teachers welfare including salary supplements and refreshments at school while the rest is used for routine administration such as expenses for electricity and telephones. It is usual in urban SD that the parents' contribution is used for the improvement of teacher's working conditions. In addition, millions of Rupiahs are collected for occasional needs such as building renovations and preparing school yard. It greatly encourages teachers to devote themselves to their work as well as pupils to concentrate on and enjoy learning.

In return, parents are very much interested in whether their contribution is used efficiently and effectively in order to improve their children's school. The schoolmaster is responsible to them and parents have opportunities to check school management. Such an environment fosters sound partnership between school and parents so that it helps to overcome the problems such as lack of facilities which cannot receive sufficient support from the government.

(6) School Libraries and Textbooks

Recent reviews of the literature on the education sector development in developing countries indicate that input factors showing most positive effect on children's learning activities are libraries, instructional time, homework, and textbooks[26]. Therefore, it is worth reporting the present condition of school libraries in the areas in order to draw implications for planning.

The condition of libraries in West and Central Kalimantan, as a whole, is very poor in the rural area whereas it is better but still inadequate in the urban area. In rural areas, a school has a room for library but it seems to be never used and there are no books while another has no library room so the limited number of textbooks and other readers are kept in the teacher's room. In urban SD, a library is equipped with desks and chairs for pupils to read, with a number of books classified by topics and arranged nicely on the shelves. However, it does not appear to be used efficiently because there is no librarian so that the room is locked most of the time. In addition, the topics of the books seem to be limited to the school subjects such as national language, biology, physics and religions. Therefore, it is highly questionable whether the existing libraries function as storerooms for teaching and learning materials or provide opportunities for pupils to enjoy reading which reinforce their cognitive abilities. Table 11.8.7

[26] It is followed, in order, by teacher knowledge, teacher experience, laboratories, teacher salary, and class size. (World Bank, *Priorities and Strategies for Education*, 1995.)

also indicates the shortage of libraries and the regional disparities. In West Kalimantan, there are schools, which have no libraries at all, in the Sintang district and the Ketapang district while most of schools have libraries in the Pontianak municipality and Pontianak district. In the case of Central Kalimantan, the overall situation is quite poor: only 31% of all schools have libraries.

Table 11.8.7 SD Libraries

West Kalimantan	No. of schools	Schools which have libraries	Central Kalimantan	No. of schools	Schools which have libraries
Pontianak Municipality	225	225	Kotawaringin Barat	320	51
Pontianak	915	832	Kotawaringin Timur	716	74
Sambas	735	398	Kapuas	880	620
Sanggau	649	11	Barito Selatan	311	6
Sintang	516	0	Barito Utara	339	36
Kapuas Hulu	367	43	Palangkaraya Municipality	N.A.	N.A.
Ketapang	483	0		2566	787

Source: Kandep, *Laporan Profil Pendidikan Tahun 1997/98*, Kalimantan Barat dan Kalimantan Tengah (District level education statistics)

Note: Including MI

In case of textbooks, the supply is absolutely not enough. Usual practice at school is that the books are rented out to pupils and returned after classes. Although books are revised sometimes, the old editions are being used over years. Some schools allow pupils to keep textbooks with them until the grade ends if every pupil can have one textbook. Therefore, it happens quite often that teachers write all contents of the textbook on the blackboard and pupils/students copy them in their notebooks. On average, the present ratio of textbooks to pupils is, on average, 1:2 in urban areas and 1:3 in rural areas.

Taking the positive effect of libraries and textbooks into account, it is substantially important to improve libraries and the provision of textbooks. Especially, great priority should be put onto rural areas which suffer from lots of disadvantages mentioned above. It was heard, during this survey, that development program for libraries of INPRES SD will be planned in the near future. Although it is not sure whether the information is reliable, it is highly appreciated because INPRES SDs are located in disadvantaged areas. If it is actually implemented, it is worth being supported by aid agencies.

11.8.2 Senior Secondary Education and Employment

(1) Overview

SLTA enrollment in both provinces is at an extremely low level compared to other provinces (Table 11.8.8). In terms of GER growth, as Figure 11.8.3 shows, there is no significant progress in the last 3 years. In the case of Central Kalimantan, GER of SMU, which was as good as the national average in 1993/94, has declined gradually. The growth of SMK

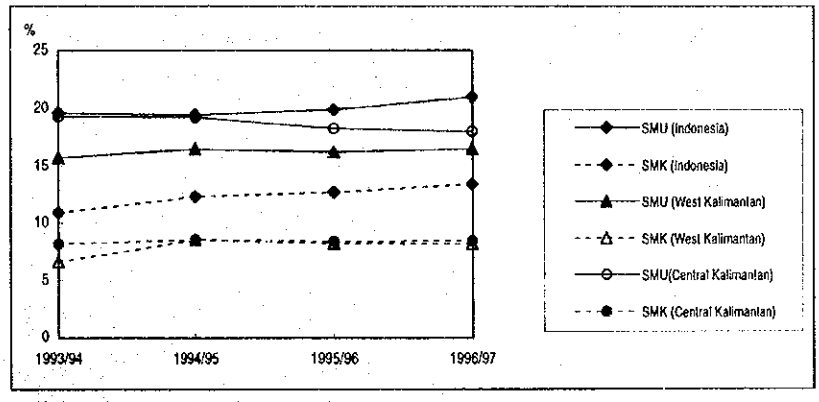
enrollment has been stagnant although that of the national average has increased slowly but constantly. Table 11.8.9 implies that the unbalanced number of students between SMU and SMK is caused by the number of schools of which SMU is about 4 times more than SMK.

Table 11.8.8 GER of SLTA by Province 1996/97

		%
1	DKI Jakarta	91
2	DI Yogyakarta	76
3	Bali	55
4	North Sumatra	49
5	Maluku	46
6	East Kalimantan	45
7	West Sumatra	45
8	North Sulawesi	44
9	East Java	39
10	Southeast Sulawesi	38
11	South Sulawesi	37
12	East Timor	36
13	Bengkulu	36
14	Central Java	36
15	DI Aceh	35
16	Irian Jaya	34
17	West Nusa Tenggara	32
18	South Kalimantan	32
19	Riau	31
20	South Sumatra	31
21	Jambi	30
22	Lampung	30
23	Central Sulawesi	30
24	**Central Kalimantan**	**29**
25	West Java	28
26	**West Kalimantan**	**27**
27	East Nusa Tenggara	26
	National average	**38**

Source: Data from BAPPENAS

Figure 11.8.3 The Growth of GER 1993/94 - 1996/97



Source: Data from BAPPENAS

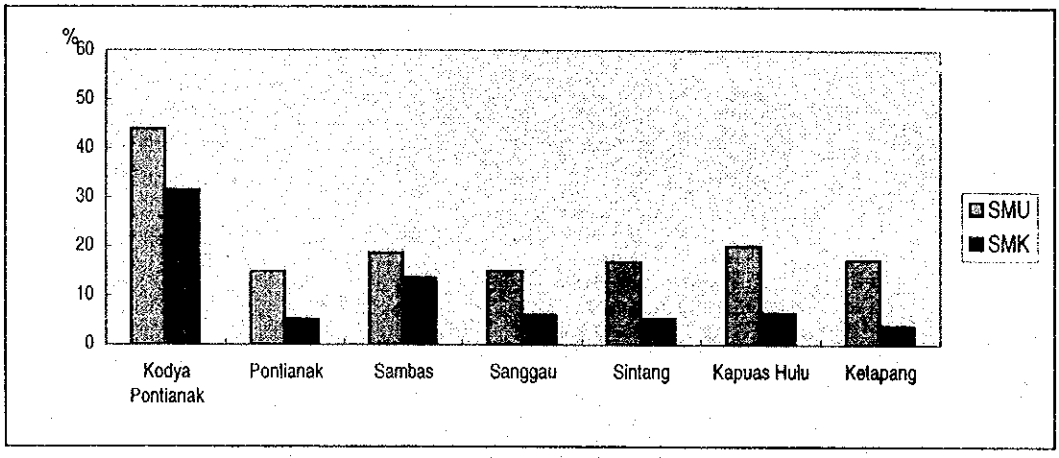
Table 11.8.9 Number of Schools and Students of SLTA by type 1995/96

	West Kalimantan				Central Kalimantan			
	No. of schools		No. of students		No. of schools		No. of students	
SMU	222	(82%)	46631	(69%)	123	(81%)	23158	(71%)
SMK	50	(18%)	21292	(31%)	29	(19%)	9438	(29%)
Total	272	(100%)	67923	(100%)	152	(100%)	32596	(100%)

Source: MOEC, ibid., 1997.

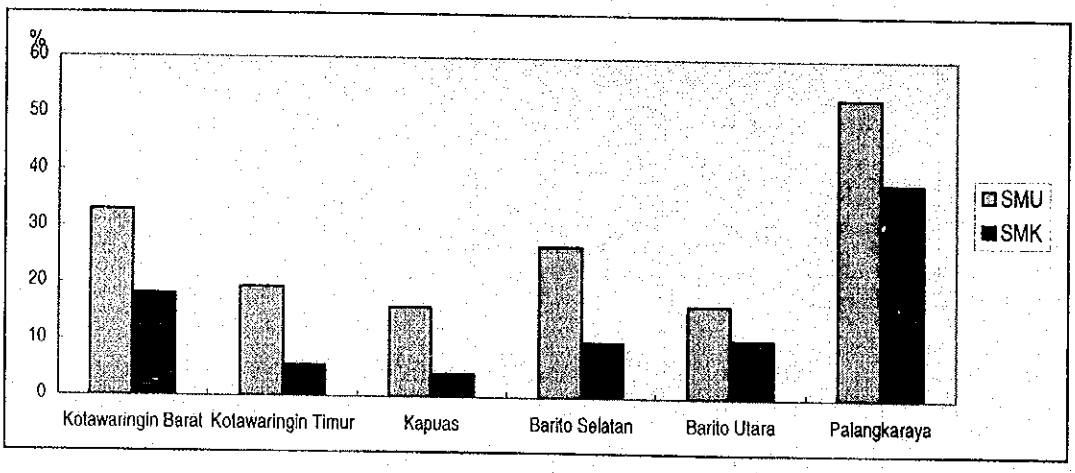
Within the provinces, student enrollment in senior secondary schools (SLTA) varies among the districts (Figures 11.8.4 and 11.8.5). The gap of GER between the two provincial capitals and other districts is very wide. Comparing the GER of SMU to that of SMK, the difference between these two is not so remarkable in the Pontianak and Palangkaraya municipalities while there is quite an obvious gap in the case of other districts. The GER of SMU is higher than SMK. This situation is reflected in the following facts.

Figure 11.8.4 GER of SMU and SMK by District in West Kalimantan 1997/98



Source: Kandep, *Laporan Profil Pendidikan Tahun 1997/98*, Kalimantan Barat (District level education statistics)
Note: SMU Includes MA.

Figure 11.8.5 GER of SMU and SMK by District in Central Kalimantan 1997/98



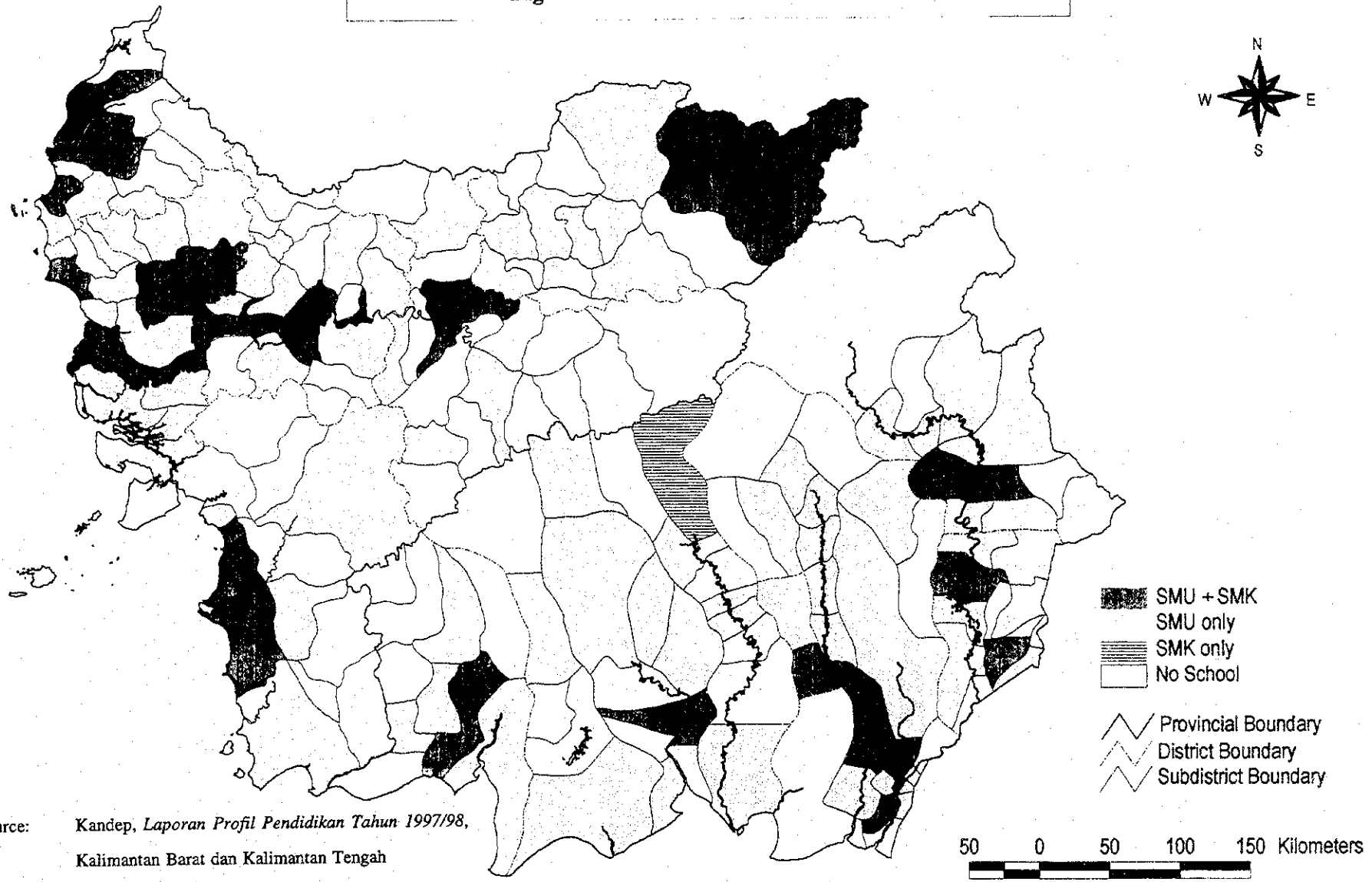
Source: Kandep, *Laporan Profil Pendidikan Tahun 1997/98*, Kalimantan Tengah (District level education statistics)

There is a larger number of SMUs more evenly distributed among most of the sub-districts while limited numbers of SMKs are located in only a few sub districts or only in a district town

(Figure 11.8.6). Therefore, the easiest choice for children in rural areas is going to the nearest SMU. If they want to continue at an SMK, they need to bear the extra cost for transportation or boarding and a school fee. In the village in Central Kalimantan where the JICA team carried out a social survey, children have to stay at the nearest subdistrict town to go to an SMU which is the only SLTA. If they have relatives or siblings in bigger towns outside their subdistrict or district, they prefer moving to go to school there rather than going to the nearest one. The reasons are: 1) there are more choices of schools; 2) it is commonly thought among villagers that schools in bigger towns provide quality education; and that 3) there are more employment opportunities in the bigger towns. Even if they have possible physical access to schools to which they want to go, they have to pass competitive exams to enter because senior secondary education is not compulsory.

In general, people prefer public schools to private schools because of the higher education quality and lower cost of the former than the latter. This preference and its limited capacities makes public SMKs the least accessible especially for people in remote areas. In urban areas, such as provincial capitals, a number of both public and private SMKs are available. Therefore, children in the urban area is much more advantaged than their rural counterparts. Only well-off families in rural areas can send their children to the provincial capitals for education.

Figure 11.8.6 Distribution of SLTA



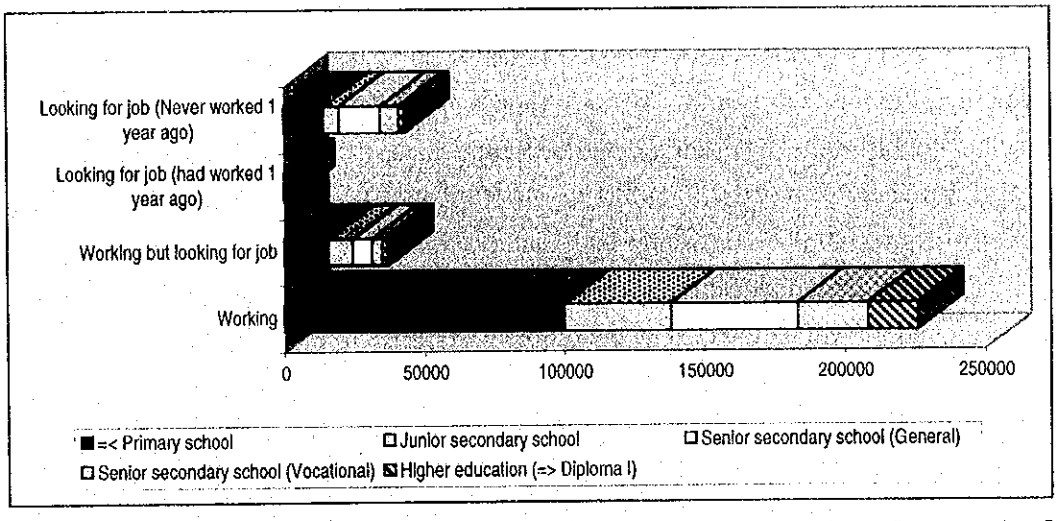
Source: Kandep, *Laporan Profil Pendidikan Tahun 1997/98*, Kalimantan Barat dan Kalimantan Tengah

Note: Including MA

(2) Employment and SMK Education

The employment situation of SLTA graduates is not so sound. The ratio of population whose education attainment is SMU is considerably large among those who have no jobs and are looking for jobs in the urban areas of both West and Central Kalimantan (Figure 11.8.7). If added with those of SMK, the ratio is quite large.

Figure 11.8.7 Population 10 Years of Age and Over by Educational Attainment and Type of Activity During the Previous Week (Urban Areas in West Kalimantan)[27]



Source: BPS, *Population of Kalimantan Barat: Results of the 1995 Intercensal Population Survey series: 92.18*, 1996

In rural areas, to become government employee at the subdistrict or the district level, or a teacher was expected path of SLTA graduates in the past. To attain higher education is one of the strategies for people to get such employment opportunities which assure a stable income. At the present, however, employment opportunities are far more scarce than before. The young just stay at their village and engage in traditional family farming activities. Otherwise, for instance in some villages, males work as manual wage laborers such as in gold mining while females work as housemaids in the towns.

11.8.3 The Cost of Education

It is frequently mentioned that economic difficulty of families is the one of the biggest reasons to prevent children from going to school, especially to SLTP and SLTA. Then, how much money

[27] Although the data of Central Kalimantan is not shown here, the composition of each category is very much alike in both provinces.

are families spending for children's education actually? The social survey conducted by the JICA team gives a realistic pictures of it as described below[28].

In the inland areas of West and Central Kalimantan, lots of children have to board at the towns to go to SLTP and SLTA because of the distance from their own villages to school. It means their families have to prepare a separate budget for the children's daily necessities such as housing and food, besides the cost for schooling. Table 11.8.10 presents the annual household expenditure for child's education based on the answer for household questionnaire. Expenditure varies from Rp 150,000 to Rp 2,800,000 for SLTP and from Rp 325,000 to Rp 3,120,000 for SLTA per year. This variation is provably caused by; 1) whether the school is private or public; 2) whether the child stays at the house of his/her relatives who supplement the cost, stays with other families, or at a rented house; and 3) whether the family bear all cost by cash or partly in kind; 4) the child stays at a capital city or a smaller town; and 5) the distance from their own villages. The answer about family income revealed that the annual income ranges approximately from Rp 2,556,000 to Rp 10,654,000 in West Kalimantan and from Rp 1,210,000 to Rp 5,030,000 in Central Kalimantan. It means that quite a large portion of the income goes to children's education. Therefore, it is no doubt that many informants identified the lack of money for education cost as the problem in regard to their children.

Table 11.8.10 Annual Expenditure for Schooling

Annual amount per child (thousand Rp)	No. of Households			
	for SLTP	*	for SLTA	*
1500 =<	3	(2)	6	(0)
1000 - 1499	1	(0)	6	(1)
500 -999	2	(0)	7	(6)
100 -499	7	(3)	4	(1)
Total HHs	13	(5)	23	(8)
Mode value bracket (approx.)	Rp 300 - 500		Rp 1200 - 1500	(Rp 500 - 700)

Source: SCRDP-Kaltengbar, "Part IV: Analysis of Social Survey (1)" , *Technical Report(1)*,, 1998.
Note: *Number in the parentheses shows the number of households providing necessities in kind to their children in addition to the cash.

Actually, pure schooling cost is not so large. In the case of SLTP, annual payment to schools is about Rp 50,000 except for the first year when students are required to pay for uniforms and extra contributions to the parents association. As of SLTA, it ranges from about Rp 100,000-Rp 250,000. In both cases, its share of total education cost is about less than a quarter. Thus, it is very important to note that the additional cost due to the distance from the village to school is quite a heavy economic burden for people in inland remote areas.

[28] The social survey was conducted twice. The methods used are questionnaire interview for the first survey and the rapid rural appraisal for the second one. As to the first survey, its framework and the analysis of the results are presented in the Technical Report (1) of SCRDP-Kaltengbar.

CHAPTER 12

HEALTH

CHAPTER 12 HEALTH

12.1 MAJOR ISSUES OF HEALTH SECTOR DEVELOPMENT

12.1.1 Women's Health and Family Planning

Although efforts to increase the coverage of health services for pregnant women has been progressive, the MMR is still high. In addition, fetal death is still the highest percentage in the mortality pattern of infants and all ages in the hospital. Fetal death is the manifestation of the low health condition of pregnant mothers (high risk) and the delay to get necessary help.

The IMR, although lower than the national figure, is still considered high. According to many studies, 40 % of infant death happens during the neonatal period. Neonatal death is associated with prenatal problems, tetanus neonatorum and complicated by low birth weight.

Healthy pregnant mothers, safe delivery and good care of newborn babies can prevent neonatal death. The high prevalence of iron deficiency in pregnant mothers and high births attended by TBA and delay of referral from community to health center hospital in Central Kalimantan and delay to get service, may correlated with neonatal death. High coverage of mother receive the iron tablet (64%, Health Profile of Central Kalimantan, 1997) but this does not guarantee high coverage for pregnant mother consuming the tablet as the iron tablet sometimes makes the pregnant mother nauseous.

In addition, women work very hard. The social survey in Tambang Terusan conducted by the JICA Study Team in January 1998 found that women worked a longer time that men, and women were involved in both reproductive and productive activities in the family. In terms of the food distribution in family, although women decide, however, they are the last people who receive the food.

The problem of TBA and village midwives is similar to that in West Kalimantan. Although the TBA has received the training from the puskesmas doctor, it does not guarantee that she will provide safe delivery for the mothers. The coordination between village midwives and TBAs seems to be lacking. The cooperation between among those two health providers will increase the capacities of TBAs in safe delivery. In addition, village midwives seem not to be proactive to assess high-risk pregnancy in the village. Usually, the first visit of pregnant mother to the midwives or TBA after three or four months of pregnancy. Lack of capacity to assess high-risk

pregnancy of village midwives may one of the problems too. There is not laboratory to check iron deficiency in the village. Providing a simple laboratory may help the village midwife to identify high-risk pregnancies.

As far as Family Planning is concerned, it is also similar to West Kalimantan, that pills and injections are more popular to both new family planning acceptors and active family planning acceptors. The cost also seems to be the main reason to choose the type of contraceptives used. Although, basically the use of the long term contraceptive such as IUD or in-plants is much cheaper than those short terms ones, however, the women do not have enough cash to pay. The same as that in West Kalimantan, perhaps the IEC of using the long term of contraceptive such as in-plant and IUD needs to be reinforced and the installment payment system may encourage women to use them.

As far as AIDS concerned, although the family planning program is successful in Indonesia the method used by the people will not protect the women from the AIDS as very small percentage of people use condom.

12.1.2 Under Utilization of Health Services in Polindes, Pustu, Puskesmas and District Hospitals

Even though the coverage of pregnant mothers who examine their pregnancies by the village midwives and trained TBA is 71.99% (table 3.4.1) in 1996) it does not necessary they will seek help from a midwife for delivery. TBA is still popular especially in rural areas (64.56%, Welfare statistic, 1997). The reasons are that there is intact culture between the pregnant mother and TBA. TBA can provide holistic services to the family such as bathing the baby, cooking for the family, washing clothes and dishes that village midwives can not do. In addition, it is believed in village that young unmarried women (village midwives are young unmarried girls) are not allowed to attend the delivery. More over, TBA does not mind to receive in kind payment while village midwives charge about Rp. 25,000 to Rp. 40,000 to the family which is considered expensive for the rural people. However, there are some mothers in Tumbang Terusan village who seek injections and vitamins several days after delivery to village midwife.

The contact rate of puskesmas of around 40% and the average daily visits of 42 indicates the low coverage of services provided by puskesmas. Similar to West Kalimantan, the average daily visit is lower than the average visit. The yearly visit is high during the outbreak of endemic disease. This is true with the high percentage of health people who treat themselves (47.48%). Only 16.19% and 11.03% of people go to a puskesmas and pustu for treatment (Welfare Statistic 1996). The economic reason is one of cause. The people could not afford to go to Puskesmas and Pustu, which the charging of Rp. 1000 and Rp. 3,500 respectively. In addition, the transportation cost to go to a Puskesmas is quite expensive due to geographical

conditions. Therefore, only the better off people can enjoy the service of puskesmas since they are located in urban areas. For the case of Pustu, although they are located in villages, the amount charged to the patients might have given disincentive for people to use the services.

The same explanation applies for the hospital service. It is located in urban areas, hence only those better off people can use the services. Welfare Statistics 1996 shows that only 2.03% of people seek treatment to the hospital. In addition, data from the Health Profile of Central Kalimantan 1997 indicates that the BOR of public hospital was 41.47%, this is considered, low.

The Kartu Sehat program seems not to be well distributed to the low income group. It is true in Tembang Terusan village, that not a single person has a Kartu Sehat.

The quality of services may be another cause of low utilization of health services.

As far as district hospitals are concerned, often time the Obstetric Gynecologist (Ob-gyn) is not available in the hospital. Only three district hospitals have a Obstetric Gynecologist. For those that do not, the ob-gyn from other hospitals visit several times in the year. The facilities for emergency obstetric neonatal services are lacking in most district hospitals.

A considerable amount of people go to private doctors or private paramedical practices for treatment such as 5.57% and 12.07% respectively (Welfare statistic 1996). Many times, doctors are not available in Puskesmas due to many reasons (observation of JICA study team social survey in Tumbang terusan in January 1998).

Lack of laboratory facilities in Puskesmas may contribute to the low utilization of the Puskesmas. In addition, facilities for the basic obstetric and neonatal emergency services are also limited. Many times doctors are not available in the puskesmas due to many reasons. The facilities for providing basic emergency obstetric neonatal service are very limited The work of doctors is overloaded. Those things might result in the low quality of services. The puskesmas staff unfriendly attitude some times influences the use of services in the Puskesmas.

The education of the mother may also contribute to the use of the services. The education of women aged 10 years and above in Central Kalimantan is better than that in West Kalimantan. This may correlate with the better health situation in Central Kalimantan than that in West Kalimantan(Table 12.1.1).

Table 12.1.1 The Coverage of Fe Tablets Distribution Base on District in Central Kalimantan, 1996

No	District	Number of Pregnant Mother	Number of Pregnant Mother Received Fe Supplement		% Coverage	
			1 Pack	>= 3 Packs	1 Pack	>= 3 Packs
1.	Kotawaringin Barat	5,665	4,993	4,247	88.14	74.97
2.	Kotawaringin Timur	12,929	9,316	8,692	72.06	67.23
3.	Kapuas	14,753	12,166	6,408	82.46	43.44
4.	Barito Selatan	5,387	4,517	3,985	83.85	73.97
5.	Barito Utara	4,799	4,433	3,923	92.37	81.75
6.	Palangkaraya	3,987	3,821	3,397	95.84	85.20
Central Kalimantan		**47,520**	**39,246**	**30,652**	**82.59**	**64.50**

Source: SP2TP/Program Gizi Propinsi, Profil Kesehatan Kabupaten/Kotamadya

12.1.3 Traditional Medicines

Similar to West Kalimantan, there are many local leaves and roots which can be used for alternative medicines. There are about eleven types of leaves and several types of roots which are used by the community in Tembang Terusan village. Some are used for curing children and some are for adults. According to the villagers interviewed, there are certain people who come from Java to ask for those mentioned roots and leaves. Since they are abundant in the village and easily collected they just provided them for free. Those traditional herbs need to be investigated and possibly can provide leverage for economic development of the local areas by cultivating those herbs. In addition, with the high cost of westernized medicines, the traditional medicines will be popular as alternative medicines for the low income groups.

12.2 OBJECTIVES OF HEALTH SECTOR DEVELOPMENT

- To improve health conditions of the people all over the region, futher health sector development should be viewed as a basis for human resources development as well as social development. The three objectives to support this are as follow
- To improve the systems of health services delivery in the region
- To empower communities so that they can control their own health care as much as possible (by promoting their own health as well as by wisely utilizing clinical services)

12.3 STRATEGIES OF HEALTH SECTOR DEVELOPMENT

The targets of strategic development efforts of the health sector in Kalimantan should be as follows:

- Geographical Target Areas: Upland Areas
- Social and Health Targets: Maternal and Child Health Care
- Institutional Targets: District Hospitals and Health Centers (Puskusmas)

The following three strategies are recommended:

(1) Integration of district hospitals with health centers for primary health care at the subdistrict level and at village level in inland districts, especially in West Kalimantan

The function of the district hospital will be expanded not only as a referral institution but also as a training institution for health center personnel. District hospitals will manage and design an apprenticeship program for health center personnel. The specialists from the district hospital will visit health centers regularly to monitor and supervise maternal and child health activities and provide training related to maternal and child health to the health center personnel. District hospitals will also conduct preventive activities and promote activities in the community. In district hospitals which do not have the required four specialists, specialists from the provincial hospital will be invited. The delivery and laboratory facilities and drugs necessary for comprehensive obstetric neonatal emergency services will be provided. The qualification of nurses and midwives will be improved. District hospitals will also conduct regular seminar workshops for health service units involved in maternal and child health.

(2) Upgrading of certain health centers to core health centers with in-patient care and specialist doctors in inland areas, especially in Central Kalimantan

Health center doctors are expected to be health managers in their area, hence the necessary skills to be a manager will be improved. Health centers, which are far from district hospitals, especially in Central Kalimantan will be expanded to become health centers with in-patient care.

The capacity of health center doctors in managing basic emergency obstetric neonatal services as well as, epidemiological surveillance and community analysis so as to focus on the health center's program based on the community need, will be improved. The qualification of health center midwives will be improved to a bachelor degree level. Health centers will conduct regular seminar workshops and training for village midwives and traditional birth attendants (TBA). Rehabilitation of laboratories and delivery equipment and facilities as well as a maintenance budget will be provided. Transportation facilities for supervising village-based maternity clinics will be provided as well. Health centers will also send morbidity reports to the district hospitals.

12.4 THE PRESENT HEALTH SYSTEM AND SITUATION

12.4.1 Health Sector Organization

(1) National Level

Ministry of Health (MOH) is the center agency for the formulation and the implementation of health policies and programs. At the provincial level, the Ministry of Health (MOH) is represented by the provincial health office (1 Wilayah or Kanwil Kesehatan), which is technically, and administratively subordinate to MOH. At the district level, Kantor Wilayah Departemen or Kandep (district administrative health office) represents the MOH. This office will be gradually erased from the overall health system hierarchy because of efficiency considerations. There are some districts, which no longer have this representation. It has been years that health policy as well as programming of national and provincial levels were passed onto lower level health facilities (district, subdistrict, and village level) through Dinas Kesehatan DATI II (District Health Management Office, DHMO).

(2) Provincial Level

The Dinas Kesehatan (Dinkes) DATI I at the provincial level and the Dinkes DATI II at district level are local government offices responsible for health programming. Dikes DATI I is responsible for reporting all health programming to the local government at the provincial level (Office of the Governor), while Dikes DATI II is having similar responsibility as DATI I but for district local government (Office of Bupati, head of local district government). The responsibility to report to the respective local government offices does not only occur for health, but also for other sectors such as family planning, agriculture, etc. This type of reporting is necessary since the local government is the one in charge for development in the area.

(3) District Level

Although Dikes DATI I and II have line of authority to the local government, they also report all activities and program implementation to Kanwil because they receive technical assistance from Kanwil and funding of health programming from central level of the MOH. Funding from the central MOH could be identified through the code of APBN or bilateral fund, i.e. UNICEF, WB, etc. Local government contribution to health programming could be recognized from the code of APBD I (for provincial government) and APBD II (for district level government).

(4) Subdistrict Level

Primary health care service provision for the community, both rural and urban, is conducted through Pusat Kesehatan Masyarakat/Puskesmas (health center, HC) at subdistrict level and Puskesmas Pembantu/ Pustu (health subcenter, HSC) and Pondok Persalinan Desa/Polindes (the village maternity hut) at the village level. Health center is in charge of the supervision of health sub centers, and some Polindes. It is divided into two types: those with in-patient facilities and those without. At the subdistrict level, at least, one health centers should exist. Sub center and Polindes are located at the village level. The subcenter is responsible for health services of, at least, two villages, but Polindes, ideally should be present at every village. Polindes and Pustu report their program implementation to Puskesmas, while Puskesmas itself reports to Dikes DATI II and subdistrict level local government (Kecamatan).

(5) Hospital Sector

The hospital sector in Indonesia is classified according to its ownership: (1) vertical hospital belongs to MOH, such as Cipto Mangunkusumo Hospital in Jakarta, (2) provincial and district hospitals are owned by the local government, (3) Armed Forces hospitals, (4) private hospitals, (5) public company hospital, i.e. Pertamina Hospital.

At the end of Repelita I, there were 1,116 hospitals in Indonesia with 81,753 beds, and end of Repelita V the number of hospitals were 1,638 with 123,441 beds. The private sector showed the biggest increase (145%) from Repelita I (133) to Repelita V (217).

(6) Referral System

At provincial and district levels of local government hospital exist.. District hospitals serve as a referral for the health centers in the surrounding area, and provincial hospital as a referral for district hospitals. However, there are occasions that clients come directly to either the provincial or district hospitals because of many reasons such as distance, health provider expertise, etc.

The latest data showed that the average number of all referral cases from the health center level or others lower level and private hospitals, was 5.8% with the lowest referral being in Class D hospitals at the district level (0.9%). This reflects that Indonesian hospitals are facing problems of under utilization, inefficient services, and low referral rates.

The local government role to overall health programming is mainly for coordination and finances of some health program activities. They also provide support for building health facilities such as polindes, pustu, puskesmas, and hospitals. In other words, all health facilities (buildings) belong to local government at the respective level. On the other hand, equipment as well as other needs such as medicines at health facilities mainly come from the MOH.

12.4.2 Health Programming

Most of the health programming (i.e., programs focused on the prevention and eradication of contagious diseases) are designed by the central MOH. For instant, the Directorate General for Communicable Diseases Control designs and manages programs against tuberculosis, diarrhea, acute respiratory infections (ARI), acquired immune deficiency System (AIDS) and sexually transmitted diseases (STDs), and vector-borne diseases. The Directorate General of Community does the planning and management of programming of Family Health (i.e. women's health including reproductive health, adolescent health, health of the elderly, etc.), Community Nutrition coordinates nutrition programs. Health center activities are supervised by the Directorate for Health Centers.

(1) Community Health

The MOH Directorate for Community Participation is responsible for promoting and developing leadership in health and strengthening community organizations. Community Action for Health is channeled through the Village Community Welfare Body (LKMD). Since 1988, training for community leaders has been provided regularly. Several other government agencies and NGOs are also involved in activities to promote community participation for health.

(2) Posyandu (The integrated village health services post)

The history of the grassroots health post program dates back to the establishment of weighing posts (Pos Timbang) for children underfive in rural areas in Java almost twenty years ago. Aside from the pos timbang, other health service posts had existed in rural areas such as family planning post (Pos KB), health posts (Pos Kesehatan), and vaccination posts (Pos Vaksinasi). The community, using voluntary workers, had basically managed these posts or village health promotors (Promoter Kesehatan Desa or Prokesa) assisted by health center staff. Activities conducted in each post had a similar target population, which were mothers; infants; and underfives, it was then decided to have one stop shopping post, which enabled the community to have all services in one place at one time. In 1984, this idea was put in place in the form of a Posyandu (Pos Pelayanan Terpadu) activity, which is conducted monthly.

In the beginning of Repelita IV, President Soeharto issued a statement of: the high Infant Mortality reflects a failure on our part in achieving equity in development and in improving the welfare of the people. Therefore, the formulation of Posyandu was, also, done in response to the President's call to reduce the infant mortality rate in the country.

Cadres manage Posyandu with assistance of health staff, either a village midwife; or a Pustu staff; or a combination of both, with/without health center staff support. The main services provided at the Posyandu are based on the principle of integration between family planning and health services programs, which is known as KB-Kes. There are five major areas of integration, which are reflected in form of Posyandu services: nutrition, family planning, immunization, diarrhea disease management, and mother-child health care (MCH).

(3) Health Cadres

The majorities of health cadres are married women between 20-40 years old with primary school education. Most of them are members of PKK (Family Welfare Movement). Although there are various methods of cadres' selection, in practice, cadres are almost always selected by the village chief without assistance of health staff and local village council. The general impression is that many cadres are relatives of the village chief, subordinate of village chief, and other cadres (such as law). This happens because of great difficulty in finding appropriate and willing candidates for conducting voluntary work in the community.

The responsibilities of cadres fall into three broad categories:

- Encourage local participation in specific programs, including community mobilization
- Collect, record, and report data related to Posyandu services and other assigned data
- Conduct (simple) health education

12.4.3 Health Policy and Planning

(1) Past performance (Repelita I - V)

Rapid economic growth in Indonesia over the past three decades has brought about substantial reductions in poverty. The proportion of the population living below the official poverty line declined from 60 % in 1970 to 15 % in 1990 and 11 % in 1996. Other social indicators have improved - including infant mortality, life expectancy, and literacy - although their levels in Indonesia generally remain less favorable than those of Malaysia, the Philippines, and Thailand.

The Government efforts can be reviewed through its five-year Development Plans (Repelita) and the Second Long Term Development Plan (PJP II).

1) Repelita I (1969/70-73/74)

This plan focused on integrated basic health care; curative and preventive care, and hygiene. The idea of the Puskesmas (Health Center) was developed. Equity and community participation in health promotion was conceptualized in the plan.

2) Repelita II (1974/75-78/79)

Underutilization of hospitals was pointed out. For betterment of accessibility, 4,353 Puskesmas were built and every year 500 medical doctors were newly deployed. Under the Presidential decree, INPRES (Special budget) supported health projects. Although the number of health personnel increased, distributions of those human resources were mainly in urban areas. Health policy stated the need of public-private mix, decentralization and intersectoral cooperation. The view of public health was prioritized in medical education.

3) Repelita III (1979/80-83/84)

Although the access to Puskesmas was improved, the quality of service was questioned. Thirteen percent of Puskesmas do not possess any medical doctors. Beds started to be distributed to Puskesmas. (At the end of Repelita IV, 1,000 Puskesmas had beds.)

As to health policy, the National Health System (NHS) was proposed and the poor were prioritized for care. Preventive care and primary care became the core of the health strategy.

4) Repelita IV (1984/85-88/89)

Five strategic approaches (PKH) were set as follows:

- Sustainable Community Health
- Human Resource Development
- Food and Drug Management
- Nutrition and Environment Improvement
- Quality Assurance of Health Care and Law Enforcement

5) Repelita V (1989/90-93/94)

Effective uses of limited resources were deeply considered, with the result that administrative organization was restructured and the health personnel were deployed in the remote areas. Health workers increased from 474,808 to 655,598 including deployment of at least one midwife in each village. One the priority areas was building the referral system between health promotion with preventive care and hospital care. Accidents and occupational health was held in great account.

(2) Existing Plan

1) PJP II (1994-2019)

In the Second Long-Term Development Plan, economic and human development are identified as the keys to national development and self-reliance. Following the Great Outlines of State Policy (GBHN) of 1993, the strategy, adopted to improve the health and nutritional status of the population, is two-pronged: to improve the quality of health services, which must become affordable to all levels of the population; and to promote a healthy life style supported by adequate housing and environmental sanitation.

Objectives of health development in the PJP II is to improve the level are:

- Life expectancy upon birth — 70.6 years
- Infant mortality rate — 26 per 1,000 live births
- Under 5 mortality rate — 40 per 1,000 live births
- Maternal morality rate — 225 per 100,000 live births
- Underweight babies — 6 %
- Iron anemia for pregnant women — 9 %
- Iron anemia for workers — 10 %
- Lack of iodine — 9 %
- Under 5 — free from lack of vitamin A

2) Repelita VI (1994/95-98/99)

The objective of health development in the Replita VI is to increase the health level by increasing the health quality and service that reaches more community level. To achieve the objective, the main results to be realized are:

- To strengthen preventive and promotional activities aimed at reducing maternal, infant, and child mortality, morbidity and fertility, and improving nutritional status;
- To improve the quality of health services and associated referral systems;
- To increase efficiency and effectiveness, and promote improved management of health resources;
- To transform public hospitals into self-supporting units through improved cost-recovery;
- To promote the use of quality generic drugs;
- To establish the Community Health Maintenance Assurance or the Village Health Fund (Dana Sehat) in rural areas;
- To distribute a health card for the poorest families entitling them to free health services;
- To promote and facilitate joint public and private financing of health care services;
- encourage the private sector to finance preventive and promotive health care; and decentralize health service management to the district level.

12.4.4 Major Issues

(1) Women's Health

Although improvement has been observed during PJP I, the key health indicators remain unsatisfactory, especially in comparison with neighboring countries (Table 12.4.1).

Table 12.4.1 Infant Mortality Rate in Several Asian Country, 1993

Country	IMR
Cambodia	108
Laos	89
Myanmar	78
Indonesia	52
Vietnam	39
Philippine	38
Thailand	32
Malaysia	12
Brunei Darussalam	8
Singapore	4

The Infant mortality rate has declined from 145 infant deaths per thousand live births in 1971 to 56 in 1993. Life expectancy at birth increased from 46 years to 63 years (male 62 and female 65) during the same period. Maternal morality estimated at 390 maternal deaths per hundred thousand live births in 1995 remains very high by international standards.

The State Ministry of Women's Role is responsible for: Women's welfare, Women's work condition, Women's education and Women's social-culture

Assistant Minister for Women's Welfare manages program of the Mother Friendly Movement (Gerakan Sayang Ibu, GSI). President Soeharto through launched GSI President Instruction (Inpres) No. 5/1996 in accordance of commemoration of Mother's Day on 22 December 1996 as one approach to decrease the maternal mortality ratio. The president instruction was then followed-up by Ministry of Home Affairs Instruction (Inmendagri) No. 17/1996 on the management of women's role improvement in each province. It was a national commitment to put the MMR decrease as one of the successful development indicators.

GSI becomes a nation-wide program through the implementation of Mother Friendly Hospitals (Rumas Sakit Sayang Ibu) and Mother Friendly Subdistricts (Kecamatan Sayang Ibu).

Mother Friendly Hospitals were initiated to fulfill the need of obstetric emergency treatment, primarily for the sake of referral from other hospitals/health facilities. This is implemented in collaboration with the MOH through DG Medical Care Services. Whilst, Mother Friendly

Subdistricts were implemented to anticipate "the three lateness" of identifying: dangerous signs of pregnancy; making the decision to seek medical help; and taking the pregnant woman to the health facility.

The essence of those two major activities is: the improvement of the status of women; empowerment of pregnant women; families and community, and quality family planning services for reproductive aged couples; quality antenatal care for all pregnant women; and quality obstetric emergency for high risk pregnancy.

As applied to other state ministries, no representation office for this state ministry exist. At the province level, GSI is implemented under the coordination and the supervision of the local government (the Vice Governor is the chairman of GSI Working Group) with members from the provincial MOH (Dinas and Kanwil), Population/BKKBN, PKK, government and non government organizations, women's study center of local universities, private companies, formal and informal leaders, etc.

At the district level, similar configuration of the task force presents under the coordination of the Vice Bupati. Whilst, at the subdistrict level, a task force chaired by Camat, Head of subdistrict local government provide technical assistance to task forces at the village level.

The working group and task force have regular meetings, usually monthly, to share and discuss activity implementation and data collection (primarily on maternal death). This forum is aimed to be a media to improve awareness of males (usually members of the task force and working group are males) regarding the importance of maternal health.

According to Mr. Abdullah Cholil, Assistant Minister for Women's Welfare, delivery assistance contributes significantly to the high MMR (Note: no percentage quoted) because a majority of women's death occurs at delivery. It is identified that provinces with high percentage of TBA assistance have higher maternal death compared to those with a high percentage of trained health providers assistance. It is recognized that women with less than nine-year of formal education have a higher risk of having high risk pregnancy, which finally leads to maternal death.

(2) Disparities

Significant disparities in health and nutritional status can be observed between and within the provinces. In some sparsely populated provinces, the health infrastructure is still relatively underdeveloped (e.g. Kalimantan and some provinces of Sumatra). The differences in health status among and within the communities reflect decreasing accessibility to existing health and other services. National data indicate that the poor travel much farther for medical care than the

non-poor: the distance to the closest provider is on average 4.2 kilometers for the poor and 2.7 kilometers for the non-poor.

(3) Underutilization of Health Facilities

Although the health infrastructure has expanded significantly over the last two decades, easier physical access to health services has not been accompanied by increased utilization. The number of outpatient visits in the health center, the bed occupancy rate in the district hospitals, and the percentage of patients who complete the doctor's prescriptions, for example, indicate clearly an underutilization of the existing services, which has a direct impact on the cost-effectiveness of the health system.

Only four class A hospitals exists in Jakarta, Center Jawa, Medan and Ujung Pandang. B and C hospitals were built in several cities including in Palangkaraya. A number of regency hospitals were upgraded from D class to C class type, which meant they had the services of at least 4 basic specialists, the specialists on gynecology and obstetrics, pediatrics, surgery and internal diseases. The Bed Occupancy Rate of the MOH and Local Civil Authority General Hospitals had decreased from 55.4% in 1993 to 53.4% in 1994. BORs of class A, C and D general hospitals had declined if 1989 figures are compared with 1994 figures, i.e., by 14.6 %, 3.1 % and 8.9 % for Class A, and Class D hospitals, respectively, while a 1.9 % increase was observed for Class B hospitals.

The MOH is planning to improve efficiency; the end of Repelita VI all class D Hospitals into will be converted class C hospitals.

Now, "Rumah Sakit Proactif (Active Hospital)" is considered to be applied in hospitals throughout Indonesia. The principle of a proactive hospital is as follows (From "The Proactive Hospital in the Indonesian Referral System" by Dr. H. Soejoga, MPH);

- reorientation to primary health care approach
- proactive community out reach orientation
- innovation
- integration with district health office
- financial independence through improved financial management
- decentralized of managerial decisions
- "open door" or "hospital without wall"
- flexible Strategic planning
- continuous quality improvement
- equitable pricing to guarantee cross-subsidy to address poverty alleviation

- resource mobilization without legislature
- accountability
- agenda for action
- adaptation to evolving medical technology
- perpetual forward motion

One of the follow-up actions for the concept implementation is through Model 1 and Model 2 as explained by Dr. Nurul of Sub-Directorate of the Teaching Hospital, DG. Medical Care MOH.

Model 1

Specialists from the provincial hospital go to the district hospitals and provide technical assistance to the district general physicians and other health personnel in handling special case (patients are collected from health center level).

Model 2

Specialists from the district hospitals go to health centers, and do similar activities like model 1 but for health center doctor and paramedics. Patients are collected from villages surrounding health center.

An other follow-up action for proactive hospital is cross-subsidy through "the swadana" concept:

Hospital cost is divided into three categories: class 1, class 2, and class 3. In the swadana concept, cost for class 3 is very low compared with class 2 and 1 because it is aimed at providing more access to poor. For vertical hospitals (owned by MOH) class 3 cost is decided by the DG. Medical Care MOH. Costs for similar class for local government hospital are decided by the local government through PERDA (*Peraturan Daerah*, local government regulation). While, for the private hospitals at the provincial and district level, Kanwil Depkes decides the cost of class 3.

Swadana concept allows hospital to have authority to use revenue based on the need, 45% of hospital revenue from swadana implementation is used for human resource development such as employees' benefit, training, comparative study, research, etc.

(4) Health Sector Financing

Total health spending (public plus private) was 1.9 % of the GDP in 1993, which is lower than other Asian countries. (China 2.9 %, Thailand 5.4 % in 1993) Public spending, 0.9 % of the

GDP is especially lowest among ASEAN countries. Since 1992 the Government has changed the composition of health spending; decreased the proportion of government expenditures on hospitals and increased the share of expenditures on primary health care and communicable disease control.

The funding of health in Indonesia is mainly from two sources, the government and the community. About 70 % of the health funding comes from the community, including the private sector. The coverage of various types of health insurance is still limited, that is about 12 % of the total population. Even though the budget for health continues to increase the total value is still not adequate compared to the requirements. The role of the community and the private sector in the funding of health needs to be continuously sought and directed, especially to support the preventive and promotive health efforts.

The public health budget consists of several components, including (1) MOH center budget; (2) provincial and district budgets; (3) Presidential Instruction (INPPRES) funds; (4) central Government subsidy for hospital operations and maintenance; and (5) funds from foreign assisted projects. Several modifications in health financing have been introduced since 1993, including (1) corporatizing public hospitals; (2) distributing health cards for the poor, giving them free access to health services; (3) decentralizing of health administration to the district level; (4) promoting involvement of private investors in the provision of health services; and (5) developing health insurance based on prepayment. In rural areas, the Dana Sehat is an example of community based insurance scheme. A consolidated budgeting system was introduced at the district level for maternal and child health, nutrition, communicable disease control, community participation, and health education. Under this system, the center's budgets are transferred directly to a single treasurer at the district level.

At present the health center charge around Rp. 400 per consultation. Integrated District Health Programs are testing Rp. 1,000 per consultation in some districts to be implemented nationally the same in future.

(5) Current Morbidity Structure

On one hand, the high level of infection of diseases is still a problem, on the other hand there seems an increase in degenerative diseases or diseases that are not contagious, which is closely related to the change of life style due to the improvement of the social economic conditions.

The epidemic of malaria is still uncontrolled. The spreading of this disease mainly occurs in the provinces in the eastern part of Indonesia and in the transmigration areas. In addition, dengue fever, which at the beginning was only spreading in urban areas, in further development, has

started to spread in the villages along with the morbidity of population between cities and villages.

Water borne infection is still main cause of diseases. Water Supply and Sanitation Directorate (Direktorat Penyehatan Air), Ministry of Health is in charge of 3 main activities: water quality control, water quality improvement and establishment of participation of community water users.

Support activities include increasing the ability of environmental health inspectors, Providing and developing technical equipment, development methodology, developing and strengthening information on water sanitation.

The water Supply & Sanitation Directorate is represented by Sub-Dinas PKL (Environmental Health Division) within the Dinas Kesehatan DATI I at the province level. There is no representation at the Kanwil Depkes. At the district health office (Dikes DATI II), it is represented by the Section of Environmental Health, and in Puskesmas, it is represented by Sanitariant.

Comprehensive water quality control is initiated by sanitary inspectors who aim to assess all kinds of physical conditions of clean water facilities particularly towards sanitary aspects. Standard forms for monitoring are available which include water facilities i.e. dug well, hand-pump, spring water protection, rain water, hydrant/public tap water, etc. Based on monitoring and scoring, the pollution risk level of clean water facilities would be classified as follows: Very high (Amat Tinggi/AT), High (Tinggi/T) and Moderate (Sedang/S), and Low (Rendah/R).

To assess water quality, sample is taken to a laboratory. The sample has to reach the lab within 24 hours. If not, the sample is examined with using Field Water Analysis Kit (Water Test Kit, WTK) which is available at puskesmas. However, not all puskesmas have the kit. In West Kalimantan, only 21 out of 185 puskesmas (1994) have a WTK, while in Central Kalimantan, of 123 puskesmas, only 16 have the kit.

Currently, 300 districts nation-wide have Paket laboratory equipment (bacteriological examination), and only 100 districts have Paket C laboratory equipment (chemical exam). West Kalimantan has 10 Paket A laboratory, and only 7 of that are functioning. While, Central Kalimantan has 7 Paket A laboratory, and only 4 functioning. The Paket C laboratory is not available in those two provinces. The laboratories were funded by ADB and OECF (OECF will complete their support by December 1997).

Water supply pollution level in West Kalimantan (Surveillance Result, with 11,649 samples from different water sources): Very high of 5,821, high of 3,387, moderate of 1,446 and low of 995.

(6) Health Personnel

Since 1992, newly graduated general medical practitioners are engaged by the MOH under a compulsory nonrenewable three-year contract as nonpermanent employees. Most of these newly graduated doctors are posted in health centers. The MOH Center for Health Personnel Education is responsible for the pre-service training of other health personnel, including nurses and village midwives. The MOH Center for Education and Training Organizes regular in-service training programs for the MOH staff.

In 1992, the Government initiated a program, as part of MOH's Safe Motherhood Initiative, to reduce maternal mortality, and to ensure that every village has a trained resident midwife. Many villages now have midwives who are under contract to the Government, trained to follow up pregnant women, provide antenatal care, and assist in normal deliveries. A small budget from the central Government, supplemented by the local government, is provided for the village maternity home, which serves as the midwifes living and working quarters. The community contributes in labor or in kind. Because they reside in the community, village midwives are increasingly utilized as front-line health workers in various programs.

(7) Nutrition

One of the diseases caused by malnutrition is the lack of protein energy (KEP) which can hinder the physical growth and the level of intelligence, and is still infecting 4 out of 10 children below five years. In addition more than half of the pregnant mothers and under five children suffer from the lack of iron, around 750,000 children suffer from cretin disease (dwarf) and more than 25 percent of elementary school children suffer from inflammation of the thyroid due to the lack of iodine. The content of vitamin A in the children below 5 years of age is still low, which affects the resistance of the body so that diseases that often cause death easily infect them.

Nutrition programs are aimed at reducing the prevalence of four main problem (1) protein energy malnutrition; (2) vitamin A deficiency; (3) iodine deficiency; and (4) iron deficiency anemia, especially among pregnant women. The Family Nutrition Improvement Program, an intersectoral program with regional implementation, began in 1969. The Additional Nutrition for School Children program, pilot tested in 1994/5, has become a Government priority program, and will be expanded to all poor villages outside Java and Bali. Under this program,

low-cost locally produced meals are supplied through schools in poor communities to supplement the students diet.

12.5 PRESENT SITUATION OF WEST KALIMANTAN

West Kalimantan was in the sixth rank in terms of economic development in among the provinces in Indonesia (The economic growth of 9.23%(Fakta dan Analisis, PEMDA Tk I. Kalbar 1992). The increase of agriculture production such as rice and horticulture are noted. The decrease of the illiteracy rate both in the rural and urban areas is also noted, although nationally it is still high (10.92% in the urban area and 22.30% in rural area in 1993). The population growth is still high at 2.49% in Pelita V. The increase of transportation facilities development has given affect to the increase of road accidents. Settlement areas, however generally are not in a healthy condition with the average of 5.41 family members in a house and a lot of man made breeding which is conducive for the contamination of the vector diseases such as malaria, dengue and filariasis. The increase of agricultural plantations and industries near the Kapuas river will decrease the quality of water that will also increase the contamination of water, and thus will effect the health status of the people, 47% of which use the river for household purposes.

12.5.1 Health Status and Morbidity

The CDR of 7.5 is lower than the national figure of 7.9, but the IMR of 62 is higher than the national figure of 51.5 as well the child mortality, which is higher (CMR 95). The CMR illustrates the environmental factors that affect the children's health such as the nutrition, sanitation, epidemic and accident factors. Rivers are used for bathing and latrines. About 48.8% of population have access to clean drinking water with 57% having latrines in West Kalimantan.

Table 12.5.1 Percentage of People Utilizing Clean Drinking Water and Latrines In West Kalimantan

	Clean Water (%)	*Latrines (%)*
Pelita III	25	18
Pelita IV	32	21.6
Pelita V	55	55
Pelita VI	(65)*	(75)*

* Target for Repelita VI

The MMR was estimated 520 per 100,000 live births (SKRT, 1986). The MMR is the reflection of maternal health status, environmental health and the efficacy of health services rendered, particularly to women during pregnancy, delivery and after delivery. The direct causes of maternal death are hemorrhage, infection and toxemia gravidarum. The high rate may be related to the high percentage of pregnancies, which are not controlled by the midwife service (64.8%, SKRT 1986). On the other hand the health condition factor of the pregnant mother also affect the MMR. For example, it has been found that 87.56% (SKRT, 1986) of pregnant

women in West Kalimantan have a iron deficiency. However, the SKRT 1994, estimated the MMR at 373 per 100,000 live births.

Dengue fever, diarrhea and malaria are endemic in West Kalimantan. In addition rabies, hepatitis and filiariasis in specific areas are also endemic. During the 1996, there was an epidemic of hepatitis with a CFR of 3.70 the district of Sintang, and a considerable number cases of measles in with the CFR of 3.70 in Sintang district. Diarrhea with the CFR 0f 9.09% the DBD (dengue) also spread throughout the district of Sambas, Sintang, Ketapang and Kapuas Hulu.

Based on the puskesmas and hospital report in 1995, the new cases of lung TB with BTA+ were 3105 with the morbidity rate of 72.16 per 100.000 population. ARI and diarrhea are the main causes of death among children and occur with peaks according to the season. Low birth weight and tetanus neonatorum are the causes of neonatal death.

The pattern of diseases of the outpatient treatment in the hospital in 1995 was accident, gastritis, road accidents, (ARI), diarrheas, skin diseases, malaria vivax, fever, lung TB and Bronchitis. While the pattern of diseases in in-patient treatment, diarrhea/gastro enteritis shared the bigger portion (6.97%) and it is followed by road accidents, gastritis, typhoid fever, lung TB, malaria vivax, pneumonia, and diabetic mellitus.

Accidents seem to be increasing due to the increase of development in West Kalimantan. According to the Police Department of West Kalimantan, human factors such as driver and the pedestrian, etc. are 90% of the cause of the accidents. The remaining non-human factors such as number of cars, length of road and number of population, are the main factors that are physically attributed to the accident cases.

According to SKRT in 1994, the causes of death in West Kalimantan are not only because of infectious diseases but also degenerative diseases. However, fetal death, pneumonia and lung TB shared the bigger proportions than the other diseases.

12.5.2 Health Services and Health Behavior

(1) Hospitals

The number of hospitals is 21 (including government, private and special hospitals) with a total of 2022 beds. According to the health profile of West Kalimantan 1997, the number of general practitioners and paramedics is sufficient but the number of specialists and non-medical staff is inadequate. The provincial hospital has an adequate amount of specialists, but the district hospitals have a lack of specialists. The district hospitals, which have 4 basic specialists

(obstetrician, internist, pediatrician and surgeon), are in the districts of Ketapang, Sambas and Singkawang. There are 3 basic specialists in the district of Sintang (minus the internist). However, only four district hospitals have Obstetrician/Gynecologist such as in the district of Sambas, Sangau, Sintang and Ketapang (Kalimantan Barat dalam angka 1996).

Fetal death is the main portion (35.11%) of the cause of the death in the in patient treatment in the hospitals in 1995. It is followed by pneumonia, sepsis neonatorum, gastro enteritis and tetanus neonatorum

The utilization of hospital is low with the BOR of 46.1%(Table 12.5.2), and the average number of outpatient visits a day is 357,07 in all hospitals (Health profile of West Kalimantan 1997). The capacity to conduct comprehensive emergency obstetric and neonatal services may be limited in most district hospitals.

Table 12.5.2 Number of Bed, BOR, LOS, TOI, BTO, NDR in the Hospital by District in West Kalimantan, 1996

No	District/ Municipality	Hospital Reporting		BOR (%)	LOS (day)	TOI	BTO	GDR (%)	NDR (%)
		Total	Bed						
1.	Municipality of Pontianak	1	630	49.77	10.65	10.75	17.05	3.91	1.92
2.	Pontianak	1	50	26.08	2.88	8.17	33.04	2.36	0.97
3.	Sambas	7	562	41.11	4.05	5.80	37.08	3.59	1.75
4.	Ketapang	1	67	50.73	5.66	5.49	32.73	3.74	1.50
5.	Sanggau	2	150	74.78	7.13	2.40	38.29	0.97	0.28
6.	Sintang	1	143	30.52	4.33	9.85	25.75	4.35	2.17
7.	Kapuas Hulu	1	50	28.63	6.94	17.30	15.06	7.04	4.12
West Kalimantan		**14**	**1,652**	**46.11**	**5.95**	**8.54**	**27.61**	**3.71**	**1.82**
Year 1995		**16**	**1,468**	**41.49**	**4.66**	**7.97**	**30.97**	**3.35**	**2.12**
Year 1994			**1,401**	**43.16**	**4.79**	**7.13**	**33.12**	**3.75**	**1.86**
Year 1993			**1,332**	**39.58**	**5.23**	**7.54**	**31.87**	**3.41**	**2.05**
Year 1992			**1,285**	**41.64**	**5.02**	**8.01**	**31.87**	**3.41**	**2.05**

Source: SP2RS Profile Kesehatan Kabupaten/Kodya

(2) Health Centers (Puskesmas)

There are 184 puskesmas in West Kalimantan. The number of doctors working in Puskesmas is 218 of which 53% are PTT doctors. The problem with PTT doctors is similar to that in Central Kalimantan. These PTT doctors are young and freshly graduated and may lack the capacity of organization planning and management, community management and mobilization, epidemiological surveillance, community analysis and management of obstetric and neonatal emergency services.

The government contracts them for three years; usually they do not stay after the contract. They do not have supervisor/advisor nearby. As a result the quality between his/her service in the first year is different from the last year. The second cycle of the three years start after the new

doctor comes. There is a time lag until a new doctor is assigned to the puskesmas when the contract is due. It is also difficult to choose nurses in the puskesmas to fill the gap, because there is a big discrepancy in terms of education and knowledge between doctors and nurses. This situation has been slowing down the process for increasing the quality of services and improving the management of the Puskesmas. Like in all Puskesmas, the work of the doctor is overloaded because he is responsible to all administrative work. Some doctors serve in the puskesmas as an obligation to be enrolled as a specialist doctor.

The Puskesmas has 18 programs without any prioritization except for five essential programs.

The following are several features pointed out on Puskesmas in West Kalimantan.

A considerable amount of activities by programs such as the MCH, Communicable Diseases Control, Public Health Nursing, Out Patient Clinics, Laboratory, Pharmacy. A relatively sufficient staff but varied among Districts in West Kalimantan. The farthest district from Pontianak is likely to be under staffed there is a in puskesmas, especially for laboratory technicians. The government can not recruit more staff as there is a zero growth of policy for staff recruitment.

The visits are relatively low of 20 – 40 people per day. The total new visits in 1996 were only 1,450,155 with the contact rate at only 38.85%. The fee is Rp 1500 of which Rp 350 of it is returned to the District health office as a retribution fee, the rest of the revenue is used for the recurrent cost of the puskesmas.

Two types of puskesmas, with and without in-patient care and the mobile puskesmas (four wheel and boat). Total number of beds in puskesmas is 567, the same number as last year. The location of puskesmas mostly quite far from any district hospital, hence hamper the referral from puskesmas. It is difficult to visit villages for mobile puskesmas especially during the dry season where the river is shallow, and the boat is hard to move. The outreach activities are hampered by the vastness of the health center catchment area and the very low budget for traveling.

It is lack of laboratory facilities and their maintenance, visual aids for mass campaign; lack of transportation facilities and its maintenance. In addition, the facilities for basic services of obstetric neonatal services are limited.

Although the puskesmas has a doctor, many times she/he is not available in the puskesmas because he has to go to the District health office every month to get salary or for other necessary meetings and training.

Good radio communication, not only for reporting and monitoring but also for long distance education and exchange of experience are considered important and cross functioning of health services in the province.

The infectious diseases of which Acute Respiratory Infection (ARI) shared the biggest percentage (26.52%) dominate the morbidity pattern of outpatient's treatment in the Puskesmas in 1995. Gastritis, clinical malaria, skin diseases and diarrhea follow it.

In 1996, the number of deliveries attended by traditional birth attendants has become 31.17% (among the 57.20% of delivery coverage) meaning that the higher percentage of the deliveries attended by health professionals. The coverage of pregnant mothers who receive tetanus toxoid is 67.22% while the coverage of pregnant mothers receiving iron supplements is only 53.38%.

From the report of the Puskesmas and hospitals in 1990, the babies born with the weight less than 2,500 grams was about 14.8% in West Kalimantan.

After office hours, the nurses of the puskesmas also have their own practice in the afternoon. The consultancy fee charged to patient varied between Rp. 8,000 to Rp. 15,000 depending on the types of medicines provided to patients.

(3) Sub Health Center (Pustu) and Village-based Maternity Home (Polindes).

The same constraints in the other provinces were mentioned. As many puskesmas are far away from the village, Pustu and Polindes play an important role for the villagers. Pustu is managed by a young nurse and sometimes a pekarya (non-medical staff worked some years in the puskesmas and who have received three months training on medical services, case of Pustu in Setugal). Medicine is provided by the puskesmas, including a simple building and facilities. The total number of Pustu has been increased since 1989 from 513 to 701, with one Pustu serving 5,300 people.

The Pustu is allowed to charge a consultancy fee which is a higher amount than the official fee. The fee charged varies from Rp. 2,500 – Rp. 3,500, of which Rp. 1,000 should be returned to the puskesmas (case of Nagamahap puskesmas). The number of visits was 3 to 5 patients a day. They also have their own practice after office hours, and the fee charged to villagers was Rp. 5,000 – Rp. 10,000. The community prefers to go to Pustu because the cost to go to the Puskesmas is much higher as transportation cost is very expensive in West Kalimantan. However, the people in poor villages like Sebabas in the sub district of Nagamahap, prefer to go to the Puskesmas by walking because the fee is not as expensive as that in Pustu.

The situation is similar in the sub village (dusun) of Tapang Kemayau, in the sub district of Sekadau hulu. The puskesmas is far from this sub village, with a Pustu nearby. The consultancy fee was charged about Rp. 5,000 to Rp. 8,000 per visit after office hours.

The lack of supervision from the Puskesmas may create resistance of the people to some medicine because sometimes the Pekarya does not give medicine according to the standard dosages as the medicines were not sufficiently available (case of pustu in Setugal, Nagamahap sub district.). Housing is provided for the nurse or pekarya.

The village-based maternity home is managed by village midwives of which most of them are contracted by the government for three years (PTT midwife). They work as a front-line of maternal health services in the village. The number of deliveries attended is 4-5 deliveries a month. The facilities for delivery are very simple. Most of pregnant mothers give birth at home for many reasons. Each midwife is provided with a bicycle as the transportation means, which is not appropriate for the geographical situation of Kalimantan. There are 1066 of Polindes in West Kalimantan with the ratio of 0.76 per village. Lack of supervision from puskesmas is also another problem in Polindes. The fee for attending delivery is between Rp. 40,000 to Rp.80,000.

The nurses and village midwives are supposed to supervise posyandu's activities every month. As the health leaders in the villages, they will act as a motivators and innovators. They should equip the capacity of community management.

(4) Posyandu and Health Volunteers (Kader).

The Posyandu's performance depends of puskesmas doctor staff visits and the visits from local authorities at the subdistrict level. The more visits to a posyandu by puskesmas or subdistrict staff the better the performance is. Incentive to maintain kaders to be active in posyandu are officially recognized by a kind of appointment, free treatment for family, lotteries, capital assistance for small scale business, etc. About 3311 posyandu (1996) have been established in the village with the ratio of 1 Posyandu for 250 families. Each Posyandu provides primary health services integrated with family planning services

Posyandu is very famous in the village. One of the common weaknesses of the posyandu in all provinces is that the health education component. Relying on kaders for health and nutrition education seems to be less effective. Most of the time there is no health education conducted as many of kaders lack capacity for delivering the health messages. The visual aids provided for health education may not be appropriate for the local condition and sometimes are not available in a Posyandu.

Refresher courses for kader are necessary, but education during monthly visits by a puskesmas doctor or village midwife or nurse of pustu is more important to improve the capacity of kader to manage posyandu and deliver health messages. In addition, visits from a puskesmas doctor or the authorities from the sub districts may maintain the motivation of kaders to be active in a posyandu. Perhaps the capacity of village midwives and nurses in delivering health messages to the community also needs to be improved.

(5) Family Planning

The percentage of new acceptors and active acceptors in 1996 are 99.77% and 77. respectively. The pill and injection are the most popular contraceptives among active and new acceptors 15 (Table 2.4.3). The percentage of active acceptors use the pill and injection is 36.60% and 32.70% respectively, and 34.16% for the pills and 42.95% for injection for new acceptors. The cost is the reason for contraceptive choices. The cost of pill and injection are the most affordable by the acceptors of which are Rp. 500 per pact of pills and Rp. 5,000 for injection respectively. While the cost for in-plant is Rp 40,000. The social study conducted by the JICA study team in Sebabas village found that the reasons to be family planning acceptors are village heads asked them to, just follow friends advice, and do not want to have children any more. Usually, the husband will decide whether a mother will participate in family planning and whether he wants more children.

12.5.3 Nutrition

Protein Calorie Malnutrition (PCM), Iron deficiency anemia and Goiter are nutrition problems in West Kalimantan. From the results of monitoring the nutritional status of the children under five years old from posyandu in 1993, the prevalence of PCM was found to be 10.43 %. The 1996 indicator for youth and children prosperity (BPS) indicates that the percentage of the under five years old with poor malnutrition is 25.5%. This condition is higher than the national figure of 14.6% in 1995.

Table 12.5.3 Percentage of Family Planning Acceptors and New Acceptors by Types of Contraceptives by District in West Kalimantan, 1996

No	District	% of FP Active Acceptors							% New FP Acceptors						
		IUD	Injection	Implant	Steriliz ation	Pill	Condom	Other Methods	IUD	Injection	Implant	Steriliza tion	Pill	Condom	Other Method s
1.	Municipali ty of Pontiana k	28.88	33.02	0.85	10.88	30.46	2.07	0.02	10.75	34.46	0.40	4.25	22.97	1.58	0.12
2.	Pontiana k	7.49	34.93	3.65	1.92	51.06	0.84	0.11	3.11	43.02	4.25	1.21	47.83	47.83	0.07
3.	Sambas	10.55	34.51	3.75	2.44	51.74	0	0	9.99	40.05	4.33	1.03	0	0	44.61
4.	Ketapan g	5.35	27.53	10.05	1.36	55.34	0.36	0.01	3.76	36.45	23.93	0.83	34.69	0.34	
5.	Sanggau	8.53	33.19	6.63	1.93	49.33	0.36	0.04	2.99	46.99	9.50	0.77	39.28	0.39	0.08
6.	Sintang	12.45	27.92	4.17	1.36	53.61	0.41	0.08	3.64	46.31	6.07	1.27	41.6	0.87	0.15
7.	Kapuas Hulu	1.95	47.23	2.32	0.82	47.49	0.18		0.94	56.21	4.19	0.75	37.23	0.68	
West Kalimantan		**10.96**	**32.72**	**4.42**	**2.05**	**36.66**	**0.56**	**12.63**	**6.35**	**42.95**	**7.54**	**1.34**	**30.16**	**0.59**	**11.05**
Year 1995		11.24	31.78	3.79	1.96	50.30	0.93		6.14	45.89	5.15	1.43	40.28	1.11	
Year 1994		11.15	30.35	3.86	1.96	51.69	0.99		5.89	45.40	2.51	1.24	43.74	1.22	
Year 1993		11.67	28.81	3.72	1.84	53.85	0.11		7.31	44.87	3.09	1.09	42.26	1.38	
Year 1992		12.21	27.48	3.86	1.81	54.52	0.12		10.69	43.80	2.82	1.26	40.27	1.16	
Year 1991		11.35	26.55	3.47	1.69	56.78	0.16		11.85	43.45	2.08	1.07	39.71	1.84	

Source: JICA-SCRDP Kaltengbar

On the basis of survey of Vitamin A surveillance in 1986, West Kalimantan was included in the 15 provinces of Vitamin A emergency area and the same survey conducted in 1991; West Kalimantan was excluded as the province of Vitamin A emergency area. However, the possibility for West Kalimantan to have Vitamin A deficiency still exists.

Data from the 1982 Iodine deficiency endemic survey indicates that West Kalimantan is included as the area that having the high prevalence of Iodine deficiency with the range between 9 – 56%. Iron deficiency is also prevalent.

The SKRT 1992 reports that more than 53% of pregnant women in West Kalimantan have iron deficiency with the average of Hb of 8.9 Gr% of the normal 12 to 14 Gr%.

In order to eliminate the nutrition problem, government has implemented the program of Family Nutrition Improvement (UPGK), Vitamin A capsule distribution, and Iron tablet distribution to pregnant women through integrated KB-Kes program in Posyandu.

The UPGK program has been implemented since the early of Pelita V. This program has covered 725 villages out of 1296 villages with the result of these under five years old weight increase of 20.1%. In addition, starting at Repelita VI, the food supplementary program for the school children with the budget from APBN and INPRES in the poor villages with the frequency of 40 times a year. The coordinator of the program is the Directorate of Village development in West Kalimantan.

12.5.4 Community Participation

Efficient health development is not possible without full community participation. Since 1964, community participation has been encouraged and health facilities which had been established through community resources were Community Health post (Posyandu), Village Drug Post (Post Obat Desa, POD), Village-based insurance scheme (Dana sehat), and Village-based maternity home (polindes). From the data 1997 of West Kalimantan Health Profile there area about 3311 Posyandu, 117 POD, and 1066 Polindes. In addition, in West Kalimantan there are 161 Dana Sehat (community based insurance scheme) with the participants of 6,348 households (UKBM profile 1997, Kanwil Kesehatan of West Kalimantan). The ratio of these facilities is still low that are 1 posyandu for 250 households, 1 POD for 10 villages, and 0.7 Polindes per village. Number of kaders involved in Posyandu is 6 that are considered sufficient because the standard figure is 5 per Posyandu.

The coverage of weighing for infants in Posyandu is 77.26% with the visit frequency of 5.54 and for children 1-3 years is 40.12% with the visit frequency of 6.05 and for children aged 3-5 years is 13.78% with the visit frequency of 5.30. The high coverage of infants weighed may because of immunization program. This can be related with the high coverage of immunization of 103% with the drop rate of 8.12%. The older the child is the less coverage of weighing. This indicates that understanding of mothers to monitor health progress by regular weighing is likely low. This may be because the Kartu Menuju Sehat (KMS = the card for monitoring the weight progress of a child) was not used as an educational tool for the mother. The weight of the children plotted in the KMS might not be told and the KMS might not be showed to mother. The KMS may not be given to mother, rather is kept by kader in posyandu. Consequently, the consultation might not be given during weighing session, as the progress of the children health in the KMS is the basis for consultation. This situation may be true in the Posyandu in the very remote areas.

The coverage of tetanus toxoid immunization for pregnant mothers is less than 80% (67.22%), as shown in Table12.5.4. The traditional birth attendants were also trained. About 68.05 % of TBA were participating in the training of safe delivery conducted by puskesmas (Profil Kesehatan Kalimantan Barat, 1997).

Table 12.5.4 The Coverage Frequency of the Pregnant Mothers Visit and the Coverage and Drop Out of TT2 Immunization by District in West Kalimantan, 1996

No	District	Population	Number Pregnant Mothers	Total of Visit		Immunization		Coverage of Pregnant Mother		Coverage of TT2 (%)	Drop Out TT2
				K1*	K4*	TT1	TT2	K1	K4		
1.	Municipality of Pontianak	459,100	14,554	15.692	13,333	14,420	13,365	107,82	91,61	91,83	7,32
2.	Pontianak	890,700	27,018	21,740	15,729	23,158	21,609	80,46	58,22	79,98	6,69
3.	Sambas	864,300	27,496	24,031	19,411	20,028	17,208	87,40	70,60	62,58	14,08
4.	Ketapang	375,400	11,380	8,795	6,635	6,658	5,613	77,28	58,30	49,32	15,70
5.	Sanggau	500,600	15,839	11,123	9,812	9,848	8,494	70,23	61,95	53,63	13,75
6.	Sintang	463,300	13,788	10,616	8,948	9,989	8,725	76,99	64,90	63,28	12,65
7.	Kapuas Hulu	178,900	5,711	3,889	2,888	3,310	2,814	68,10	50,57	49,27	14,98
West Kalimantan		**3,732,300**	**115,786**	**95,886**	**76,756**	**87,411**	**77,828**	**82,81**	**86,29**	**67,22**	**10,96**
Year 1995		**3,651,800**	**115,278**	**89,059**	**69,864**	**78,827**	**74,034**	**75,78**	**60,60**	**64,22**	**0,73**
Year 1994		**3,577,643**	**113,684**	**83,304**	**74,476**	**67,795**	**59,359**	**73,87**	**65,51**	**52,08**	**14,05**
Year 1993		**3,457,921**	**117,939**	**84,584**	**139,805**	**224,389**	**57,359**	**71,00**		**44,24**	**12,69**
Year 1992		**3,382,569**	**115,462**	**74,973**	**117,598**	**491,571**	**55,867**	**65,78**		**43,35**	**14,40**

Source: SP2TP,SP2RS, Profil Kesehatan Kabupaten Pontianak/Kodya
*K1 = The fist visit to Health Professional
*K2 = The Fourth visit to Health Professional

12.5.5 Health Financing

Puskesmas and Pustu consultation fee is higher than the amount set by local government. The revenues are sent to District health office is Rp. 300 – 350 for a retribution fee. Puskesmas and pustu manage the rest of the money is for themselves. It is not clear whether the financial record is available for the additional fee charged to the community and whether there is a financial audit from the district health office. Polindes also charges for delivery. There is no the fixed rate set by local government for delivery, and it is not clear how much money the midwife should send to puskesmas.

Hospitals also charged a fee from the community both for outpatient and inpatient. The cross subsidy pattern allows the low-income group to get health services from the hospital. The revenue is sent to local government every month and will be returned back to the hospital based on their annual planning. Lately, the hospital can use 25% of the revenue for their operation directly. Therefore, basically health financing is partly borne by the community. Besides from that the health sector budget is obtained from the government. Most of resources are obtained from central government of the MOH through APBN and the MOHA through INPRES. Small amount of health expenditure comes from the local government. The breakdown is 37.15% from APBN, 20.27% from INPRES, 9.99% from APBD I, 8.35% from APBD II and only 19.24% from foreign funding assistance (Profile Kesehatan Kalimantan Barat, 1997). Data from the private sector can not be gathered. The high dependency of funding from the central government might have decreased the initiative to develop bottom up planning in the lower level of the health units.

PT Askes provides an insurance scheme for government civil servants with the small amount of premium deducted from their salary. The policy has been changed that the private sectors can also join the scheme with a different amount of premium.

Another promising health financing scheme is JPKM (the community health insurance scheme) which provide universal protection that includes preventive, promotion, curative and rehabilitation. The district of Sambas was chosen as a pilot project area. The status of the project now is still at the preparation stage.

Kartu sehat is one of the policies of the government to provide health services to the very deprived group of the people. They can use the card to get the services in all health services units following the referral system. For emergency case, they can also use the transportation means owned by health services unit for referral. However, although the policy has been issued for three years, it is not broadly used. The Kartu Sehat is issued by the MOH, while puskesmas and hospitals are owned by the local government. The use of Kartu sehat will imply additional expenditure of health services. The implication may have not discussed between the MOH and the MOHA. Therefore, the guideline from the MOHA to implement the Kartu Sehat does not exist yet. This may create the "reluctanse" among the local health services units and local government to intensively promote the Kartu Sehat to the community. This is true in Sebabas village, in the subdistrict Nangamahap, that none of the villagers has the Kartu Sehat.

12.5.6 Existing Projects

There are three projects going on in 1997/1998 namely:

- The development of health education in the districts of Pontianak, Sambas, Sintang and Ketapang. The purpose of the project is to increase the provision of paramedical staff both quantity and quality with the target of the increase the skills of paramedical staff as well as the improvement of health facilities.
- The project of the increase of community health services in 7 Districts of West Kalimantan. The target are the improvement and expansion the health services units and the expansion of the coverage of health services.
- The Health 4 project, the five years World Bank supported project, with the purpose of the improvement of the quality of the primary health services at district level.

12.5.7 Major Issues

(1) Women's Health and Family Planning

The MMR is almost the same as the national figure. Although the effort to increase the coverage of health services for women has been progressive, birth death is still the highest percentage in the mortality pattern of infant and all ages in the hospital. Fetal death is the manifestation of the health condition of mothers (high risk) and delay to receive appropriate treatment.

According to many studies about 40 % of infant death happen during the neonatal period. Neonatal death is associated with the prenatal problem, tetanus neonatorum and complicated by low birth weight. Healthy pregnant mothers, safe delivery and good care of newborn babies can prevent neonatal death. There is a high prevalence of iron deficiency (53%) in pregnant mothers and high delivery attended by TBA (31.72%) (Table 12.5.5), while only about 68% of TBA was trained and delay referral from community (economic and geographical constraints and high risk pregnancy was not detected earlier) to health centers or hospitals and delay to get the services in the hospital (only 4 district hospital has Obstetrician Gynecologist, and provide comprehensive obstetrical and neonatal emergency services) may correlate with high maternal and neonatal death.

It is also recognized that women that had less than nine years formal education have higher risk of having high risk pregnancy which finally lead to maternal death. In West Kalimantan, only % of women aged 10 years and above is graduated from junior high school (Table 12.5.6).

Table 12.4.5 The Coverage of Deliveries by the Birth Attendant by District in West Kalimantan, 1996

No	District/ Municipality	Number of Puskesmas	Delivery Estimation	Health Birth Attendant					% Coverage of Delivery
				Health	%	Trained TBA	%	Total	
1.	Municipality of Pontianak	19	14,116	10,967	83.53	2,162	16.47	13,129	93.01
2.	Pontianak	41	25,820	8,420	69.98	4,041	30.02	13,461	52.13
3.	Sambas	29	26,661	11,126	69.12	4,971	30.88	16,097	60.38
4.	Ketapang	24	11,014	3,114	51.34	2,952	48.66	6,066	55.08
5.	Sanggau	27	15,363	3,474	56.19	2,709	43.81	6,183	40.25
6.	Sintang	25	13,699	3,754	55.96	2,954	44.04	6,708	48.97
7.	Kapuas Hulu	19	5,529	1,975	77.57	571	22.43	2,546	45.96
West Kalimantan		**184**	**112,212**	**43,830**	**68.28**	**20,360**	**31.72**	**64,190**	**57.20**
Year 1995		184	112,337	47,853	77.43	13,949	22.57	61,802	55.01
Year 1994			110,641	48,043	70.05	20,540	29.95	68,583	61.99
Year 1993			110,726	36,416	67.58	17,467	32.42	53,883	48.66
Year 1992			109,925	25,935	23.59	14,239	12.95	39,837	36.24

Table 12.5.6 Percentage of Women Aged 10 years and over and Attainment of Education in West and Central Kalimantan

Province	Never Attended School	Not Completed Primary School	Completed Primary School	Junior High School
West Kalimantan	25.32	35.44	22.03	7.49
Central Kalimantan	8.22	34.92	36.14	10.83
National	15.94	30.72	31.06	9.73

Source: BPS, Susenas, 1994

Even the coverage of delivery attended by health staff is quite high (68%), however the coverage delivery was only around 57%. It means, the remaining deliveries are still attended by untrained TBA or family members.

The low coverage of iron tablet distribution is another problem attributed to maternal death (Table 12.5.7). Those who receive the iron tablet do not also guarantee the intake of the tablet, as the iron tablet makes some pregnant women nauseous. In addition, the intake of food is less in both quality and quantity. Most of the people's food pattern is rice, fish and vegetables, and they eat only once or twice a day (high case of gastritis in puskesmas and hospitals).

Table 12.5.7 The Coverage of Fe Tablets Distribution Base on District in West Kalimantan, 1996

No	District	Number of Pregnant Mother	Number of Pregnant Mother Received Fe Supplement		% Coverage	
			1 Pack	>= 3 Packs	1 Pack	>= 3 Packs
1.	Municipality of Pontianak	13,775	9496	9,742	68.94	70.72
2.	Pontianak	27,020	20,559	13,817	76.09	51.14
3.	Sambas	27,496	14,913	10,451	54.24	38.01
4.	Ketapang	11,375	9,296	8,439	81.72	74.19
5.	Sanggau	15,839	11,078	8,071	69.94	50.96
6.	Sintang	13,552	10,592	9,025	78.16	66.60
7.	Kapuas Hulu	5,824	587	1,778	10.08	30.53
West Kalimantan		114,881	76,521	61,323	66.61	53.38
Year 1995		115,278	61,227	52,000	53.11	45.98
Year 1994		113,891	34,047	48,392	29.89	42.49
Year 1993		132,334	24,572	59,892	48.57	45.26
Year 1992		77,116	15,819	26,904	20.51	34.89

Source: SP2TP/Program Gizi Propinsi, Profil Kesehatan Kabupaten/Kotamadya

Although the TBA have received training from the Puskesmas doctor, it does not guarantee that she will provide safe delivery to the mothers, unless there is a coordination between TBA and village midwife to ensure the efficacy of TBA in attending safe delivery. The cooperation among those two health providers is likely still low. In, addition village midwives seem not to be proactive to assess high-risk pregnancy in the village. Usually the first visit of pregnant mother to midwife or TBA after three or four months of pregnancy. Lack of capacity to assess high risk pregnancy is likely existing. There is no laboratory to check the iron deficiency in pregnant women in the village. Providing a simple laboratory may help the village midwife to identify high-risk pregnancy

A kind of friction among the TBA and village midwives in terms of access to the patients seems to exist (case of subdistrict Nagamahap).

Besides those conditions, women work very hard. The social survey in the sub district of Nagamahap conducted by the JICA team on December 1997, found that women work longer than men do, and women are responsible for both reproductive and productive activities.

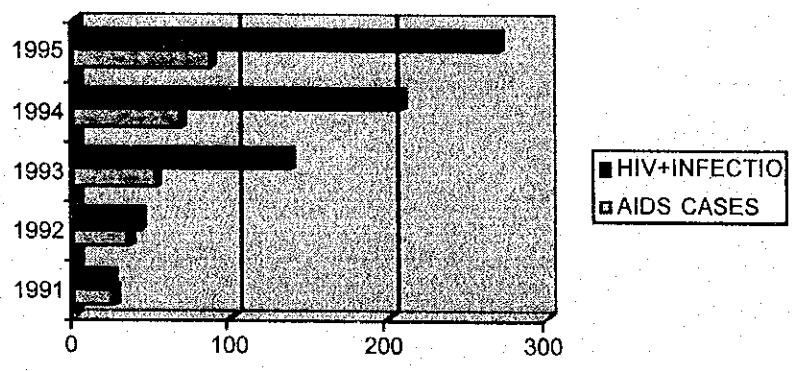
Besides, although women decide the distribution of food in the family, however, they are the last person who receives the food in the family.

As far as Family Planning program concerned, the government has gradually deducted the subsidy of contraceptive to the people. The people are expected to pay for the contraceptive. The Pill and injection are the most popular among the Family Planning acceptors as the cost is affordable. With the choice of short term contraceptives, the risk to get pregnant is high. Implant and IUD are to be promoted to be used. Due to the high cost of which Rp. 10,000 and Rp. 40,000 respectively, they are not so popular with women especially the women in the rural area. Perhaps the installment system will give incentive for women to use the long term contraceptive method (IUD, Implant, tubektomi and sterilization). Besides, The CIE of the use of these method needs to be reinforced.

To ensure the acceptors are continuously active in family planning, the supply of the contraceptives must be made available. The geographical and transportation problem have also influenced the coverage of new acceptors and to maintain active acceptors. The distance of puskesmas and villages are quite far. To eliminate this problem, the government has established a PAKBD (the village institution for contraceptives supply). This institution will make available the contraceptives chosen by the women. The members of this institution of which are to the supervisory group of family planning at village level, are trained in terms of enterpreneuership. However, due to the lack of social marketing of this institution, it is not well run in most of the villages.

The AIDS cases reported are increased every year (Figure 12.5.1).

Figure 12.5.1 Cultivate Number of Reported Cases and HIV Infection, 1991-October 1995



West Kalimantan have been also reporting these cases, although only e few (Table 12.5.8).

Table 12.5.8 Cumulative Number of Reported Cases of Aids And HIV Infection, by Province, Up to And Including October 1995

Province	Aid Cases		HIV + Infection		Total	
Nort Sumatera	1	(1.2%)	2	(0.7%)	3	(0.8%)
West Sumatera	0	0	1	(0.4%)	1	(0.3%)
Riau	0	0	29	(10.8%)	29	(8.2%)
South Sumatera	1	(1.2%)	14	(5.2%)	15	(4.2%)
Jakarta	49	(57%)	69	(25.6%)	118	(33.2%)
West Java	8	(9.3%)	6	(2.2%)	14	(3.9%)
Central Java	0	0	5	(1.8%)	5	(1.4%)
Yogyakarta	2	(2.3%)	2	(0.7%)	4	(1.1%)
East Java	5	(5.8%)	24	(8.9%)	29	(8.2%)
West Kalimantan	0	0	3	(1.1%)	3	(0.8%)
East Kalimantan	0	0	1	(0.4%)	1	(0.3%)
Bali	11	(12.8%)	22	(8.2%)	33	(9.3%)
West Nusa Tenggara	1	(1.2%)	0	0	1	(0.3%)
Maluku	0	0	3	(1.1%)	3	(0.8%)
Irian Jaya	8	(9.3%)	88	(32.7%)	96	(27%)
Province	**86**	**(100%)**	**269**	**(100%)**	**355**	**(100%)**

Although the Family Planning has been successful in Indonesia, the contraceptives used are not able to protect the women from AIDS as very small number of people used condoms.

(2) Under utilization of health services in Pustu, Puskesmas and Hospital

Even though the coverage of pregnant mothers who examine their pregnancies with village midwives and trained TBA is more than 60%(1996), it does not guarantee they will seek help from midwife for delivery. TBA is still popular at the rural areas (65.29%, welfare statistics 1996). The reasons are that there is a culture intact between the pregnant mother and TBA. TBA can provide holistic services to the family such as bathing the baby, cooking for the family, washing clothes and dishes that the village midwife can not do. More over, with the lack of cash in the rural areas, TBA does not mind to receive in kind payment while village midwife charge about Rp. 40,000 to Rp. 80,000 to the family which is considered expensive for rural people.

The contact rate of Puskesmas of 38.35% (Table 12.5.9). and the average daily visit of 63 indicates the low coverage of services provided by the puskesmas(Table 12.5.10). The actual daily visit is lower than the average visit. The visits are higher only during the outbreaks of diseases such as diarrhea, dengue fever and malaria. This is true with the high percentage of people who treat themselves (40.88%) in West Kalimantan and only 22.78% and 9.37 % of the people go to puskesmas and pustu for treatment (Welfare statistics 1996).

Table 12.5.9 The Coverage of Puskesmas Utilization by Districts, 1996

Name of Districts	No of Puskesmas	Ratio Puskesmas/ Population	Average of Daily Visit	Contact Rate
Municipality of Pontianak	19	0.41	118	40.02
Pontianak	41	0.46	18.8	46.03
Sambas	29	0.64	88.44	30.41
Ketapang	24	0.54	39.40	27.91
Sanggau	27	0.54	38.00	36.79
Sintang	25	0.54	114.40	55.25
Kapuas Hulu	19	1.06	11.60	
West Kalimantan	**184**	**0.44**	**65.00**	**38.85**
Year 1995	**184**	**0.50**	**61.00**	**39.75**
Year 1994	**183**	**0.51**	**63.00**	**38.61**
Year 1993	**182**	**0.54**	**55.90**	**34.97**
Year 1992	**175**			

Source: SP2PT, Profil Kesehatan Kabupaten dan Kodya.

Table 12.5.10 Number of Out Patient Visit, Referral and Average of Out Patient Visit in Public Hospital by District in West Kalimantan, 1996

No	District/ Municipality	Out Patient Visit			Refferal From			Own Visit	% Referral	Average Daily Visit
		New	Repelled	Total	Puskesmas	Other Facilities	Total			
1.	Municipality of Pontianak	53,966	43,408	97,374	30,562	236	30,798	47,147	57.07	324.58
2.	Pontianak	2,686	4,333	7,019	30	27	57	6,962	2.12	23.40
3.	Sambas	32,586	21,577	54,206	58	0	58	54,148	0.18	180.69
4.	Ketapang	7,.087	3,635	10,722	2,910	0	2,910	9,779	41.06	35.74
5.	Sanggau	35,856	9,216	45,072	122	0	122	0	0.34	150.24
6.	Sintang	7.606	2,962	10,568	2,061	182	2,060	8,560	27.08	35.23
7.	Kapuas Hulu	12.903	1,257	14,160	33	0	33	14,127	0.26	47.20
West Kalimantan		**152,733**	**86,388**	**239,121**	**35,593**	**445**	**36,038**	**140,723**	**23.60**	**797.07**
Year 1995		**155,733**	**86,388**	**239,121**	**35,593**	**445**	**36,038**	**140,723**	**23.60**	**79,707.00**
Year 1994		**109,580**	**82,088**	**191,668**	**49,122**	**482**	**49,604**	**59,976**	**45.27**	**638.89**
Year 1993		**92,710**	**90,597**	**184,698**	**37,677**	**22,954**	**60,631**	**52,238**	**27.36**	**614.66**
Year 1992										

Source: SP2RS, Profil Kesehatan Kabupaten/Kotamadya.

The economic reasons may be one of the causes. The fee of Rp. 1,500 charged by puskesmas and Rp. 3,500 by Pustu may not be affordable for most of the people. In addition, the transportation cost to go to puskesmas is quite expensive due to the geographical condition. Therefore, only the better off people can enjoy the services of puskesmas, as puskesmas is located in the relatively urban areas. For the Pustu, although they are located in the village, the amount charged to patients and the transportation cost to go to pustu may have given disincentive for people to use the services.

To support the argument of the fee is the concern of the people to utilize the health services, the following is the findings of JICA study team found in Sebabas and Setugal village in Subdistrict of Nagamahap, the district of Sanggau. The people in Sebabas will use roots and leaves or go to a dukun for treatment if they are sick. They would not go to Pustu because that amount charged to the community is very expensive (Rp. 3,500 – 10,000). If it does not cure them,

they prefer to walk to the Puskesmas Nagamahap (consultation fee is Rp. 1,500), instead, although the puskesmas is farther than the Pustu.

Another case is in Tapang kemayu sub village, the subdistrict of Sekadau Hulu, in the district of Sanggau. This subvillage seems to be better off than Sebabas village as it is located along the main road. The attitude toward traditional healer is different than that in Sebabas village. The puskemas is quite far from the subvillage, but there is a pustu nearby. If they are sick they will try curing themselves. They will go to the Pustu only if they have money because the pustu charges between Rp. 5,000 to Rp. 8,000. They seek help from the dukun or TBA only if the treatment of the pustu or the doctor does not cure them.

The low coverage can be explained also with the number of puskesmas and pustu which are still low as compared to number of population served (1 puskesmas serve 19,000 people and 1 pustu serves 5,300 people).

The same explanation is applied to the hospital services. It is located at the district and province level, hence only those better off people can use the services. Welfare statistics 1996 shows that only 2.14% and 0.65 % of the people goes to public and private hospitals respectively. In addition, data from the Health profile of West Kalimantan 1997 indicate that the BOR (Bed Occupancy rate) of the hospitals is 46.11% (Table 12.5.11) which means that the use of beds in every hospital were still low (normative figure of 80%).

The quality of services may be another cause. A considerable amount of people go to private doctors or private paramedical practices which are 7.81% and 8.08% respectively (welfare statistics 1996). Many times the doctor is not available in puskesmas (finding in Nagamahap). Lack of laboratory facilities and equipment in puskesmas and pustu may be attributable the low utilization of puskesmas. The facilities for basic obstetric and neonatal emergency services seem to be lacking too.

As far as the district hospital is concerned, oftentimes an obstetric gynecologist (Ob-gyn) is not available in the hospital due to many reasons and sometimes medicine is not available either. Only three-district hospitals have an Ob-gyn and surgeon. The capacity and facilities for Comprehensive Obstetric and neonatal emergency case services are being improved gradually.

(3) Disparities

West Kalimantan is included in the provinces that have higher infant death. The IMR in West Kalimantan, which is still higher than the national rate, has been decreasing year by year. However, the rate is varied among district levels. The variation of the IMR for each

District/Municipal in West Kalimantan is presented on the basis of the Demographic Condition of West Kalimantan (SP90 result, page41).

The following table shows the variation of IMR in West Kalimantan in 1982 and 1990.

Table 12.5.12 IMR by District/Municipality in West Kalimantan, 1997

District/ Municipality	Year			
	1986*	1992**	1993	1995
1. Sambas	66	60		
2. Pontianak	80	67		
3. Sanggau	102	86		
4. Ketapang	78	65		
5. Sintang	84	71		
6. Kapuas Hulu	71	60		
7. Municipality of Pontianak	54	45		
West Kalimantan	**81**	**68**	**66*****	**62******

Source: Health Profile for West Kalimantan
*) Measure from SP90 result
**) The projection based on the Died Children Pattern in 1980 and 1990.
***) The year 1993, based on the 1994 Indonesian Galthy Map (Pusdakes Dekes RI, 1994)
****) The year of 1995, presented by Governor of West Kalimantan at the Opening Ceremony of Healthy Workshop of West Kalimantan on August, 1996 (BPS Indicator in 1995 people prosperity)

The districts of Sanggau and Sintang have higher rates than the rate of West Kalimantan. The districts of Pontianak and Ketapang follow.

According to a study, 40% of infant death is neonatal death. The good quality antenatal care, safe delivery and good care of the inborn baby will prevent neonatal death. The government has increased the number of health infrastructure and health manpower to those districts. The government also has installed an Ob-gyn in those districts except for the district of Pontianak. The distance to Pontianak may be the consideration not to deploy an Ob-gyn in this district.

From table... shows that, although the antenatal care delivery attended by health professional and the coverage of lactating mother have been increased by years, however the magnitude of the increase is likely slow. Perhaps the government needs to invest more in increasing the coverage of antenatal care, delivery by health professional/strengthening the working relationship between village midwife and traditional birth attendant and increasing the coverage of lactating mothers to get post natal care.

The health four of the World Bank supported project for strengthening the primary health services has also chosen the district of Sintang and Sambas as the main target (project has started in these districts).

(4) Occupational Health Problems

MOH is one of the members of Pesticide Commission at national level which include departments involved in aspects of pesticide, such as Ministry of Agriculture (MOA); Manpower/Labor, Forestry, and Industry & Trade with the leading sector of MOA. At the province and the district level, the Pesticide Control Committee represents the commission. At the province level, Kakanwil Deptan (Provincial office of Agricultural) is the chairman of the committee, and the secretariat office is the Protection Agency (Balai Proteksi) which is under the Kanwil Deptan.

But from Implementation Report of Programs on Environmental Health (Laporan Program Penyehatan Lingkungan Pemukiman) 1996/1997, sub-directorate of Environmental Health, Ministry of Health indicated that main activities of Pesticide Inspection Sub-Directorate, Directorate of Environment Health is to sample pesticide residue (remnant) examination. West Kalimantan did not report anything regarding this activity, but Central Kalimantan reported 282 samples from 14 different places and found out no pesticide in the samples. In West Kalimantan, from 688 persons examined, it was found out that 39.83% have low and 6.54% moderate level of cholinesterase in their blood. In Central Kalimantan, from 589 persons, it was found 0.68% have high and 4.92% have moderate; and 18.85% with low level of cholinesterase in the blood.

From the report on 1-15 November 1997, there were two cases of herbicide parquet (commercial name is gramozone), which is used for delaminating the tall coarse grass in West Kalimantan. These cases were found: 1) in Bintang Mas Village, Sungai Kakap District, a farmer's body was swollen and the skin was peeled off because the sprayer tank was leaking and 2): in Rasau Jaya Village, Sei Kakap District, a farmer stumble down and the solution of gramoxone spilled out from the tank and all parts of the farmer's body was full of gramoxone. The complain was that his chase and lung were painful.

The industry of palm oil has been accelerated as the main source of income of the local government since the last five years. Further, it is predicted that the growth of this industry as well as its downstream industries will be increased in the next five years. The increase of these agriculture industries will also increase the use of pesticides. Although, at present the cases of workers have the accident reported are only a few, the increase of these industries, including their downstream industries will lead to the increase of the accidents, if the knowledge about the chemical, how to keep the chemical /pesticides the use of the pesticide and precaution measures and the first aids for pesticide poisonous or other chemical hazards utilized in the agricultural industries are not taught to the worker. Thus, it is necessary for the West Kalimantan to implement the control of the use of pesticide and to take the precaution measures from the accidents of this chemical hazards.

(5) Traditional Medicines

Kalimantan is full of the natural herbs that can be used to cure children and adults. The practices of using natural herbs are more obvious in rural areas. According to the result of interview by the JICA study team in Sebabas village the community use several leaves and roots for curing children diseases such as fever, stomach pain, diarrhea and skin diseases. For adults, some leaves were also shown to cure headaches, stomach pain, and skin diseases. These herbs need to be investigated and used as an alternative medicines.