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9. ABSTRACT

The American Public Health Association, under a contract with the Agency for International Development, has designed a program in public health improvement which is called the Development and Evaluation of Integrated Delivery Systems (DEIDS). The activity is designed to assist countries to demonstrate how to establish health delivery systems within seven years. Such projects include, but are not limited to, Maternal and Child Health and Family Planning and Nutrition. The projects are to cover large populations in predominantly rural areas. They are to utilize in-country resources for the service component, although external assistance organized by DEIDS is available for planning, evaluation, training, and limited amounts of essential equipment. It is expected that successful health delivery systems can be subsequently replicated in the country or in the region.

These are phases through which DEIDS projects proceed:

a) Phase I -- reconnaissance within a specific country or region, to gather information about disease patterns, health services as currently organized, local resources, cultural aspects, community involvement, the potential for integration of various parts of public health, opportunities for innovation, current and potential staffing, training, supervision, emphasis upon preventive services, outreach, cost, and evaluation

b) Phase II -- Detailed planning. This phase begins if the survey in Phase I recommends it, and involves experts from the host country as well as experts assigned by DEIDS.

c) Phase III -- Pilot Project Operations, which continue for as long as eight years.

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THAILAND

DEIDS - Reconnaissance

Jan. 29 - February 9,1973

THAILAND

DEIDS Reconnaissance
January 29 – February 9, 1973

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INTRODUCTION

The reconnaissance team members appreciate the opportunity to visit Thailand, to become acquainted with many delightful people, and to learn something about its health problems and programs. We regret that limitations of time and energy kept us from staying longer and learning more.

This report represents a precis of what we were able to do and to comprehend and record, along with some judgment regarding possible future joint endeavour. We have made it as complete and accurate as we could but apologize for any inadvertent errors or omissions.

Appreciations and thanks are extended to the several USOM (AID) staff members and to many Thai people in the Ministry of Health and elsewhere who assisted and counseled us with unfailing courtesy during our visit.

Much credit is due Dr. M.M. Shutt, Chief Health Officer, USOM, Bangkok, for planning our itinerary and for accompanying and aiding the team in many ways,---resulting in completion of the survey almost without problems.

I. Summary and Recommendation

DEIDS is a project which "seeks to establish through detailed planning, trial, and evaluation a practical program for the development of a delivery system through which maternal and child health, family planning, and nutrition services can be made available to the majority of the population in a defined area." It is specified that the program shall be an integrated one.

Three phases are envisioned:

Phase I--Reconnaissance (the subject of this report)

Phase II--Detailed Planning. Should a decision be made to proceed with Phase II (the planning phase) in Thailand, it will involve one to two individuals on a continuing basis from the APHA team, plus consultants, on short-term assignments for specific areas of competence, for a minimum period of three months with contemplation of completing the planning phase well within a year. Throughout this planning phase it would be hoped that there would be a continuing key involvement of Thai government personnel, particularly someone assigned as primarily responsible for the planning operation to guide the APHA group.

Phase III--Pilot Project Operations, would continue for up to eight years.

Between January 28 and February 12, 1973, the APHA reconnaissance team interviewed many individuals, collected considerable published and unpublished material and observed program operations in a limited number of areas in Thailand. The mission to be performed by the reconnaissance visit was to ascertain jointly with Thai officials the feasibility of a DEIDS project in that country. This report is intended to summarize a number of facts about the Thailand setting and to report the findings of the reconnaissance team.

A. Strong Points

The following strengths were noted which would appear to favor further development of a DEIDS project in Thailand:

1. The DEIDS concept (an integrated delivery system) is not new to Thailand and appears to be consistent with the national plan.

2. The majority of the senior staff members of the Ministry of Public Health expressed keen interest in the DEIDS proposal.

3. Positive support was expressed by the numerous multi-lateral and bi-lateral organizations presently operating in Thailand.

4. Educational capabilities for the development of health manpower are available in institutions such as Mahidol University, (including Sirirai Hospital and Ramathibodi Hospital), Chulalongkorn Hospital, The Universities of Khon Kaen and Songkhla as well as in the existing and planned maternal and child health centers operated by the MOH.

5. There is personnel capability for planning, evaluation and research in the present Ministry of Public Health. These men appear to be highly capable at analyzing strengths and weaknesses; they appear to have an understanding of the flexibility which would be required to carry out a DEIDS project.

6. Verbal approval of Phase I, encouragement, and assistance were obtained from the Department of Technical and Economic Cooperation (DTEC). This support is essential since DTEC provides final sanction for foreign country participation in Thailand.

B. Possible Problem Areas

Below are several aspects of the situation in Thailand which would require careful consideration in making a commitment for Phase II (Detailed Planning) of a DEIDS project in Thailand:

1. While popular approval for DEIDS was expressed by a majority of the Ministry staff inverviewed by the DEIDS reconnaissance team no commitment was received from the Director-General, Dr. Choed Tonavanik, Director of the Department of Health and Medical Services. Ninety percent of the Ministry of Public Health budget is administered by this Department and constitutes the principal present "line" Department of the Ministry.

2. The reconnaissance team did not meet the Minister of Public Health--Police General Prasert Rujirawong--and has no knowledge of his acquaintance with or commitment to continuance of a DEIDS project in Thailand.

3. Effective input from the staff departments of the Ministry would be required for successful operation of Phases II and III. Special concern is felt for strength in the Department of Health Promotion which embraces nutrition, environmental sanitation, health education, and food and drug control.

4. Many of the provincial medical officers of health are basically oriented toward hospital operation and medical care. Since DEIDS is oriented toward prevention as well as treatment, assurances would be needed that the public health and preventive medicine skills would be adequately represented in any province chosen for a DEIDS project.

5. The reconnaissance team heard an acknowledgement of a weakness in supervision, and capable supervision would be required to successfully pursue operational phases of a DEIDS project.

6. The Ministry of Health would need to reallocate some funds, assign some available personnel specifically for DEIDS Phase II and III and make some of the time of his central

staff available to interact with the DEIDS team. The reconnaissance team is not certain of the Ministry's willingness or timely ability to undertake these and related adjustments.

7. Five or six proposals were described for the development of manpower to extend the effectiveness of physicians. Various interested individuals and agencies would need to be pulled together to assist in making decisions regarding the type or types of health aides to be trained and used in a DEIDS activity and then to develop and utilize curricula for that purpose.

8. A considerable variety and number of health manpower exist in Thailand who have limited training but play an important role in health care delivery. A decision would be needed as to whether one or more types of such personnel now found in Thailand are available for additional training and for new or expanded roles in health care delivery.

Conclusion

The Ministry of Health of the Royal Thai Government has many strengths. It also has some problems which are well recognized by the staff and indeed are the subject of a number of staff reports. A DEIDS Phase II and III project would be feasible in Thailand if the Ministry of Health was able and willing to make a continuing commitment in relationship to the potential problems envisioned and reported above by the reconnaissance team. Similar commitments may be needed from the Provincial Government of any proposed DEIDS project.

A DEIDS project would provide an additional focal point for further development of the Thai health delivery system and is recommended for favorable consideration subject to the above remarks.

II. General

A. Geography

A Kingdom of Thailand, formerly known as Siam, is located in the heart of Mainland South Asia. It has an area of approximately 200,000 square miles--about the size of Texas. Thailand has common boundaries with Burma on the West and North, Laos on the North and East, Cambodia on the Southeast, and Malaysiaon the South. Southern portions of the country border on the Gulf of Siam and the Andaman Sea. The shape of the country has often been compared to the head of an elephant with its trunk extending down the Malay Pennisula.

The country can be subdivided into four regions. The Central region is drained by the Chao Phraya river and is the geographic and economic heart of the country. This region is rich in alluvium and is watered by an extensive network of canals and irrigation projects and is Thailand's "ricebowl". The northeastern region is a large plateau rising about a thousand feet above the central plain and comprises roughly one-third of the country. A great deal of this land is poor and suffers occasionally droughts or floods depending on the season. The typography of the plateau makes irrigation difficult but planned irrigation and flood control projects on the Mekong River, which forms much of the border with Laos, should improve agricultural potentiality. Northern Thailand is primarily a region of mountains and valleys and comprises about one-quarter of the nation. The mountains running north and south through this district are forested, the valleys between them are narrow but fertile. The southern region is a long sliver of land extending from Central Thailand south to Malaysia and is covered in great part by rain forest.

The official Thai vital statistics (overlooking under-enumerations) show a death rate of about 8 per thousand. The significant reduction in mortality and the consequent increase in life expectancy from about 35 years in 1937 to between 55 for men and 62 for women in 1964–66 followed rapid adoption of modern medical technology and the expansion of health facilities. The consequent reduction in diseases which formerly took their toll is dramatic. For example, the annual death rate for malaria declined from 329 per hundred thousand in 1943 to only 18 in 1964 and zero in 197..

U.N. experts estimated birth rates at 45 to 50 per thousand as late as the 1960 census. Over the past few years the birth rate has fallen slightly. Several studies and programs have shown very considerable interest in family planning and some evidence of use of a means of family limitation. These attitudes and practices are evidently not sufficiently widespread or of long enough duration to greatly affect the birth rate. Thai women continue to average about 6.5 births by the time they complete their reproductive cycle.

Thailand continues to remain a largely rural, agricultural country as judged by both residence and economic activity. In the 1960 census, only 12.5 percent of the population lived in places classified as municipal areas. Of the 120 places classified as municipal 98 contained fewer than 20,000 persons each. Further reflecting the very low level of urbanization of the country is the fact that almost 4 out of every 5 persons resided in agricultural housing. As is typical of many developing countries most of Thailand's urban population is highly concentrated in a single metropolitan area, Bangkok-Thomburi, with a combined 1960 population of 1.7 million accounting for 52 percent of the total population classified as urban. The next largest urban place, Chiang Mai, numbered only 66,000 persons in 1960.

By 1967, the urban population was estimated to have grown to 14.3 percent of the total, reflecting the increasing urbanization of the country. The population of all places classified as urban in 1960 increased by 43 percent by 1967 while all rural places grew by only 22 percent. The highest growth rate of all was in the Bangkok area which increased by 45 percent between 1960 and 1967. This growth was in part attributable to the inclusion of former rural areas in the expanded municipal area. As a result, in 1967 Bangkok's estimated population of 2.6 million accounted for even more of Thailand's urban population than in 1960––about 56 percent.

D. Economy

The Thai economy is both fast-developing (8 percent growth rate since 1960) and stable, an unusual combination. Thailand has shunned excessive deficit financing, built up comfortable foreign exchange reserves, and created a stable currency readily convertible at free market rates. These conditions, created by conscious Thai efforts, have facilitated development and attracted foreign investment.

Internally, the Thai economy continues to rest largely on an agricultural base, with rice the major crop. In 1964 Thailand was the largest rice exporter in the world, but, although rice continues to be the major Thai export, the market for this commodity is declining. The 1960's saw a dramatic diversification of Thai agriculture. This has been reflected in the increasing

importance of new exports, notably corn, tapioca, and kenaf (a fiber used in ropemaking). Rubber continues to be the second most important foreign exchange earner, while corn now competes with tin for third place. Teak is an important export. In 1969 Thai exports amounted to about U.S. $710 million, the bulk of which went to its major export partners, Japan, the United States, Malaysia, Singapore, and Hong Kong.

Imports into Thailand for 1969 amounted to $1.3 billion, excluding U.S. military equipment. The major import items included machinery and transportation equipment, petroleum products, metal goods, textiles, and chemicals. These imports came, for the most part, from Japan, the United States, the Federal Republic of Germany, and the United Kingdom.

Despite the manifest economic progress which Thailand has experienced in the last 10 years, per capita income is still only about $180 (U.S.) per year. The benefit of the increase in gross national product (BNP) to $6.3 billion in 1969 has been partially offset by the yearly population increase of more than 3 percent.

The Thai Government has embarked on a concerted effort to broaden the base of the nation's economy. A large part of the national budget goes to education and economic development. Efforts in the latter category are largely concentrated on basic irrigation, transportation, communications, and power facilities.

The Thai economy is relatively free of controls and relies primarily on private rather than public enterprise. The government is interested in industrialization and is receptive to prospective private foreign investment. The present good health of the Thai economy has enabled the country to depend increasingly on international lending institutions for foreign capital for economic development projects. The International Bank for Reconstruction and Development (IBRD) has played a major role by financing the Chao Phraya irrigation project, railway rehabilitation, port development, highway construction, and the combined irrigation and hydroelectric project (the Bhumibol Dam) at Yanhee in northern Thailand. Another project of great significance for Thailand and neighboring countries is the Mekong River Development Program, which includes power and irrigation dams in Laos and Cambodia as well as in Thailand.

Tourism, which also contributed to the nation's economic well-being, has increased dramatically in recent years. The number of tourists visiting Thailand in 1969 was approximately 450,000; about 30 percent of these were U.S. citizens.

Public transportation in Thailand now reaches most larger towns by rail, all-weather highways, and air. Highways have been greatly improved in the last decade. Numerous feeder roads are now being built which will connect many rural areas that were accessible only by foot, ox cart, boat or elephant-back a decade or two ago.

Telephone service reaches the major towns, with more than 100,000 telephones in use throughout the country. Thailand has joined the International Telecommunications Satellite Consortium (INTELSAT) and has had a receiving station for the communications satellite in operation over the Pacific Ocean since 1967.

In the development sphere, Thailand cooperates with a number of international agencies concerned with stimulating economic development.

E. Educational Level

For some years universal education through the fourth grade has been offered in all parts of the Kingdom, and the Government is currently seeking to extend this to the seventh grade. There are universities in the capital, in the northern city of Chiang Mai, in the northeastern city of Khon Kaen, and in the south, where a new university is being established with colleges in Songkhla, Yala, and Pattani. Although Thailand's school attendance rate through 4th grade and literacy rate is approximately 70 percent, very few Thai youth, perhaps 1 in 100, attend college-level courses.

(See III. D. "Health Manpower and Womanpower")

F. Religions, Cultures, and Ethnic Groups, including Health Beliefs and Systems

Thailand's population of 38 million is composed primarily of people of Thai stock. The principal minority groups are an estimated three million ethnic Chinese located in the larger urban areas, most of whom have integrated into the Thai society; about 800,000 Malay-speaking Moslems in the southern-most provinces; the various hill tribes in the north, estimated at about 286,000; and 45,000 Vietnamese, mostly in the northeast.

Buddhism is the national religion. Of the total population 3 percent are Islamites, 1.7 percent are Confucianists, and 0.6 percent are Christians. Thai is the national and official language, with several regional dialects.

Western medicine has largely influenced the development of medical practice in Thailand, especially as practiced in urban areas. However, the shortage of western type personnel, especially in rural areas results in widespread self-medication and patronage of various types of trained and untrained healers (see item III. D. Manpower and Womanpower). No information was elicited that a separate strongly organized system of practitioners exists in Thailand.

G. Policies and Laws

An interesting history of the "evolution of population policy and programs in Thailand" has been reviewed. As late as 1956 bonuses were offered for large families. Since that time step by step the policy has been restudied through various agencies of the Thai government and step by step official policy has moved to its present statement adopted by the Royal Thai government cabinet based on recommendations made in a report from the National Economic Development Board. This statement is as follows: "The Thai Government has the policy of supporting family planning through a voluntary system, in order to resolve various problems concerned with the very high rate of population increase, which will constitute an important obstacle to economic and social development of the nation." The Cabinet also accepted the appointment of an interministry coordinating committee composed of 22 members from all ministries and related government agencies and responsible for studying and coordinating the implementation of the adopted population policy.

III. Health Administration, Family Planning and Related Official Activities

A. Official

1. Ministry of Public Health

In 1918 the Department of Public Health was created under the Ministry of Interior to supervise the medical and public health services of the country. The work of the department expanded gradually and in 1942 the Ministry of Public Health was formed integrating almost all medical and public health activities in the government into one administrative unit.

A recent reorganization of the Ministry of Health is illustrated by the organizational chart which is included herein. (Appendix A) The basic purpose in establishing the Department of Medical and Health Services was one of integration of preventive and curative services. One result of this action is that this particular department has something over 90 percent of the entire budget of the Ministry and it constitutes the administrative arm of the ministry for a very large proportion of the total line type activities.

The Provincial Chief Medical Officer is now responsible for both health and medical services. He is administratively responsible both to the Department of Medical and Health Services and to the Provincial Government. When fully staffed, the Provincial office will include the Chief Medical Officer and a Deputy for medical services and a Deputy for health services. Services are dispensed to rural people both through the hospitals and through peripheral health units located in the villages. These units supply both health services and limited medical services.

The described reorganization has not been fully implemented in part because of its newness and in part because of staff shortages especially at the provincial Chief Medical Office level and affecting the performance not only of that office but of all subordinate activities. In some quarters concern is expressed that public health services will suffer at the expense of medical services as a result of administrative rearrangement.

The included chart showing "The Existing Model of Rural Health Services in Thailand" (Appendix B) further illuminates the ways in which public and private health services impact on communities in Thailand.

In the past several divisions in the Department of Health also operated in the Provinces either from their own headquarters or through mobile teams carrying out certain specialized health programs. It was not clear to the visiting team whether or not all of these direct services had become the responsibility of the Province. At least in the past vertically administered specialized health programs included those associated with malaria eradication, venereal disease control, tuberculosis control, leprosy control, maternal and child health and school health.

Public Health Services in Thailand have been frequently examined or re-examined, planned or replanned, and a result is a rather rich literature. A central focus for such planning was provided in the Ministry in 1972 by the establishment of the Health Planning Division.

2. Ministry of the Interior

Village doctors function under the village headman and under the Ministry of Interior. The village doctor is responsible for collecting information regarding illness or epidemic. There is one in each tambol (village). He is selected from among the village people. It is estimated that there are 5,000 in place and approximately 1,000 of these have been trained in first-aid and simple medications. It is reported that they use traditional herbs. Further, they are rated as politically influential although apparently they are not organized as a political force.

3. National Statistical Office

This agency is primarily responsible for demographic data collection and analysis. In addition to the regular census it conducts a number of other special censuses and surveys.

4. National Economic Development Board

This Board (NEBD) is a separate agency under the Office of Prime Minister and has as its major responsibility preparation of Thailand's Economic Development Plan. The Board includes a Manpower Planning Division concerned particularly with the implications of population growth and also has responsibility for formulating population policy.

5. National Research Council

This council is an independent agency of government established in 1959 to advance scientific programs in the natural and social sciences. The council has sponsored three national population seminars and has cooperated with the Ministry of Public Health in studies of family planning.

6. University Related Health Activities

There are several health projects in existence relating to universities and conducted in cooperation with the Ministry of Public Health. Each such activity has its own particular significance, either as a pilot project, as a training device, or both. (See Section on Health Manpower and Womanpower–III D)

a) Chiang Mai University

The Saraphi District is being used by Chiang Mai University and the Ministry of Public Health for a "project to strengthen rural health services and develop community health concepts in medical education." It involves the creation of a special area for field operational research, experimentation and evaluation to create and demonstrate methods of strengthening rural health activities which could be used in other areas of Thailand. The Saraphi project has the following specific objectives:

1. To study specific rural health problems and to improve existing techniques and develop new ways for providing World Health Services.

2. To stimulate greater usage of health services by people in rural areas.

3. To increase understanding and interest about health problems of rural people among medical students, nursing students, staff and faculty.

4. To integrate special projects such as malaria surveillance and tuberculosis control in the general health activities.

This project was begun in 1970 and undoubtedly some of the lessons learned in this project would be valuable in further development of rural health services in Thailand.

b) Mahidol University

1. Institute for Population and Social Research

The Institute was started in 1966 as a Center for Population and Social Research. Institutional status which is equivalent to the rights and priviledges of "Faculty" was achieved in 1971. The Institute's activities are organized around three program components:

a. Research: Current research projects are in Field Worker Evaluation and Condom Study. The first project examines the feasibility of utilizing non-health personnel in the National Family Planning Program, Ministry of Public Health. The latter is a pilot project to investigate the acceptability, methods of distribution and resupply of condoms in a rural community in Thailand. Completed research includes Fertility, KAP Survey and Pregnancy Testing projects in Bangkhen.

b. Training: Activities are "aimed to provide research and administrative capabilities for workers for population, health and family planning programs, and to assist other faculties in developing and organizing courses in population and health dynamics. In addition, courses in public health research methodology and demographic analysis are offered to students in the School of Public Health."

c. Distribution of Information: "The Institute serves as a population and social information center by maintaining a technical library, supplying lists of references, providing survey raw data in magnetic tape form to interested researchers both within and without Mahidol University." A Mini-tab computer program is available, free of charge, to any interested researcher.

2. Field Training Program

Mahidol Faculty of Public Health in Soong Noen District provides field training for virtually all of its degree candidates in public health nursing, environmental sanitation, occupational health and health education, as well as M.P.H. students.

Ramithibodi Faculty of Medicine of Mahidol University in cooperation with the Ministry of Public Health operates a field training program for undergraduate medical students in Amphur Bang Pa-in. a district of 46,000 people about 55 kilometers north of Bangkok.

c) Chulalongkorn University

1. Family Planning Unit

The Family Planning Unit was established in 1965 at Chulalongkorn Hospital, a Government institution and the central hospital of the Thai Red Cross. It is also the teaching hospital. Through family planning services, it expresses its concern of protecting the basic rights of women and the future of the development of Thailand.

The Family Planning Unit was started to meet the need for alternative methods of family planning, especially when large numbers of beds in Chulalongkorn Hospital were being used by women having sterilizations and abortions.*

From the beginning of this program, IUD has been the method of choice by patients and staff. Other methods of contraception are also offered.

* Summary of services: January 7, 1965--February 5, 1973

Total IUD Insertions	75,910
Total Visits--All Acceptors	232,232
Total Post-Partum Insertions	14,788
IUD Cases--Mobile Unit	17,078
Pill Cases	3,336
Injection Cases	1,767

2. Institute of Population Studies

This institute was started in 1966 as a Population Training and Research Center.

It has a threefold purpose:

"1. to promote public and official awareness, interest and knowledge about population matters in Thailand;

"2. to train persons in Thailand to conduct demographic research and to utilize demographic materials in both the applied and the scientific spheres; and

"3. to expand store of knowledge about the population of Thailand, including the relation between population factors and various social and economic conditions and to disseminate this information to the public, the scientific community, and government officials and agencies."

B. External Assistance

1. Introduction

Several multilateral agencies and one bilateral agency in Bangkok were visited during the second week of the Reconnaissance Team's assignment in Thailand. These agencies were selected jointly by the Reconnaissance Team and USOM, Thailand. The criterion for selection was determined by assuming that these agencies were the more prominent organizations which could be of assistance to a DEIDS project, should Thailand be selected.

The purpose of the visit to the multilateral agencies was fourfold:

a. to pay a courtesy call
b. to become oriented to the overall function of each agency
c. to describe the DEIDS project
d. to ascertain the interest of the respective multilateral agencies should DEIDS go into Phases II and III

Everyone, without exception, in all the agencies visited was most generous in providing the time for the interviews as well as in sharing the material requested. All agency representatives expressed the advantages of a DEIDS-like system in Thailand and enthusiastically assured cooperation. The timeliness of the project was repeatedly expressed by the majority interviewed.

It was noted during these visits to multilateral agencies that the profusion of agencies involved in population activities was most impressive. Agencies involved in population programs but not interviewed are listed:

2. Multilateral

a. World Health Organization

The World Health Organization assists in many ways in planning and carrying out health activities through support projects and consultation.

The pattern of assistance to Thailand appears to be changing in recent years with the consolidation of small projects and concentration on fields of major importance. The latter is determined jointly with the Thai government. A number of the special projects which have become a part of the general health services have been dropped

by WHO with only occasional consultations from WHO specialists. The limited WHO resources are used for consultation and promotion to areas of need which have not yet gained much attention but require activities. At present, there are about 36 Thailand Country Projects of which 27 are supported by WHO, six by UNDP, and three by UNFPA.

b. United Nations Fund for Population Activities

This agency is under the aegis of the United Nations Development Program. It was created by the Secretary-General in 1967 to assist national efforts by:

"1. promoting government awareness of social and economic implications of population problems;

"2. providing systematic and sustained assistance to countries seeking to define and solve population problems;

"3. helping organizations within the UN system to be more effective and efficient in planning, programming and implementing population projects supported by the Fund;

"4. assuming a leadership role in developing population strategies."

The UNFPA support for the government of Thailand's family planning program include the following:

1. Accelerated Development and Child Health Services and Family Planning.
2. Bangkok Municipality-Family Planning Field Workers' Project.
3. Family Planning Communication Development and Integrated Campaigns.
4. Training for Medical Personnel and Provision of Motorcycles and Bicycles.
5. Expanded Sterilization Project.
6. Mahidol University--Feasibility Study and Faculty Training.
7. Analyzing Legislation in Thailand and other countries.

The Budget for the above projects and programs totals $3,980,594 (agreement signed 12 November 1971).

c. United Nations Childrens Fund (UNICEF)

UNICEF, in close collaboration with WHO, and UNFPA have made the following commitments for 1972-1974:

Health	360.0	472.0	68.0	900.0
Nutrition & Child Feeding	22.5	35.5	12.0	70.0
Education	265.0	329.0	56.0	650.0
Hill Tribes	28.0	38.0	14.0	80.0
Total	675.0	874.5	150.0	1,700.0

d. Development Support Communication Services

The Development Support Communication Service is a regional technical service for UNDP-and UNICEF-assisted projects, and development in general, in Asia (ECAFE Region). Its resources include personnel for communication, with appropriate technical equipment and administrative support. The project-support operations of the DSC are financed by UNDP and UNICEF from existing or supplementary project allocations made for the purpose, and is available for help to development projects directly associated with them.

The structure of the Services include:

1. Director, Research and Advisory Specialists (Social Science, Television, etc.) and Operations Planning;

2. Field project support communication Appraisal, Planning and follow-up;

3. Multi-media Production Unit (including 16 mm film and still-photography);

4. Audio-Visual Materials Distribution:

5. Administration.

Planned, additional resources include personnel for field survey, advice and training in the programming and maintenance of project audio-visual equipment and material.

3. Bilateral

United States Operations Mission to Thailand–Agency for International Development

More than thirty projects of support to Thai health institutions have been given by U.S. Government in nearly twenty-three years of assistance by the end of 1972. ".....emphasis has been given to the development of Thai staff, and provision for out-of-country training as well as improved training in-country has been woven throughout the projects." To these efforts, "the U.S. has contributed about $61 million over the period 1950-1972. This has been matched by about $74 million baht equivalent input from the Royal Thai Government." The areas of additional assistance in the future may well concentrate in the areas of:

1. Assisting Thailand to re-examine its whole system for the training and utilization of health manpower and its deployment to programs and geographic areas of highest priority.

2. Due to the reorganization of the Ministry of Public Health, and the provincial health structure, "workers from specialized disease control programs, and the programs themselves, will have to be integrated. More and more, the emphasis will be on creating general health services at the local level."

3. There will need to be a response of health services to the health needs of its people as the excessive population growth is checked.

C. Voluntary Agencies

The Planned Parenthood Association of Thailand (PPAT) was founded in April 1970. Its basic objective is "to support the development of a Government Family Planning Project which will improve the health and well-being of individual families, and to improve the country's social and economic development."

PPAT activities include public information and education, training, medical and clinical services, fund raising, and research and evaluation.

D. Health Manpower and Womanpower

1. History

King Chulalongkorn encouraged establishment in Thailand of western medical approaches and scientific methods in the late 19th century, and since then such healing methods have had increasing emphasis, supplementing the activities of traditional medical practitioners such as herb and spirit doctors and granny midwives.

After the introduction of smallpox vaccination in 1880 by an American, Dr. Dan Bradley, growth and influence of western medical techniques were also aided by a number of private and public organizations, including the Rockefeller Foundation, which helped establish Siriraj Faculty of Medicine in 1889 and Ramathibodi Faculty of Medicine in the late 1960's; USAID, which during the 1960's aided development of the only medical school outside of Bangkok, at Chiang Mai; WHO and UNICEF; the Colombo countries; China Medical Board; Population Council; and other groups.

Support by western organizations included postgraduate training abroad for Thai faculty members, especially physicians and nurses, and this led to increased numbers of western-style practitioners and specialized health professionals. But such training, often leading to demands for highly technical equipment, usually under-emphasized the basic public health attitudes and skills essential for solution of Thailand's most serious problems: infant mortality, enteric diseases, tuberculosis, design and management of effective local health systems, etc.

Generally, the trained professionals, especially doctors, nurses, pharmacists and dentists, located in the cities, provincial capitals, and small towns leaving rural districts and villages without western-type medical care. This was the result of many factors, among which may be mentioned: opportunities for increased incomes and job advancement in cities; failure to recruit students from among people raised in rural areas; and lack of public health emphasis in curricula of professional schools.

Thailand's present medical care system is a mixture of Government hospitals and health centers, private hospitals and clinics, and old and new-style practitioners. The 71 provinces have 84 provincial hospitals with 20,300 beds, and about 4,200 health centers, all staffed by Government-employed nurses, doctors, sanitarians, and midwives. About 260 of the country's 550 districts (48 percent) have first class health centers to which physicians are assigned, but physicians were actually present at only 135 of these centers in 1970. This network of health centers provides only a small proportion of the health services purchased by rural populations, about 10-20 percent. Shopkeepers selling patent medicines in a "free" drug system, and injection and traditional practitioners, have filled the huge gaps in western-style care of the pragmatic Thais, who usually shop around for the most satisfactory method of effecting a cure.

2. Medical Profession

Physicians--Four faculties graduate 370 physicians per year; three (Siriraj, Chulalongkorn, Ramathibodi) are in Bangkok and one is in Chiang Mai. Medical schools are planned for Khonkaen in the northeast and Songkhla in the south, but these will not graduate doctors until 1978. Admission to universities and medical schools is by competitive examination, and prestige, prospective income, chance of travel abroad, and other factors draw many of the best students to medicine. Duration of studies is six years, which include two years of university studies, two years of basic preclinical studies, in anatomy, biochemistry, etc. and two clinical years. Thereafter an internship is necessary for licensure.

Most of the students' families are not able to pay tuition costs ($500 for four years), although the students' fathers usually work as relatively well-to-do shopkeepers, merchants or civil servants. The students may sign agreements with the Government for assignment for two years after their internships. One-third to one-fourth of the medical students are women.

Thai medical students have been successfully trained by western standards. Although they must overcome the barrier of English language textbooks, most of them pass the ECFMG, which is given yearly in Bangkok and Chiang Mai. Until several years ago any student passing the ECFMG could accept an internship and residency in America, many of which were taken in private hospitals with excellent salaries and poor training programs. But in 1971 the Government established a law that no medical graduate could receive a passport until he had worked in Thailand for three years after graduation, including internship. About the same time 14 Thai medical specialty boards were established, so graduates could receive credit in Thai hospitals towards specialty certification.

There are believed to be about 1,500 Thai doctors abroad, most of them in the United States. Of the first graduating class at Chiang Mai in 1965, 70 percent were still abroad in 1972. Of 2,165 doctors leaving Thailand from 1965-1969 987 (46 percent) returned during that period.

In 1971 the doctor-population ratio was 1:6570, and the Third Plan envisages a 12 percent improvement by 1976. However, since the rate of doctor attrition and retirement is 10-13 percent, it is likely there will be no significant change in the ratio by 1976. Much more basic is the great variability between the Bangkok area, with one doctor per 1,000 people, and the rural provinces, with one doctor per 15,000-200,000 people.

Curricula in Thai medical schools are similar to those in America. While they mirror the didacticism of Thai lower and higher educational systems, the faculty have introduced conference, seminar, and project approaches to learning, and have emphasized the Oslerian method of bedside teaching. Unfortunately, curricula are built solely around hospital-centered, one-to-one patient-physician relationship, largely ignoring the physician's role and responsibilities in improving the health of the rural or urban community.

In two significant ways the physician situation has improved over the past six years. First, the Thai government halted the physician emigration and established medical specialty boards; and second, the medical schools, especially Ramathibodi and Chiang Mai, appear slowly to be upgrading their curricula concerning public health and epidemiology. For example, the latter schools have established district laboratories, where on-site teaching activities concerning community health problems are carried out.

3. Nurses, Nurse-Midwives and Practical Nurses

In 1972 Thailand had about 17,000 nurses, 4,000 midwives, 6,000 practical nurses, and 15,000 re-trained traditional ("granny") midwives, and the nurse-population ratio was 1:2100. (Appendix C) By 1976 it is expected the nurse-population ration will be about 1:1780. Of the 17,000 nurses, 6,230 (36 percent) are presently employed in Thailand, and about 2,000 are believed to be living in the U.S. Over the past 10 years nursing schools increased from 10 to 20, and at present 1,400 nurses and 500 midwives graduate yearly.

The above projection makes no allowance for out-migration of nurses. During the period, 1967-1969, about 7 percent of all Thai nurses emigrated each year and 2 percent returned, giving a net outflow of about 800 nurses per year. In Cook County Hospital, a major 2,000 bed institution of Chicago, 75 percent of all nurses are Thai. The exodus of Thai nurses begins immediately upon graduation, and the peak emigration rates are among 25-35 year-olds. Also, about 4 percent of nurses retire yearly, so total attrition of the nursing force is about 8 percent per year.

To meet the nurse-emigration problem the Thai Government is emphasizing the training of practical nurses and midwives, especially in the new Maternal-Child Health Centers, of which four are now functioning and five more are planned. Midwives are trained for one and a half years after 10th grade and cannot meet educational requirements for working as nurses in U.S. hospitals. About 80 percent of Thai children are born at home at present and only 15 percent of pregnant women now deliver with the help of Government midwives.

As everywhere, nurse-doctor role rigidities and communication problems exist, and there is need to appraise effectiveness of nursing school curricula. Many Thai nurses who emigrate cite not only financial advantages to be gained abroad, but also more opportunities for increased responsibility.

Because of the respected nursing tradition, acceptance of the visiting nurse by most wives and mothers, and the importance of MCH-family planning-nutrition-health education services in future programs, an energetic nurse-midwife could make significant contributions to a community's health program. Although the nurse may be considered the original physician's assistant, the woman's serving and secondary role in Thai tradition and custom hampers development of a more active role and voice for nurses in health work. But in at least one place, at the Faculty of Medicine in Chiang Mai, nurses have illness-screening and educating responsibilities for babies and mothers, as assistants to physicians.

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4. Other Health Professionals

A partial listing shows at least 33 kinds of medical and health workers being trained or working in Thailand. These include, among others, dentists and pharmacists; veterinarians (370 in the country); medical, laboratory, and x-ray technologists; and beginning programs for physiotherapists and medical physicists and social workers.

In addition to the 60,000 traditional healers in Thailand there are about 13,000 shops and stores dispensing drugs, most of which are run by "old style" pharmacists trained by apprenticeship only. The most commonly dispensed drugs are tranquilizers, analgesics including cortisone and phenylbutazone, antipyretics, and birth control pills. A new type of

practitioner using modern drugs has appeared in rural Thailand, the injectionist or "quack", who may have learned his techniques as a sanitarian, sprayman, or Army Medic. The injectionist uses drugs such as vitamin B-12 and dextrose and water, and the powerful placebo principle, as he practices in shop-clinics or makes his rounds by motorcycle.

About 5,000 Tambon (village) doctors have some responsibilities for sanitation and epidemic surveillance, and about 1,000 of them have been given a 3 weeks' training course in first aid and simple medical care by the Ministries of Interior and Public Health. Also about 400 sanitarian-health workers are trained yearly, and simple medical care and referral of seriously ill persons are recently added responsibilities for these workers. In addition, there are about 700 Tambon paramedics, who received 6 months of Army medical training.

In 1972, the Faculty of Public Health of Mahidol University had 538 students enrolled as follows: 166 in diploma programs for public health nurses; and in BSc. programs, 123 persons in health education, 112 in nutrition and dietetics, 71 in sanitary sciences, 37 in nursing, 29 in occupational health, and 17 in an MPH program. A unique six weeks' community training period is mandatory for all of these potential public health workers.

5. Proposals for Village-Level Health Workers

The problem of lack of health workers, especially doctors and nurses, for staffs of provincial hospitals and government health stations is well known to officials in the Ministry of Public Health, and it has even been the subject of medical school conferences. Some appropriate action has already been taken, and other action has been recommended: increasing compensation for persons working in outlying areas, and improving advancement opportunities and living conditions.

Many Thai health officials believe some type of physician's assistant is needed to improve care in the rural district, which on the average has a population of about 50,000 people with perhaps one responsible doctor. But there is as yet no agreement on who this village-level health worker will be, his educational background, length of training, job description, and career ladder. Recently the Cabinet established a working group to consider the problem, but until a high-level decision is reached, the manpower producers, i.e. professional schools, provincial hospitals, and Ministry of Health, cannot act to develop appropriate training programs or modify those in existence.

Types of village-level health workers advocated to the DEIDS group by physicians and educators include the 'wej-anammaj,' nurse-midwife, retired medical NCO's, teacher-nurse, and pharmacist's assistant. The wej-anammaj (from the Thai words, medicine+health) would enter medical school after 12th grade without an examination and would be trained there for 4 years. Such physicians were trained from 1944-1947 by the Army Medical Department, and it is said problems arose when these 'military doctors' became senior and supervisory to regularly trained physicians.

Expanding the role of the nurse-midwife is advocated by some because at least 20 schools already exist and nurses are everywhere well accepted. Also, womanpower is sufficient, since only 1/3 of nursing school applicants are presently admitted. But safety in remote areas may be a significant consideration for any woman health worker.

The Local Administration Department of the Thai Government proposed employment of retired Army medical non-commissioned officers as assistants to Tambon doctors, and this received tentative approval from the Prime Minister. One survey found 5,000-6,000 such persons now available in Thailand.

Some advocate the sanitarian-health worker, 400 of whom are trained yearly. Because enteric infections are believed to cause 60-80% of all acute morbid conditions, expanding the training of such persons is logical. A unique proposal has been made calling for indigenous teacher-nurses, who would be trained in the provinces in preventive and curative medicine as well as in teaching. Also mentioned is the pharmacist's assistant, who would dispense medications for diarrhea, headache, fever, other common conditions, and family planning. Some propose to give drug shop owners, Tambon doctors, herb doctors, and traditional midwives appropriate training courses, to help integrate these often-popular practitioners into the Government system.

Three approaches of great merit bearing on medical care programs recently have been demonstrated in Saraphi District of Chiang Mai Province. The first is that of the village 'Health Post Worker,' a young girl (19-24 years old) trained in simple medical care, who dispenses some medicines and acts as a primary health resource and referral person for villagers. The second approach is that of the village 'communicator,' who is the tacit social leader of some 10-20 families living around her, and who maintains active health surveillance of her circle of families for acute conditions and pregnancy, again referring those with problems to the appropriate health facility.

The third approach is that of the 'Child Nutrition Center (CNC)' established adjacent to health centers for 2-6 year old children. At the CNC's the children are immunized, surveyed for illness, educated, fed, exercised, and rested while their mothers work. Recent controlled studies demonstrated increased growth and improved health in children attending such centers, compared to control groups. In 1971 about 200 such centers were already operating in 35 provinces. Any plans to develop future health systems should consider building on these innovative and apparently successful approaches.

6. Summary (Health Manpower)

Although a variety of health persons work in Thailand, a serious emigration of health leaders, physicians and nurses, has only partly been halted. The Thai Government is appropriately emphasizing training of practical nurses and nurse-midwives. All types of health professionals are concentrated in populous areas. A serious problem of under-utilization of Government health services exists, probably related to the services offered and time and distance factors. To meet the problem that whole provinces have very few physicians and few nurses, medical assistants have been advocated, but no decision has been made about the type of person to be trained.

Some progress is being made in training physicians and public health workers in community health development, and innovative health-care approaches have been successful in Saraphi District. Such successes imply that a well-managed health program for a defined population, carried out by motivated, well-supervised workers under the strong leadership of the Ministry of Public Health and other elements of the Royal Thai Government, might yield positive results.

E. Budget

Expenditures in 1972 were 956. 391,300 baht ($47,819,565). This is an increase of approximately 73 percent in a five year period.

IV. DEIDS--Special Considerations and Criteria

A. Official Invitation from Thailand and AID Mission

The reconnaissance visit was made at the invitation of the USAID Mission based on oral assurances received from the Thai Ministry of Health. The USOM Principal Health Officer accompanied the APHA reconnaissance team on all of its visits (except when the team was divided) and was outstandingly helpful in making arrangements for the visit.

The Mission Director held briefing and de-briefing sessions with the APHA team and expressed interest in the DEIDS proposal as conditioned by his belief that an increased rather than a level commitment should be sought from the MOH.

B. AID Washington and WHO

Thailand was suggested by both AID/Health, Dr. Lee Howard, and by the WHO Regional Representative, Dr. Dy, as an appropriate and desirable site for a DEIDS project.

C. Previous Health Innovations

The APHA team was impressed by the richness and variety of analyses and studies of health and family planning organization and operations which were furnished to the team. Numerous innovations are mentioned in the body of this report, indicating the interest and willingness of the MOH, other Royal Thai Government agencies, universities, voluntary agencies, bi-lateral and multi-lateral agencies to innovate changes in administrative structure, and delivery of services; in investigation, development and research for both health and family planning.

D. Readiness of Ministry of Public Health for DEIDS

The Ministry's staff members who conferred regularly with the APHA team expressed continuing interest in DEIDS. There is no official commitment, however, for or against continuance through the detailed planning and operational phases. A decision awaits receipt and review of this report by the Ministry of Health.

E. Extent and Potential for Involvement of Other Government Departments and Agencies

An inter-ministerial council, representative of all ministries, has been formed to relate their activities for family planning/population programs.

Regular working relationships between the Ministry of Health and a number of other governmental organizations and universities exist on a regular basis.

F. Institutional Bases

Presumably a DEIDS activity in Thailand would be administered by the Ministry of Health perhaps in collaboration with one or more provincial governments. In view of the current collaborative efforts between the Ministry of Health and various universities, it is quite conceivable that such a project might be undertaken collaboratively between the NOM and a university.

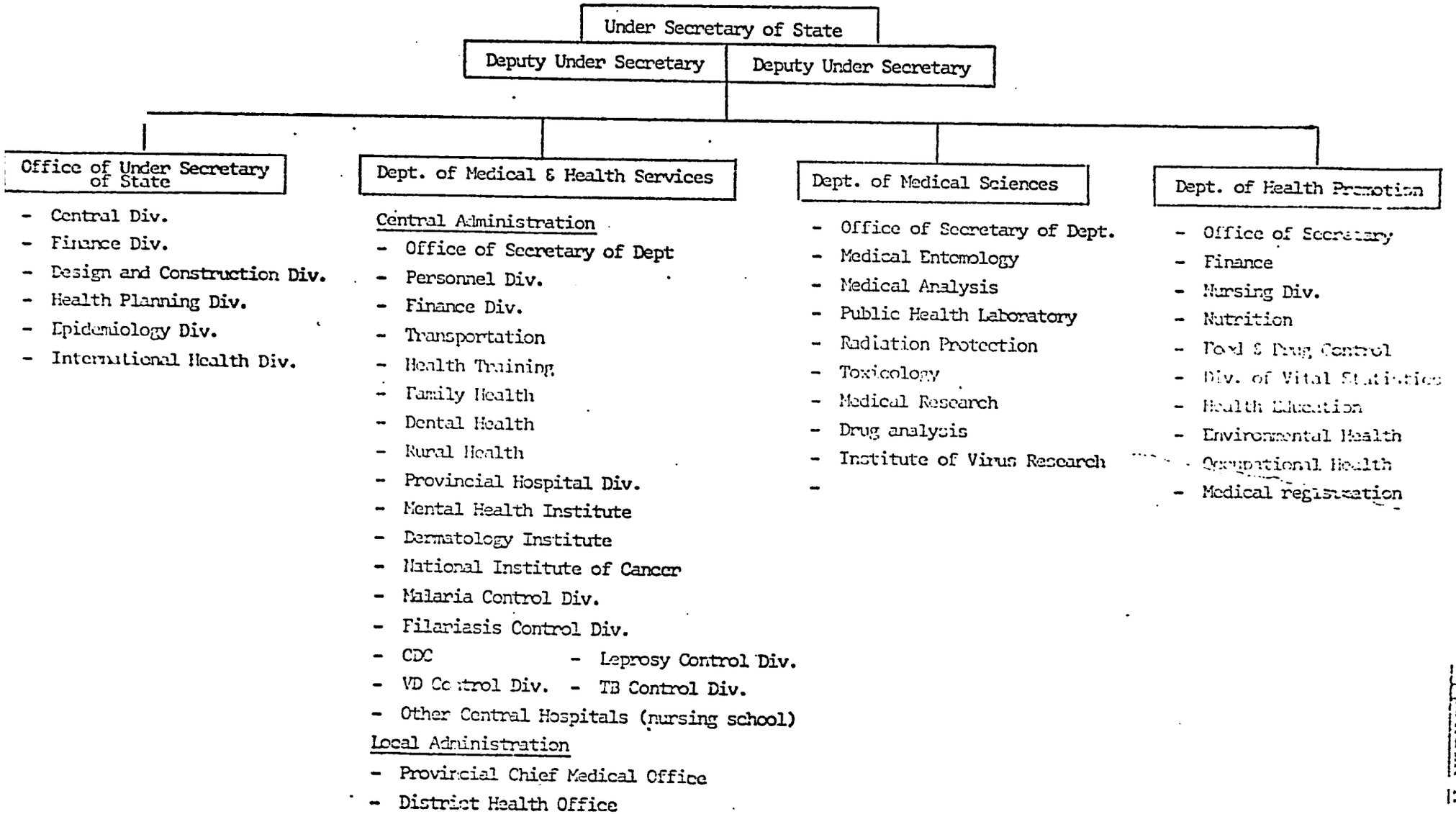
G. Current or Imminent DEIDS-like Projects

Current programs which to an extent resemble the DEIDS proposal include the Seraphi Project (Chiang Mai University and MOH); Ramithibodi Program (Mahidol University and MOH); a multi-purpose health project in the Non Thai District (Province of Nakbon Rathchasima) as well as combined teaching/service programs carried out cooperatively by certain universities and the MOH.

An imminent DEIDS-like program is the planned "Accelerated Maternal and Child Health and Family Planning Service" project (UNFPA, MOH, UNICEF, WHO).

Appendix A

Current Organization Chart of the Ministry of Public Health



APPENDIX B

THE EXISTING MODEL OF RURAL HEALTH SERVICES

IN THAILAND

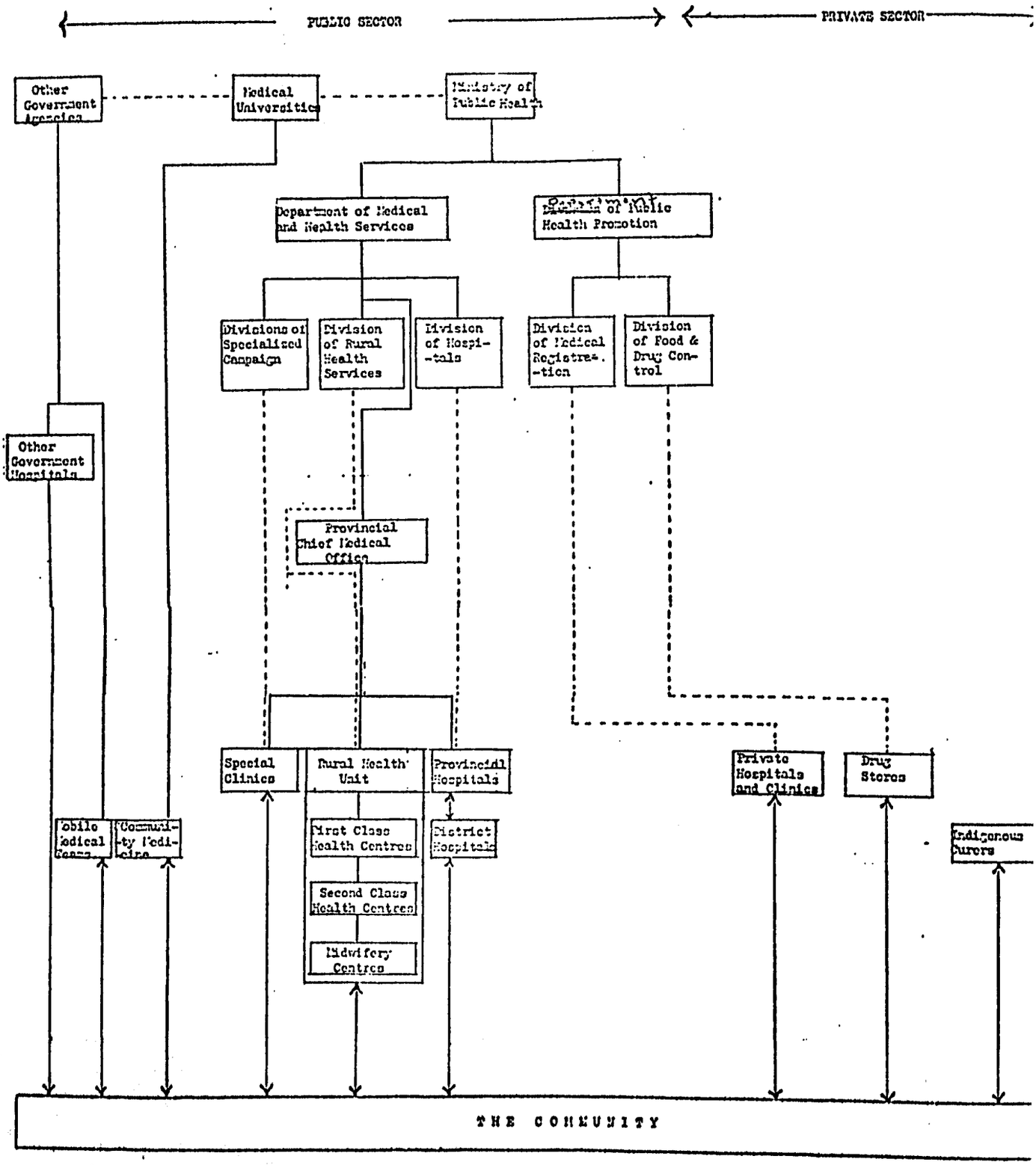


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Table

Selected Health Workers in Thailand, 1972*

Profession	Prof. Educ. Starts After	No. Years Profes. Educ.	No. Schools	Graduates Per Year	No. in 1972	No. Projected 1976 (% incr.)
Doctor	12th grade	6	4	370	5,920	7,400 (25)
Nurse	10th "	3 - 4½	20	1,400	17,900	24,200 (35)
Practical Nurse	10th "	1	14	900	6,000	10,300 (72)
Midwife	10th "	1½	5	500	3,800	6,200 (63)
Sanitarian-health worker	10th "	1½	4	400	5,000	Unknown
Pharmacist	12th "	5	2	140	1,840	Unknown
Dentist	12th "	4	2	60	700	Unknown
Laboratory technician	12th "	2	2	125	1,400	Unknown
Traditional midwife		Apprenticeship			17,000	--
Traditional doctor		Apprenticeship			60,000	--
Commune doctor		Apprenticeship			5,000	--
Drug shop owner		Apprenticeship			13,000	--

*Numbers are approximations. Sources-of-data are ref. 1,8,9,12,15.

APPENDIX D

Chronological Report

At a first USOM-Public Health staff briefing on January 29, Mr. Edmonds noted current USOM family planning aid is $3 million per year, mostly in drugs, equipment, and training. Later Mr. Hill, USOM director, stressed the need for Thai officials to have a primary action role in planning and carrying out a DEIDS project. Dr Shutt described the recent reorganization of the Ministry of Public Health, emphasizing the importance of the new Department of Health and Medical Services, a unit which is to be responsible for hospital care as well as community health. Miss Brainard reviewed present Government policy which emphasizes training of midwives and practical nurses.

A conference with physicians of the Ministry of Public Health on the following day concerned health problems and systems of Thailand. The country's predominantly rural population of 38 million persons has a birth rate which is slowly diminishing toward 3 percent, and women make up about half of the working force. The growing family planning program utilizes pills primarily; a beginning project funded by UN Fund for Population Activities is planned for 4 provinces in the Northeast, to focus on preventive care, maternal-child health services, and family planning.

Dr. Samlee Plianbangchang incisively reviewed problems of health manpower and administration in Thailand, and Dr. Samboon Vachrotai described the need for a model project which would integrate curative and preventive medicine and have built-in evaluation procedures.

The DEIDS team met with high public health officials on January 31. His Excellency, Dr. Samboon Pong-Aksara, stated his interest in the DEIDS concept, noting such a project must be approved at the Cabinet level. Dr. Chitt said the project should be carried out in a province with many problems, which would enhance its applicability to other areas of Thailand. Later, Mr. Piew Phusawat of DTEC noted that this key department would raise no objections to a DEIDS project in Thailand.

On February 1 Drs. Hood, Florio, and Doege traveled by plane to Chiang Mai Province, 400 miles north of Bangkok, and visited Saraphi District.* Dr. Pricha Deswadi, Provincial Health Officer, described the district as having a population of 58,000, with primary health problems of infections, gastrointestinal disease and diarrhea, and subnutrition. He described aims of the experimental Saraphi Project as integrating special health projects into general health programs, improving health training of professionals, and providing better medical services to District people. Three newer approaches are being used at Saraphi: the Health Post worker; the Child Nutrition Center (CNC): and the Communicator. The basic idea is to assure an expanding network of health facilitators, from the village Communicator who helps her circle of 10-20 families, through the Health Post worker who provides simple medical care, to the CNC and the district's Government health centers.

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*On February 6,7 and 9 Dr. Satoru Izutsu was interviewing external assistance agencies and voluntary agencies. These reports are found under appropriate headings. The agencies visited included WHO, USAID (USOM) Thailand, UNICEF, UNFPA, Planned Parenthood Association of Thailand, Institute of Population Studies, Institute for Population and Social Research, Family Planning Unit and Development Support Communication Service.

The DEIDS team visited several health posts in Saraphi: in Village 2 of Nong Faek tambon, 7 babies were born last year in a population of 800; and in Village 1, 6 babies were born in a population of 1,313. Active private (mission) and Government family planning programs have brought about these amazingly low birth rates.

On the following day the group visited provincial hospitals at Lamphun and Lampang, south of Chiang Mai. The 293-bed Lampang Hospital has a staff of 16 physicians and 73 nurses, who cared for 109,300 out-patients in 1972, but it lacks a pathologist and microbiologic capabilities. Most important causes of admission are: gastroenteritis and diarrhea, pneumonia and respiratory infection, GU stones, fever, hepatitis, and deliveries; 3,745 women were delivered in 1972, and there were 22 abortions for every 100 deliveries, 10 percent of them septic. In the hospital's active family planning program, the IUD and pills were used more frequently. A cycle of pills costs $.25/month, an IUD insertion $.50, and a tubal resection, $7.50. A school at the hospital graduates 40 midwives every 6 months.

A narcotics ward at Lampang Hospital had 25 patients undergoing withdrawal under treatment with tranquilizers; 16 men were addicted to opium, 8 to heroin, and 1 to both compounds.

On Saturday, February 3, the DEIDS group conferred with Dean Tawan and Drs. Avudh, Charn, Pien and others at the Chiang Mai Faculty of Medicine. Mild interest in a DEIDS Project was expressed by this group, which stated the Faculty awaits Ministry of Public Health leadership and decision on the problem of training village-level health workers.

After returning to Bangkok the group met with Dr. Thongchai, Dean, School of Public Health, Mahidol University, who described field experiences undertaken by the School's 530 students. Research of the Faculty of 140 persons mostly concern students' field work at Soong Noen in Korat Province. Again the problem of village health workers was discussed. Two important points were brought out by Dr. Kasarn, Rector: of 210 academic days in the primary school year, the average student is present for only 90 (43 percent); and, a basic factor in the lack of health workers for rural areas is they do not originate in rural areas and therefore are unlikely to return there to work.

Drs. Prem Buri and Joe Wray later discussed the Ramathibodi program in Community Medicine, unique and important because the medical school's leadership is committed to include in the curriculum material relating to Thailand's health situation and to encourage development of the skills, knowledge, and attitudes necessary to identify and solve health problems of population groups. Doctors in the four basic clinical specialities teach in this Community Medicine program, which includes care of villagers around Bang-Pa-In town.

On February 6 and 7 the group visited Soong Noen, Bang-Pa-In, and Ayuthaya Hospital. The field work of 16 public health students working in Pong Dang village disclosed six basic kinds of health problems: 1) high infant mortality (33/1,000), lack of proper prenatal and infant care, and improper diet of mothers; 2) parathion poisoning due to excessive use of that insecticide on vegetables and watermelon; 3) hookworm (17 percent) or intestinal parasites (44 percent) in villagers; 4) angular stomatitis and undernutrition; 5) lack of privies for 13 percent of families; and 6) gingivitis and dental caries (in at least 2-4 permanent teeth) in 51 percent and 43 percent of all persons, respectively.

At Soong Noen we observed student-sanitarians working with villagers to dig a rainwater catchment, and we talked with the group leader, a hospital-based surgeon, who said the 6 weeks' work was very useful and would help him be more attuned to community problems when he returned to his hospital responsibilities.

Visiting Ayuthaya Hospital, we learned 51 percent of all admissions there are due to injuries, accidents, and trauma; 34 percent are related to gastrointestinal problems, and especially peptic ulcers; and 10 percent are obstetric-gynecologic.

On February 8 the group visited a very active MCH center in Rajburi, which trains 50 midwives every six months. During 1972 the center, one of nine planned for Thailand, had 5,124 deliveries and abortions, and 67 percent of these women received family planning services; 43 percent had tubal ligation, 19 percent had IUD insertion, and 5 percent took pills.

The survey's final day, February 9, was devoted to conferences at the Ministry of Public Health. Dr. Choed, Director-General of the Department of Health and Medical Services, stated his wish to read the report of the DEIDS reconnaisance team. Also, he said, the Thai government has established a working group to consider the problem of the village-level health worker, and this person might be "above the nurse and below the doctor."

Dr. Hood outlined criteria for selections of the DEIDS country: a need and willingness for, and strong interest in, the project; a jointly chosen area with representative conditions and problems; and a good political and economic climate. He stated some funds for training, evaluation, conferences, and simple equipment would be supplied by a DEIDS project. A decision about the country in Asia to be chosen is due by early May, 1973.

Dr. Somboon Vachrotai stated the success or failure of the project would depend on the workers at all levels and the effectiveness of the management system. Dr. Chitt, Director, Department of Health Promotion, invited the APHA-DEIDS group to face the challenge of integrating health programs in Thailand.

Dr. Samlee presented a list of 26 kinds of health workers in Thailand, which was increased to 33 during later discussions. Priorities as seen by Ministry of Public Health officials include: increasing access to, and usage of, Government facilities; integrating special health projects into regular programs; and improving administration and efficiency of the country's 4,200 health and midwifery centers.

The consensus of officials in the Ministry of Public Health appears to be one of strong interest in a DEIDS project, tempered by the realization success would depend on the people and system involved and would require some basic decisions and adaptations.

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