[18-4]

Khon Kaen (KK)

Translation of Ampher Muang Konkhan Development Plan B.E. 2526 (1983): Introduction (Present Situations) Chapter 1 (Results of Past Development and Basic Problems) and Chapter 2 (Goals, Targets and Strategies) #

Introduction Present Situations

1 and 2. Site and Boundary

Amphur Ubolrat and A. Namphong, C. Konkhan North: Sub-Amphur Prayuen, A. Ban Pai, C. Konkahn South:

Amphur Kranuanm C. Konkhan; A, Ching Yuen

and A. Kosum, C. Mahasarakam

A. Ban Fang and Sub-Amphur Pra Yuen, C. Konkham West :

3. Administrative subdivision

14 Tambols having 186 villages altdgether

		10.70	
1.	Nai Muang	13	villages
2.	Muang Kao	16	
3.	Pra Lub	20	
4.	Ban Tum	11	
5.	Ta Pra	10	
6.	Don Han	10	
7.	Sila	15	
8.	Dang Yai	7	
9.	Ban Waa	11	
10.	Don Chang	18	
11.	Sawatee	15	
12.	Ban Khor	13	
13.	Samran	17	
14.	Kok see	20	

Geography

688.23 square k.m. (46 square k.m. within the City of Krmkhaen), mostly consisting of flat land used in rice growing. The soil is of sandy and lacterite type with a low ability to retain moisture and low plant nutrients.

5. Water resources

The area is drained by two rivers, i.e. Nam Chee and Nam Pong. The two important natural ponds are "Bung Kan Nakorn" and "Bung Tung

The 1983 plan gives most details while the collowing one in 1984 gives only a brief account, followed by the customary listing of projects intended to be implemented.

Sarng", used as recreational ares by the people.

E CHAPTER 1: RSULTS OF PAST DEVELOPMENT AND BASIC PROBLEMS

- 1. Summary of Results of Past Development
 - 1.1 Economic development
 - 1.1.1 Agriculture

-	Total harvest	of	non-glutinous rice	6,434.90	Tons
-	Total harvest	of	glutinous rice	63,752.04	Tons
-	Casava			42,200.00	н
-	Sugar cane			10,817.00	11
-	Kenaf			180.00	11
-	Peanuts			1,060.8	"

Income from agriculture in 1979 = 126.5 million bahts

1.1.2 Industry

- 112 rice mills having a total capacity of 1,473 kwian per day
- 1 tapioca/ flour factory with a capacity of 30 tons per day
- 64 tapioca pellet and chopping factories with a total capacity of 288,998 tons per day
- 2 ice-making factories with a capacity of 1,620 blocks per day
- 1 canning factory with a capacity of 3,600 tons per year
- etc.

Income from industry = 71.7 million bahts

1.1.4 Trade and service

This sector is of equal importance as agriculture but in 1978 its growth rate was 62.3 per cent higher than agriculture's, resulting in an increase in credits extended by commercial banks and in construction activities.

Income from trade and sercive in 1978 = 163 million bahts.

1.2 Social Development

1.2.1. Population

Total Population is 260,757, distributed as follows: KKKonkhaen Municipality = 99,501

TaPra Sanitation

District = 9,120Rural villages = 152,136

Population density is 99 per 1 square k.m. in rural areas and 2,000 in urban and sanitation districts.

1.2.2 Education

- 118 Primary schools under the national government
- 11 primary schools under Konkhaen city
- 8 secondary scholls
- 1 university

1.2.3 Health facilities

- 2 government hospitals totalling 747 beds
- 4 private hospitals totalling 55 beds
- 13 health stations
- 2 mid-wife stations
- 115 doctors
- 462 nurses and assistants
- 13 health workers
- 18 mid-wife workers
- 229 health communicators
- 23 health volunteers
- 1 doctor per every 2,194 population

1.2.4 Criminal Offenses

In 1980 there were 127 cases of serious offenses (e.g. murder, armed robberies, etc.) the wrongdoers being arrested in 32 cases (25.19%); 2147 cases of ordinary offenses, the wrong doers being arrested in 2,071 cases (96.46%)

- 1.3 Political and Administrative development
- 1.3.1 There are 17 government units controlled directly from headquarters in Bangkok
- 1.3.2 There are 13 government units under the provincial government (see details in the Plan)
- $\ensuremath{\mathcal{K}}\xspace \ensuremath{\mathcal{K}}\xspace$ 1.3.3 There are 2 local self governing districts, i.e. Konkhaen Municipality and Ta Pra sanitation district.

2. Basic Problems

2.1 Agriculture Production

Agricultural areas in Amphur Muang KK can be divided into two parts. Most of the eastern part covering T. Samran, Pra Lub, Kok See and Sila do not face the problem water shortage, being located along the banks of Nam Chee and Nom Pong rivers and also supplemented by water from the Nong Wai irrigation project. The land in this part is thus fertile and agriculture is possible all year round. The other part, lying to the west and wovering T. Ban Khor, Don Han, Sawatee, Dang Yai, Don Chang, a part of Ta Pra, Samran and Sila faces a serious problem of water shortage in the dry season because of its location far away from Nam Chee and Nam Pong rivers. Though there is enough rainfall in the rainy

season, the water cannot be stored because of the lacterite and san'ty equality of the soil which allows an easy seepage. Agriculture is thus practiced only in the rainy season. Only a few kinds of upland crops are grown in the dry season but the yield is poor. Animal husandry also suffers from this problem of water shortage in the dry season.

2.1.2 Uncertain and unfair market for agricultural Produce
Proces for agricultural produce such as glutinous rice,
caseva, kenaf, peacut, matpe beans and sugar cane are often depressed
by middlement. There is a also a problem of an over-production of
certain kinds of crops, causing prices to fall and farmers facing
losses and thus falling into debts.

2.1.3 Flooding of areas along river banks

Annual flooding in the wet season occurs in the areas along the banks of Nam Chee and Nam Pong, the important agricultural areas. Heavy rains in the reservoir of the Ubolrat Dam upstream of Nam Pong necessitates sudden releases of excess water downstream to prevent the collapse of the dam. In the case of Nam Chee, heavy rains upstream cause an annual overflow of the river downstream. In 1978 90 per chat of the cultivated area along the banks of Nam Pong suffered damages.

2.1.4 Underutilization of irrigation water

The problem is encountered in the irrigated areas of the Nong Wai irrigation projects, particularly in the dry season. The causes are

- Farmers are not certain of the available water. Repairs or improvement works on feeding canals denessitate occasional stoppage of water delivery causing farmers' anxiety about the adequacy of available water and hesitate to take risks in growing crops.
- Farmers prefer wage labor to agricultural work. To former brings more stable and better income. There are many opportunities for farmers to work as laborers in the construction and repair projects related to irrigation in the dry season.
- Low prices of agricultural produce in the market discourage farmers from investing in agriculture.
 - Lack of capitals
 - Inadequate supply of seeds
 - Farmers lack knowledge of new agricultural techniques

The underutilization of irrigated land in the dry season from 1977 to 1980 are as follows:

Year	Total Irrigated Areas	Areas actually used for	Per cent
		Agriculture	
1977	20,000	4,631	23.15
1978	21,000	8,054	38.35
1979	28,000	14,034	50.10
1980	27,000	11,516	44.96

2.1.5 Lack of land for raising animals

Amphur Muang KK is one of the 5 Amphurs in C. KK which have a large population of animals. (See details in the Plan page 9)

Lack of land is not a problem for raising such animals as chicken and pigs while ducks, cattle and buffalowes require extensive water or land space to fed or graze. Most of the land in all Tambols at present are used for rice growing and upland cropw, causing thus a shortage of sites for raising the second type of animals, particularly in the rainy season when rice is grown. At the time of flooding the animals always have to be moved to the bunds in the paddy fieths or to upland fields in which crops are also planted.

The lack of land for raising animals is related to the wrong use of land. Most farmers increase production by means of expanding cultivated land, regardless of its suitability. The idea of improving agricultural techniques and better use of existing resources has not occurred to them. They could have earned a better income if the land presently used for rice growing or upland crops even though unsuitable is used for raising animals.

2.2 Problems and Needs for Basic Sevices

- 2.2.1 This problem is particularly felt in the dry season because
- People prefer water from wells or man-made ponds to stored rain water for drinking
- In the dry season well and man-made ponds are likely to dry up or the water becomes a little salty or not clean
- Water from 90 per cent of the artesian wells is likely to be useless because of its saltiness.
- The depth of artesian wells is usually 150-200 feet from the ground, a considerable depth which means lot of expenses beyond the means of the people.

2.2.2 Inter village roads cnnnot be used all year round

Even though all villages are now connected with roads, the road surface is still not good. Being dirt roads or paved with soft latterite, they are eroded in the rainy season or washed out by floods. Built by human or animal labor and without any compacting of the soil, the road foundation is weak, the roads are prone to flood damages because of their low elvel and are constantly used by heavy and medium vehicles going into and out of the villages carrying people and agricultural produce and causing damages and pot holes. There is almost no maintenance because no one is made responsible and no budget is appropriated.

2.3 Problems and Needs in Public Health

2.3.1 The prevalence of digestary tract diseases

These diseases are found in all Tambols include stomach upset and dirreal which are cuased by the people's preference for half-cooked foods and unboiled water from wells or man-made ponds which are useally not kept in clean conditions. They are also caused by unhealthy environmental conditions and certain habits of the people such as keeping animals under the raised house floor, eating foods directly by hands and digging wells near dirty spots or latrines, etc.

Digestary tract diseases severely sap people's health and are an obstacle to human resource development as well as community development. People suffering from these diseases feel physically weak, cannot work, have to spend money for curing as well as lose time and opportunities to increase production and income. These problems are interrelated but people are not aware of them and their consequences. It is thus the task of all concerned government units to mobilize their efforts in order to reduce the severity of the problem.

2.3.2 The Needs for medical treatment facilities

The primary units in rural area are health stations and mid-wife stations. There are 15 such stations in Amphur Muang KK. Only tambols Don Han and Ta Pra have both types of stations. It is planned to build one health station in T. Dang Yai in 1983.

2.4 Social and socio-economic problems

2.4.1 Out-of-school children after finishing compulsory primary education.

This problem is found in every Tambol. The basic causes are the poverty of parents who cannot support their children's education beyond the compulsory level and the parents' need for labor of family members in agricultural work. It is not caused by the lack of schools or long distance of travelling to schools.

2.4.2 Drug addiction among youths

This problem is related to 2.4.1. Out-of-school children are likely to have no regular employment other than helping their parents in agricultural work or occasional wage labor. They are likely to form gangs in their villages, socializing among themselves in spare time and indulge in inhaling certain chemicals such as thinner oils, shellac, gasoline and lighter fuel, etc. The damaging effects may not be as bad as hard drugs such as morphine or heroine but they can cause nervous tension and damage bodily functions, i.e. Frain paralysis and physical weaknesses which will negatively affect economic production. The community will in the future suffer from having adult members who are weak and not mature.

In 1981 drug addiction was a serious problem among youths in Tambols Ban Tum, Ban Waa, Dang Yai, Sawatee, Muang Kao, Kok See, Pra Lub and Samran. These Tambols are near the City of KK and well connected to it by roads. Chemicals are easily available and the prices cheap. This has contributed to their rapid spread. More important, parents are oblivious to their bad effect and consequently have not take the trouble to stop or warn their children.

2.4.3 Safety in Life and Property

Being the center of Changwad provincial government and having a dense population with many entertainment places, the City of KK has attracted people of all kinds and nourished criminals. The surrounding rural areas have been contaminated by the bad examples of certain groups in the urban center.

The following are criminal statistics in 1980:

Serious offenses : Armed robbery 49 cases

Murder 38 "

Armed robbery by gangs 35

Of these 122 cases arrests were made only in 32 cases or 26.23%. The first and third categories, crimes against property, total 84 or 68.85% of all serious offenses. The cause is to be found in the socio-economic factor, i.e. poverty and luxuries encouraged by the existence of many entertainment plances.

To reduce the threat to the life and property of the public, the policy should stress preventive measures by means of raising the level of income and economic security of the people in which all government units must combine their effort.

Chapter 2 : GOALS, TARGETS AND STRATEGIES

1. Goals

Following are the goals for the year 1983 set by Amphur Muang KK Administration to meet the problems and needs of the people and in response to the government's policy, taking into account the possibility for development of the areas.

- 1.1 To inrease agricultural productivity, particularly that of basic crops so as to raise the farmers' level of income.
- 1.2 To improve water resources for household use and drinking both in terms of quality and quantity. The latter should be adequate the whole year.
 - 1.3 To promote animal husbandry in certain areas
- 1.4 To improve inter-Tambol and inter-village roads, usable for all seasons
 - 1.5 To prevent and reduce drug addiction among the youths

1.6 To promote public safety in life and property

2. Targets

To reach the afore mentioned goals these targets are set up:

- 2.1.1 Increase of agricultural productivity (Emphasis on basic crops)
 - non-glutinous rice, both main and off-season crops
 - glutinous rice, both main and off-season crops
 - peanuts
 - matpe beans
 - corn
 - -vegetables
- 2.1.2 Expansion of cultivated land to include 90% (58,000 rai) of the areas under the land consolidation project, with an emphasis on dry season crops listed in 2.1.1.
- 2.1.3 10% increase of production of sugar cane and casave over 1982-83 figures in the ares out side irrigation and land consolidation projects.
- 2.1.4 Improvement of water resources in the areas outside irrigation and land consolidation projects, with a view to expand their capacity to store in the dry season at least 1/3red of the rainfall in the rainy season.
- 2.1.5 80% increase in the feeding canal net work in the irrigated areas over the 1982 project.
- 2.1.6 Provision of production factors, i.e. seeds, fertilizers, insecticide to at least 4,000 farming households in the areas under land consolidation.
- 2.1.7 Extension workers and other Tambol officials concerned with agriculture must visit farmers both in and outside the areas under land consolidation at least once a month to give advice.
 - 2.2 Improvement of water resources for human consumption
- 2.2.1 Building at least 1 400 gallon rain waterstorage tank for each village in Tambols Ban Khor, Sawatee and Don Chang
- 2.2.2 Encourageing villagers in Tambols Ban Khor, Sawatee and Don Chang to build thier own permanent rain water containers such as cement jars and tanks.
- 2.2.3 Deepening village ponds so as 1/3rd of rainfall can be stored in the dry season. Along the shores of these ponds fast growing trees will be planted.
- 2.2.4 Boring of more artesian wells in Tabols facing water shortage in the dry season.
- 2.2.5 Building a health station for Tambol Dang Yai and rain water storage tanks

- 2.3 Promotion of Animal husbandry as an occupation
- 2.3.1 A 15% increase in the number of animals raised, ie. e cattle, buffaloes, pigs, ducks and chicken.
- 2.3.2 Establishment of at least 2 demonstration villages to serve as centers for promoting animal husbandry.
- 2.3.3 Establishment of at least 1 animal raising group in tambols having villages with intensive animal raising activities. Animal husbandry officials will make a visit at least once a month to give advice and treat sick animals.
- 2.3.4 Improvement of al least one pasture field in villages with animal raising groups.
 - 2.4 Improvement of inter-Tambol and inter-village roads
- 2.4.1 raising the level and resurfacing basic inter-Tambol roads with lagterite.
- 2.4.2 improving and repairing all worn-out inter-village roads 2.5 Prevention and reduction of the rate of drug addiction among the youths cohc
- 2.5.1 Inculsion of at least one lecture on the damaging effect of drug addiction in every training course organized by the government particularly those intended for youths.
- 2.5.2 Displying a poster telling about the damaging effect of drug addiction at every village newspaper reading room, particularly in villages with high rates of drug addiction among the youths.
- 2.5.3 Organizing at least one youth group in each village and giving them an effective occupational training so as to encourage them to make a better use of free time in the dry season.
 - 2.6 Increasing public safety in life and property
- 2.6.1 Building a police kiosk at villages far away from the Amphur center and having high crime rates.
- 2.6.2 Sending at least a weekly police patrol from police sub-station or central station to communities with high population density.
- 2.6.3 Organizing village defense volunteers, village scouts, etc for village guard duties at night.
- $2.6\,$ 4 Having at least 3 crime news reporters in villages with large population and high crime rates to report cases to the police and the Nai Amphur.

3. Stategies

Following the government special policy of development of design at the afore-mentioned goals and target, the following strategies will be used.

3.1 Increase in agricultural production

- 3.1.1 For this propose the agricultural land is divided into 2 areas
- Areas within the irrigation project. The exphasis on increasin approduction of rice and water-consuming upland crops
- Areas outside the irrigation project. The exphasis is on upland crops
- 3.1.2 In the areas within the irrigation project these strategies will be followed:
- Selection of farmers' leaders to work as assistants to extension workers. One leader is responsible for 200 farming households.
 - Training of farm leaders together with extension workers.
- Operating demonstration farms for different kinds of crops in both the rainy season and dry season under the care of farmers' leaders and with technical advice of the extension workers.
- Providing necessary production factors such as seeds, fertilizers, insecticide to meet the needs of farmers including spraying and weed control service in case of extensive damage.
- Providing marketing information for different kinds of crops before the planting time
- Training farmers' goups in the technique of water use and soil improvement with demonstrations given.
- Spreading modern agricultural knowledge by means of demonstration, competition and contest for prizes.
- Organizeing farmers in the form of farmers' goups, youth groups, young farmers' groups, cooperatives and water users' groups.
- Providing more credits and marketing sevice through private banks and the government's Bank for agriculture and Cooperatives.
- Renting or selling on installment plans cattle and buffaloes to needy farmers.
- Building common barns and turning them under the care of farmers' groups
- Emphasizing a follow-up and evaluation at every step of the crop growing process.
- 3.1.3 In the areas outside the irrigation project the strategies are :
- Separation of areas for promotion of upland crops from areas for promotion of anmal husbandry (pasture land)
- _ Declaring areas for promotion of suger cane and casava. The government will provide
 - 1. marketing information
 - 2. close advice
 - 3. necessary production factors

- Improving water resources by means of deepening ponds, repairing dams, embankment and feeding canals to increase storage capacity for a year round use. Small ponds will be dug in crop fields. These will be financed under the Rural Job Creation polity.
- Experimental farming in land affected by salinity to increase land under cultivation.
 - Improving rain-red rice growing
 - Planing fast growing trees near ponds by volunteer labor
 - Periodical training of farmers
- Utilizing mass media to spread modern agricultural knowledge.
- Teaching farmers about the ned for soil and water conservation during the plating season and after.
- Organizing new saving groups for production and strengthening the existing ones as means to get capitals facilitating marketing of produce.
- Encouraging organization of farmers into groups for production and social purposes.
- Finding supplementary occupations for farming households e.g. home industries utilizing local meterials.
- Promoting cooperation between farmers and government specialists.
 - 3.2 Improving water resources for household uses
- 3.2.1 Funds from the rural job creation policy will be used for:
- deepening man-made ponds, natural ponds, marshes and repairing village wells.
- building 400 gallon rain water storage tanks in the villages
 - 3.2.2 Providing training sessions for villagers in:
 - cement water tank construction
 - cement water jarconstruction
- sanitary and economical use of water from well, ponds and rainfall.
- 3.2.3 Building rain water storage tanks at schools and health stations in Tambols facing water shortage.
 - 3.2.4 Boring artesian wells in densely populated communities
 - 3.2.5 Finding measures to improve salth water from wells.
 - 3.3 Promotion of animal husbandry.
- 3.3.1 Advising, training and encouraging farmers to follow new methods of animal hushandry.
- 3.3.2 Setting aside village land for animal raising and improving it as a pasture field.

- 3.3.3 Privinding assistance in the form of parent stock, grass, feeds, vaccine, etc. Farmers may have them gree or rent them.
- 3.3.4 Periodical visits by animal husbandry officials to give advice and treat sick animals.
- 3.3.5 Stimulating people's and farmers' interest in animal husbandry and its benefit. Information will be given about suitable sites for raising animals and marketing. Demonstration and contests for prizes will be held.
- 3.3.6 Promoting animal husbandry in villages by cooperation with Tambol level officials, e.g. community development workers and extnesion workers.
 - 3.3.7 Assisting farmers in marketing
 - 3.3.8 Promiting villages' common stockades
 - 3.4 Improving inter-Tambol and inter-village roads
- 3.4.1 Repairing and resurfacing roads for all season use with a level higher than flood levels. Resources of all responsible government units such as the Accelerated Rural Development Department and the Irrigation Department will be mobilized.
- 3.4.2 Repairing worn-out roads by funds from local taxes, the rural job creation policy, etc.
- 3.4.3 Assigning responsibility to the Tambol Councils for maintenence of roads and bridges.
 - 3.5 Prevention and reduction of drug addicition among the youths (Contents same as mentioned in the previous section)
 - 3.6 Promoting safety in life and property (Contents same as mentioned in the previous section)

XXXXXXXXXXXXXXXXXXXXXXXXXX