# The Land Border of South Vietnam: Some Physical and Cultural Characteristics

T. T. Connors, M. G. Weiner and J. A. Wilson

January 1970

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A REPORT PREPARED FOR
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This study is presented as a competent treatment of the subject, worthy of publication. The Rand Corporation vouches for the quality of the research, without necessarily endorsing the opinions and conclusions of the authors.

#### PREFACE

The data presented in this Report were collected and organized as part of a study of the land border of South Vietnam, undertaken by Rand for the Advanced Research Projects Agency. The parent study, of which this is a part, is primarily concerned with counterinfiltration systems for South Vietnam. The material presented here should enable the design and operation of alternative counterinfiltration systems to be related to the physical and cultural characteristics of the border.

This detailed description of the South Vietnamese border zone should be of use in a wide range of related studies. Because of this broad applicability, this study is being published as a Rand Report.

#### SUMMARY

This Report presents a compilation of detailed data on physical and cultural characteristics of the 1700-km land border of South Vietnam. The physical data comprise topography, vegetation (types and density), foot trafficability, movement routes (roads, tracks, trails, and waterways), and climatology. The cultural data concern the composition and density of the ethnic and tribal populations along the entire land border.

For convenience of organization and presentation of data, the border is divided into 107 sectors, each approximately 16 km in length. A series of maps is presented to indicate the location of each sector and a summary of its major characteristics.

The detailed data from which these maps were prepared are included in an appendix, as is a general description of the climatological influences in Southeast Asia.

### ACKNOWLEDGMENTS

The authors wish to acknowledge the assistance of their Rand colleagues, Joseph M. Carrier, who provided data on the tribal population of the South Vietnamese border, and Charles Schutz, who prepared the climatological description presented in Appendix B.

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#### I. INTRODUCTION

The land border of South Vietnam is over 1700 km (1070 mi) in length and extends from the Gulf of Tonkin to the Gulf of Thailand. South Vietnam has common borders with North Vietnam, Laos, and Cambodia. The border between North Vietnam and South Vietnam is not an international boundary, but a provisional military demarcation line that was established by the 1954 Geneva Conference and the Central Mixed Commission for Vietnam. Ruling No. II of the Commission defines the line, which is about 75 km long and runs through a demilitarized zone (DMZ) that varies in width from 6 to 10 km. (2)

The border between Laos and South Vietnam is defined by a series of agreements and accords and is over  $400 \text{ km long.}^{(3)}$ 

The border between Cambodia and South Vietnam was established by treaties negotiated between France and Cambodia in the 19th century and by decrees of the colonial period (which began in the middle of the 19th century and ended with the French defeat at Dien Bien Phu in 1954). Six sections of this border, which is over 1200 km long, are indefinitely defined or are in dispute. Most of the disputed areas are small, the largest being about 9 km long and 4 km wide. There is also a territorial dispute between Cambodia and South Vietnam over several small islands in the Gulf of Thailand. (4)

For convenience in collecting and describing data on the physical and cultural characteristics of the border areas, we have defined a border zone extending from the border line to a depth of 10 km into

Based on map measurements using the 1:50,000 scale map of Army Map Service Series L-7014.(1)

South Vietnam. This border zone is indicated in Fig. 1. The depth of 10 km was chosen because the area within this range incorporates variations in terrain and other characteristics that are generally representative of the area to a depth of over 30 km, and because 10 km is close to the maximum range of 105-mm artillery.

The border zone was then subdivided into 107 sectors, each 16 km in length. This sector length allowed aggregation of detail intuitively determined to be consistent with the reliability of a 1:50,000 scale map and resulted in a manageable number of sector units. Also, a border length of 16 km would be within the range of 155-mm artillery if the artillery were located in the center of the sector. The data presented in this Report are organized in terms of the 107 sectors, which are numbered consecutively from the eastern end of the DMZ (Sector 1) to the Gulf of Thailand (Sector 107).

The types of information available for each sector are illustrated in Fig. 2, using Sector 1 as an example. The characteristics presented and the sources from which they were taken are described below.  $^*$ 

#### Topography

The following four categories of topography were established on the basis of relative relief and contour-line density: flat; flat, subject to inundation; rolling; and rough. The minimum and maximum elevations (high and low points) in each sector were taken from 1:50,000 scale maps and recorded, usually to the nearest 50 m. The frequency of contour lines in each sector was evaluated from topographical maps.

#### Vegetation

Fifteen types of vegetation were identified from several map sources. \*\* The percentage of each type of vegetation in an area was determined by planimeter measurements on 1:50,000 scale maps. The planimetered area was then converted to a percentage of the entire area of the sector.

<sup>\*</sup>The basic data are presented in detail in Appendix A.

<sup>\*\*</sup> These vegetation types are described in Section II.

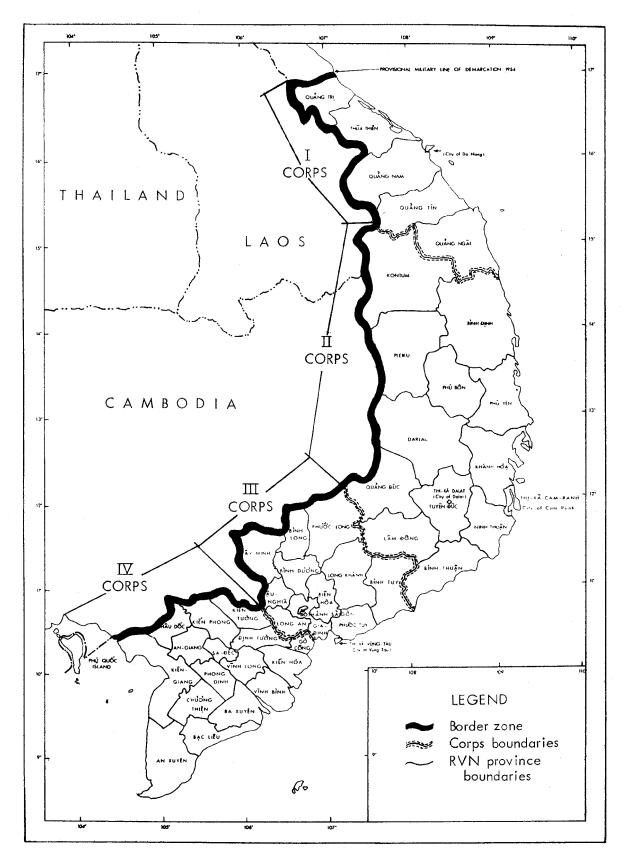


Fig. 1—South Vietnam

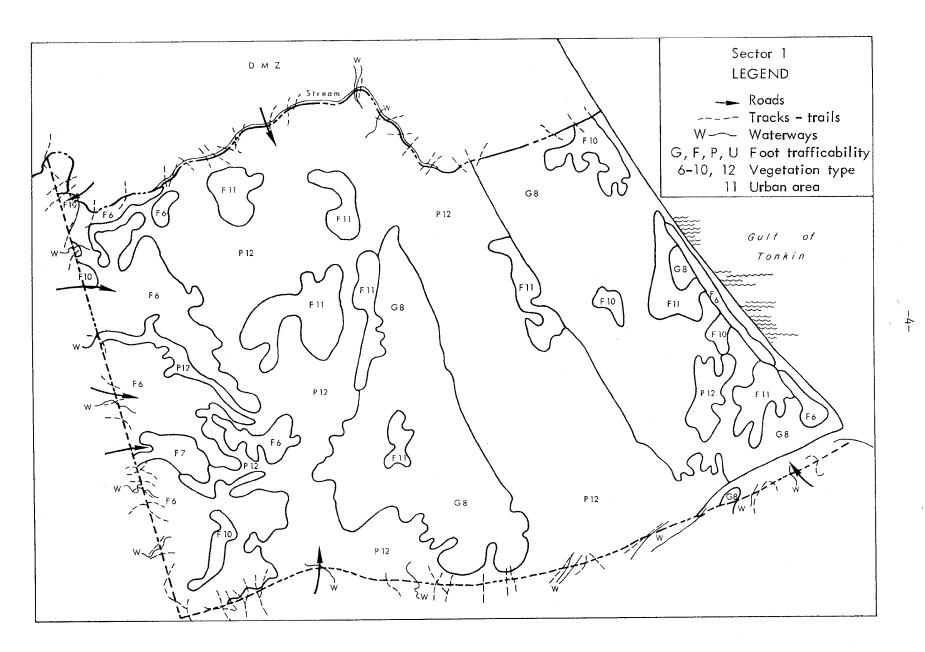


Fig. 2—Example of information available for border-zone sectors

#### Trafficability

Foot trafficability was determined primarily from Tactical Scale Study maps  $^{(5)}$  and Army Map Service Series L-7014 maps.  $^{(1)}$  The classification into Good, Fair, Poor, and Unsuitable used by the Tactical Scale Study maps was also used here (see p. 13). The percentage of trafficability of each type was determined by the use of planimetry, similar to the technique used for vegetation. Separate measurements were made for trafficability in wet and dry seasons.

#### Population

Population data on ethnic Vietnamese and Cambodians in South Vietnam were obtained from the Hamlet Evaluation System study reported by Headquarters U.S. Military Assistance Command, Vietnam. (6) These data were correlated for each sector by plotting villages and hamlets in each sector according to the Universal Transverse Mercator grid coordinates of the sector. Ethnic minority groups in particular sectors were identified from map data and reports. Population estimates for the ethnic minority groups were based on the number of household units or dwellings multiplied by a factor of 10 occupants per dwelling unit.\*

#### Movement Routes

The data on movement routes (roads, tracks, trails, and waterways) were also obtained from various maps. A numerical count was made of the roads, tracks (routes capable of being used by animal-drawn carts), and trails. Waterways were divided into two classes, small and large. Any stream or canal with a width of 50 m or less was considered a small waterway; those more than 50 m wide were considered large.

Two counts were made for all movement routes: the number of routes that crossed the border, and the number that crossed the sides or rear boundaries of each sector.

<sup>\*</sup>Because of the movement and relocation of some of the ethnic minority groups, the estimates of tribal population in each sector should be regarded as crude at best.

## Climatology

The climatological conditions along the land border of South Vietnam were identified from an earlier Rand study. (7) A general description of these conditions is given in Appendix B.

# II. PHYSICAL AND CULTURAL CHARACTERISTICS OF THE BORDER OF SOUTH VIETNAM

In this section, the physical and cultural characteristics of the South Vietnamese border are summarized in tabular form, and a series of maps is presented for each major characteristic, indicating the nature of each sector in terms of those characteristics. Data for each sector were taken from several sources and reduced to numerical form. The detailed data sheets are given in Appendix A.

#### Topography

Each sector of the border zone was classed as one of the four types defined below:

- 1.  $\underline{\text{Flat}}$ : topography in which there are few contour lines and little elevation change.
- 2. <u>Flat, subject to inundation</u>: flat topography in which flooding occurs, or swamp or marshland.
- 3. <u>Rolling</u>: topography in which there are relatively frequent contour lines but no sharp elevation changes.
- 4. Rough: topography in which there is a heavy concentration of contour lines and sharp elevation changes.

Table 1 summarizes the topographical characteristics of the border zone.

About 40 percent of the border zone is flat, and about 60 percent has rolling or rough topography. The flat areas lie at the extreme eastern end of the DMZ and along about one-half of the Cambodia-South

Table 1
TOPOGRAPHY OF THE BORDER ZONE

Type of Topography	No. of Sectors	Percent of Border
Flat Flat, subject to	18	17
inundation	26	24
Rolling	32	30
Rough	31	29

Vietnam border, the border zone between Tay Ninh (in III Corps) and the Gulf of Thailand being flat and subject to inundation. The other half of the Cambodia-South Vietnam border is almost all rolling terrain. The topography of the border with Laos is almost entirely rough. The predominant topography, by sector, is shown in Figs. 3 through 7.

#### Vegetation

The following fifteen classes of vegetation are found along the border:

- 1. Multicanopy forest with dense undergrowth. This type of forest is a dense, 2- or 3-layered mixture of broad-leafed trees, deciduous or evergreen, depending on altitude. The trees are usually from 20 to 30 m in height, with an occasional single tree reaching 50 m. The crowns of the uppermost layers generally overlap, seeming to form an impenetrable cover when viewed from directly above, but appearing somewhat less dense on hillsides or adjacent to cleared areas when viewed obliquely. Tree trunks are from 0.5 to 1.5 m in diameter and are generally spaced 2 to 3 m apart. Undergrowth is dense, particularly where sunlight reaches the forest floor, such as along waterways. Some elephant grass is found along stream courses in hilly areas.
- 2. <u>Multicanopy forest with dense undergrowth and bamboo</u>. This type of vegetation is similar to type 1, except that it also includes

Maps depicting border-zone characteristics are grouped at the end of this section. Figures 3 through 7 are located on pp. 21 - 25.

dense clumps of bamboo, particularly in the low valleys. The stems of the most common variety of bamboo are from 1 to 5 in. in diameter and from 3 to 15 m in height. Bamboo grows in tight clumps between 0.6 and 1.0 m in diameter, which in dense undergrowth are generally spaced about 3 m apart.

- 3. <u>Multicanopy forest with light undergrowth</u>. Except for the amount of undergrowth, this class of vegetation is identical to type 1.
- 4. Single-canopy forest with dense undergrowth and galleries. The single-canopy forest consists primarily of deciduous trees forming a more-or-less discontinuous cover. The trees vary from 4 to 25 m in height, depending on their location; their diameter varies from 0.2 to 0.8 m. The density of the trees varies considerably, also depending on the situation, but a spacing of from 5 to 10 m is common. Undergrowth is similar to that found in multicanopy forests. Intermittent grass areas often contain "gallery" forests, i.e., relatively dense rows of trees bordering the stream courses, so named because the crowns of the bordering trees often overlap.
- 5. Single-canopy forest with light undergrowth and bamboo. This type of vegetation is similar to type 4, except for the presence of bamboo and the difference in density of undergrowth.
- 6. Single-canopy forest with light undergrowth, rubber and palm plantations. The trees in rubber plantations are generally 10 to 20 m in height and have trunk diameters of 24 to 30 cm. Spacing between trees varies from 3 to 5 m, with rows about 8 m apart. The crowns of the trees quite often touch, forming a closed canopy. Undergrowth density varies from very light to fairly heavy, depending on the level of activity on the plantation. Palm plantations consist of coconut trees averaging 25 to 30 m in height and having diameters of from 0.4 to 0.5 m. The trees are generally spaced 5 m or more apart, with the area between them clear of undergrowth, unless the trees have been abandoned, in which case a dense undergrowth can occur.
- 7. <u>Brushwoods and coffee and tea plantations</u>. This class of vegetation consists of natural low undergrowth and coffee and tea bushes in plantations. The natural brush-grasses, brush, and scrub deciduous trees--varies in height from 1 to 3 m. It is often found

on abandoned slash-and-burn plots, along stream courses, and on some foothills. Coffee and tea plantations consist of bushlike plants from 3 to 15 m in height. The larger coffee plants are laid out in parallel rows about 5 m apart, while the small tea plants are generally planted in rows 1.2 m apart.

- 8. <u>Dune grass, and casuarina on sand</u>. This type of vegetation, which consists of a mixture of grass, brush, and (occasionally) thickets of date palms and stands of small trees, is often found in beach areas. (Casuarina is a small scrub pine from 3 to 4 m in height, often found on beach ridges.)
- 9. <u>Sugar-cane plantations</u>. Sugar cane can form very dense stands of closely meshed leafy stems, varying in height with the stage of growth but capable of reaching over 4 m.
- 10. Dry crops, open areas, pineapple plantations, and upland rice. This category includes open meadows, grass areas, and a number of different crops. Most of these crops, such as taro, beans, sweet potatoes, and pineapples, are relatively low to the ground. On the other hand, some of the crops, such as corn, tobacco, sugar cane, and the grasses, can reach to a height of 4 m.
- 11. <u>Urban-area vegetation</u>. This category includes the trees, grasses, shrubs, and crops associated with dwelling areas. Fruit trees, such as banana and coconut trees, and vegetable plots and gardens are often found in and around individual houses.
- 12. Rice, single crop. This category consists of irrigated rice grown in fields surrounded by dikes 1 to 3 m high. The rice plants are planted in rows and vary in height from 1 to 1.5 m at maturity. The fields remain covered with at least 0.15 m of water until 2 to 6 weeks before harvest. At harvest time, the rice is stacked in the field in bundles. During the dry season the fields are either left in stubble or planted in dry crops.
- 13. Swamps, inundated brushwoods, and saline areas. This type of vegetation is characterized by dense reeds and grass and brushwoods subject to seasonal inundations. The grasses and reeds can grow to a height of 2 m.

- 14. <u>Fresh-water swamp</u>. Grasses, shrubs, and trees, many with aerial root systems, comprise this category. The proportion of each type of plant depends on the particular situation.
- 15. Marsh. This vegetation category includes bushes, reeds, floating aquatic plants, and grasses in perennially wet or inundated lowlands. The average height of the grasses and reeds varies from 1 to 2 m.

The percentage of the border zone covered by each type of vegetation is shown in Table 2.

Table 2
DISTRIBUTION OF VEGETATION CLASSES IN THE BORDER ZONE

	Vegetation Class	Percent of Border Zone
1.	Multicanopy forest with dense undergrowth	46.0
2.	Multicanopy forest with dense undergrowth	
_	and bamboo	2.0
3.	Multicanopy forest with light undergrowth	< 1.0
4.	Single-canopy forest with dense undergrowth	
-	and galleries	< 1.0
5.	Single-canopy forest with light undergrowth	2.0
	and bamboo	3.0
6.	Single-canopy forest with light undergrowth,	
	rubber and palm plantations	13.0
7.	Brushwoods and coffee and tea plantations	10.0
8.	Dune grass, and casuarina on sand	< 1.0
9.	Sugar-cane plantations	< 1.0
10.	Dry crops, open areas, pineapple plan-	
	tations, and upland rice	2.0
11.	Urban-area vegetation	< 1.0
12.	-	12.0
13.	Swamps, inundated brushwoods, and saline	
	areas	1.0
14.	Fresh-water swamp	< 1.0
15.	Marsh	9.0

The fifteen classes of vegetation fall into four main types:

- 1. Grassland or plantation vegetation which does not generally grow to great heights and which is not usually found in areas subject to inundation (includes classes 7, 8, 9, 10, and 11).
- 2. Riceland or marsh and swamp vegetation found in areas subject to inundation (includes classes 12, 13, 14, and 15).
- 3. Single-canopy forest (includes classes 4, 5, and 6).
- 4. Multicanopy forest (includes classes 1, 2, and 3).

Based on this categorization, each border sector can be classified in terms of its predominant vegetation. A summary of the vegetation in the border zone is presented in Table 3.

Table 3

VEGETATION OF THE BORDER ZONE

Type of Vegetation	No. of Sectors	Percent of Border
Cropland (dry)	7	7
Riceland or marsh (wet)	26	24
Single-canopy forest	14	13
Multicanopy forest	60	56

<sup>a</sup>These data differ slightly from those in Table 2 for several categories. This results from considering only the predominant vegetation type in each sector.

Figures 8 through 12 (pp. 26 - 30) show the predominant type of vegetation in each sector. Comparison of these maps with the topography maps (Figs. 3 through 7) indicates the expected general relationship between topography and vegetation, i.e., the flatlands tend to be crop areas and the areas of rolling and rough topography tend to be covered with single-canopy or multicanopy forest.

### Foot Trafficability

Foot trafficability refers to the suitability of the ground surface for movement on foot. This measure combines topography, vegetation, the presence of surface water, and other natural factors. For this study, the four-part classification of the Tactical Scale Study maps was used. (5) This classification defines trafficability as follows:

- 1. <u>Good</u>: "...conditions do not significantly hinder progress or moderately restrict choices of direction of movement."
- 2. <u>Fair</u>: "...conditions moderately hamper progress or moderately restrict choices of direction of movement."
- 3. <u>Poor</u>: "...conditions severely hinder progress or greatly restrict choices of direction of movement."
- 4. Unsuitable: "...conditions preclude all but local movement."

Areas within each sector were designated as G, F, P, or U, as illustrated in Fig. 2; these areas were then measured by planimeter and the values converted into percentages of the total area of the sector. Measurements and conversion were done for foot trafficability in both the wet and dry seasons.\*

A preliminary analysis of the planimetered foot-trafficability data indicated that they could be visually represented best by combining the "poor" and "unsuitable" terrain into a single composite type and then indicating the percentage of that type occurring in each sector. All the remaining terrain--"good" and "fair"--was then considered as being trafficable with minimum difficulty. The advantage of this simplified categorization is that it provides a more quantitative measure of the infiltration potential of each sector than would be possible by simply identifying the dominant level of trafficability, as was done with types of vegetation. For studies of infiltration, as contrasted to more-or-less conventional military movement, it is doubtful that "unsuitable" is a particularly meaningful term.

The percentages for each sector are presented in Appendix A.

Table 4 shows the distribution of the difficult-trafficability areas for both the wet and the dry season.

Table 4

AREAS OF DIFFICULT TRAFFICABILITY IN THE BORDER ZONE

Percent of Sector	No. of	Sectors	Percent of Border		
Comprising Poor and	Wet	Dry	Wet	Dry	
Unsuitable Terrain	Season	Season	Season	Season	
Less than 10	4	7	4	6	
10 to 39	7	17	7	16	
40 to 70	14	19	12	18	
More than 70	82	64	77	60	

Table 4 indicates that between 60 and 77 percent of the border zone, depending on the season of the year, is primarily poor or unsuitable (i.e., difficult) for foot trafficability. Only 4 to 6 percent of the border zone contains less than 10 percent of difficult terrain and hence can be considered trafficable with minimum difficulty.

The distribution of difficult terrain in each sector is shown in Figs. 13 through 17 (pp. 31 - 35).

#### Population

The population of the South Vietnam border zone is a mixture of ethnic Vietnamese, tribal and religious groups, and Vietnamese with Cambodian backgrounds. The population density is highly variable, with some portions of the Laos-South Vietnam border being essentially uninhabited and some sections of the Cambodia-South Vietnam border having populations of over 400 inhabitants per square kilometer.

For this study, data on the ethnic Vietnamese and Cambodian groups \* were primarily obtained from Ref. 6; data on minority groups,

<sup>\*</sup>Population data are subject to variation because of continual population movement and displacement.

particularly on the Montagnard tribes of the highland areas, were taken from various studies and maps.

The population in the border zone is close to 500,000, the major concentrations occurring at the eastern end of the DMZ and in the area between Tay Ninh and the Gulf of Thailand. Table 5 summarizes the numbers of sectors having various population-density levels. The density ranges for each sector are shown in Figs. 18 through 22 (pp. 36 - 40).

Table 5
POPULATION DENSITY OF THE BORDER ZONE

Population Density (inhabitants/sq km)	No. of Sectors	Percent of Border
Less than 20 20 to 100 101 to 200 201 to 300 301 to 400 More than 400	86 11 3 5 1	80 11 3 4 1

#### Ethnic Composition and Population

The border areas of South Vietnam, particularly in the Laos-South Vietnam border and the portions of the Cambodia-South Vietnam border north of Tay Ninh province are largely inhabited by ethnic minority groups.\* The precise tribal areas of the border are not clearly delimited, and some movement of the tribal groups occurs continuously.

The major ethnic groups of the border zone and estimates of tribal populations of the border sectors are presented in Table 6. \*\* Tribal-population data are pre-1964, i.e., before the intensification of military activities in Vietnam. Tribal-population estimates for each

<sup>\*</sup>These groups are described in Refs. 8 through 11.

<sup>\*\*</sup>It was not possible to determine from the available data how much overlap there is between the data of Ref. 6 and those in Table 6. Spot checks indicate that a large part of the ethnic minority population of the border sectors is not included in the data of Ref. 6.

sector were derived by counting the number of house symbols on the Army Map Series L-7014 maps and then multiplying them by 10 (an estimated number of inhabitants per household). This factor is probably conservative; the actual number of household residents is no doubt higher, based on descriptions of tribal life, but some units have been abandoned during the course of the Vietnamese war. The tribal population in each sector is given in Appendix A.

Table 6
ETHNIC GROUPS AND TRIBAL POPULATION
IN THE BORDER ZONE (1,8-11)

Group	Symbol <sup>a</sup>	Population	
Vietnamese	V		
Cambodian	С	• • •	
Brou	BR	9,650	
Pacoh	PA	2,900	
Phuong	PH	2,800	
Katu	KA	1,900	
Jeh	JE	1,900	
Kayong	KG	1,600	
Jarai	JA	6,600	
Rhade	RH	500	
Mnong	MW	5,100	
Stieng	ST	4,900	
Unknown	U	900	
Total		38,750	

<sup>&</sup>lt;sup>a</sup>Used in ethnic-composition maps (Figs. 23 through 27).

The ongoing war has brought about many changes in ethnic populations, including the following:

- 1. An estimated 7,500 Jeh and Sedang tribesmen have become refugees and moved from the border area.
- 2. An estimated 12,000 Brou tribesmen were relocated because of the fighting in the Khe Sanh area.

- An estimated 8,000 Jarai were relocated to regions away from the border in 1967 and 1968.
- 4. An unknown number of Stieng, Mnong, and Katu have relocated to regions away from the border.

Because of these and other changes, data on the locations of ethnic minority tribes and estimates of their population in the border zone cannot be accepted with high confidence.

Figures 23 through 27 (pp. 41 - 45) show the occupying ethnic group(s) of each sector and, where there are tribal populations, their density. No density designations are included for nontribal sectors.

#### Movement Routes

There are three major types of movement routes in the border zone: roads, tracks and trails, and waterways. Using available data, we have identified and counted these routes; however, this count can be considered only a rough approximation of the actual number, for several reasons: (1) The only maps available for some portions of the border were several years old. (2) It is likely that some trails and waterways are not included on the available maps. (3) Some additional trails or tracks have undoubtedly been created since the source maps were published.

Two forms of data were used for all of the movement routes, a count of the routes crossing the border into each sector and a count of the routes entering each sector on its remaining three sides. In a general sense, the routes crossing the border represent potential avenues for infiltration, and those crossing the other sides of the sectors represent potential avenues either for leaving the sector or for gaining access to the sector (e.g., by forces attempting to intercept the infiltrators on surface routes).

#### Roads

A road is defined as any movement route with adequate width and surface to support motorized vehicles at some time of the year. Most

of the roads are designated by route numbers of the national, provincial, interprovincial, etc., highway system of South Vietnam. The data on road density are summarized in Table 7.

Table 7

ROAD DENSITY OF THE BORDER ZONE

	Roads Crossing Border		Roads Entering Sector	
No. of	No. of	Percent of		Percent of
Roads	Sectors	Border	Sectors	Border
0	80	75	52	49
1 to 2	25	23	32	30
3 to 5	2	2	19	18
More than 5	0	0	4	3

As indicated in Table 7, about 75 percent of the sectors have no roads that cross the border—and another 23 percent have only one or two roads crossing the border. However, about 51 percent of the sectors have at least one road that exits from them, and over 21 percent of the sectors have three or more exit roads. In other words, there are more roads that permit access to the border sectors from inside the country than from outside.

Figures 28 through 32 (pp. 46 - 50) present the data on numbers of roads in the border zone. Access to the border from either side is generally sporadic, the larger number of roads being in the Cambodia-South Vietnam border zone, particularly opposite Saigon.

#### Trails and Tracks

Trails and tracks are defined as movement routes whose widths or surface conditions do not usually permit the passage of motorized vehicles. Trails are generally about 1 m wide and are used primarily for foot traffic; tracks are generally about 1 to 3 m wide and can be used for animal-drawn vehicles. As indicated earlier, the available data are very unreliable, since the number of trails or tracks can change rapidly, as new ones are easily established.

Available maps show about 650 trails or tracks crossing the border. The distribution of these routes is summarized in Table 8, and data for the individual sectors are presented in Figs. 33 through 37 (pp. 51 - 55).

	Trails/Tracks Crossing Border		Trails/Tracks Entering Sector	
Number	No. of Sectors	Percent of Border	No. of Sectors	Percent of Border
0	13	12	4	4
1 to 4	42	40	20	19
5 to 9	26	24	10	9
10 to 18	21	20	46	44
19 to 25	3	3	8	7
More than 25	1	1	18	17

<sup>&</sup>lt;sup>a</sup>No data are available on Sector 107.

The data on trails and tracks reflect a somewhat different picture than do the road data. Not only are there many more trails and tracks than there are roads, but with a few exceptions (13 out of 106 sectors) there are tracks or trails crossing the border into every sector, as indicated in the tracks/trails maps. Also, some sectors are shown to have more movement routes crossing the border than routes entering or exiting the sector. While part of this apparent difference may be the result of inadequacies in the available data, it may be that some of the ethnic minority groups along the border have developed trails to cross the border, while there is little movement laterally or toward the interior of the country.

## Waterways

The waterways in the border area of South Vietnam range from large rivers, such as the Mekong, to small, intermittent streams.\* For this

Intermittent streams were not considered to be potentially significant waterways for movement and hence were not included in the waterway count.

study, waterways were divided into two groups: (1) large waterways, defined as permanent streams or canals, 50 m or more in width, entering, or themselves comprising, one of the boundaries of a sector; and (2) small waterways, defined as all permanent streams or canals less than 50 m wide. (The numbers of large and small permanent streams in each sector are given in Appendix A.) Table 9 and Figs. 38 through 42 (pp. 56 - 60) show the overall distribution of waterways (large and small combined).

Table 9
WATERWAYS OF THE BORDER ZONE

	Waterways Crossing Border		Waterways Entering Sector	
Number	No. of Sectors	Percent of Border	No. of Sectors	Percent of Border
0 1 to 4 5 to 9 10 to 18 19 to 25 More than 25	47 45 7 6 1	44 42 6 6 1	7 42 29 13 3 13	6 40 27 12 3 12

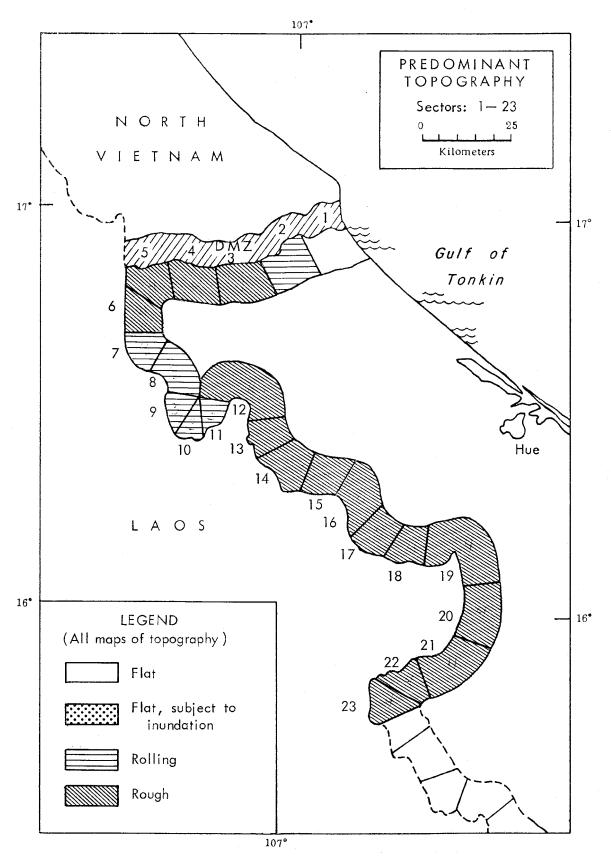


Fig. 3—Predominant topography of Sectors 1-23

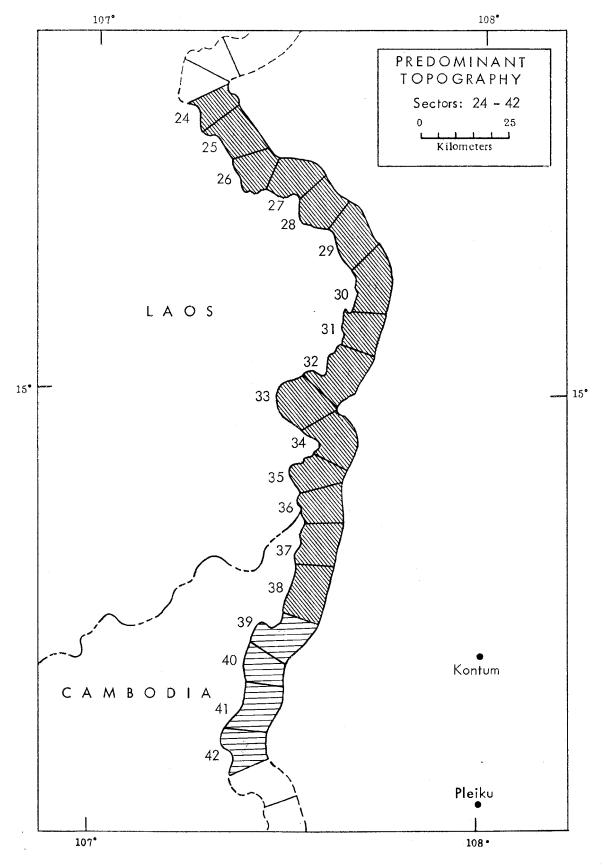


Fig. 4—Predominant topography of Sectors 24 - 42

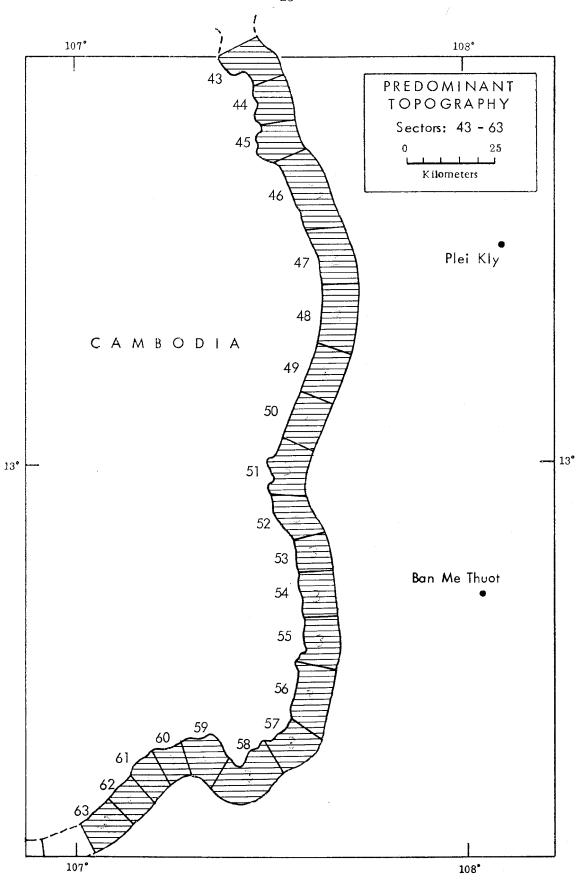


Fig. 5—Predominant topography of Sectors 43-63

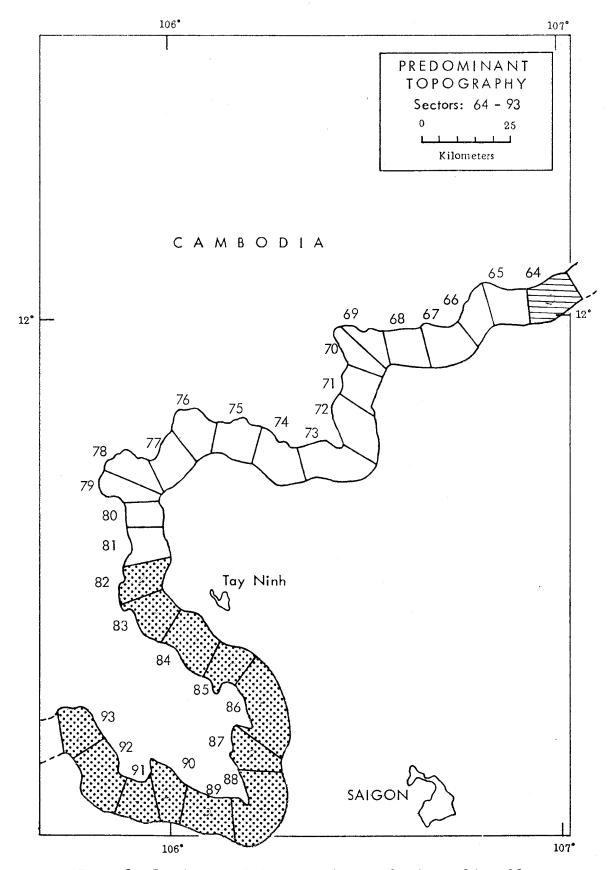


Fig. 6—Predominant topography of Sectors 64-93

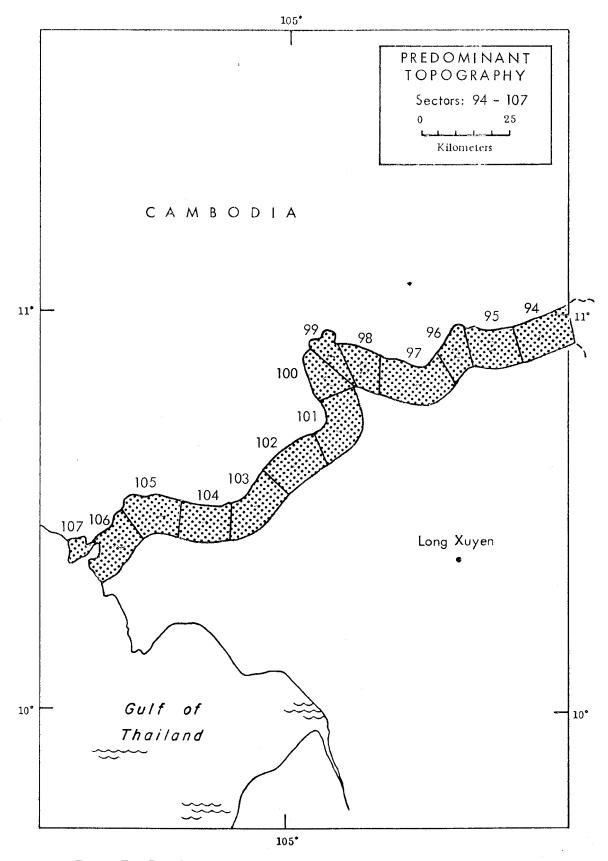


Fig. 7—Predominant topography of Sectors 94 - 107

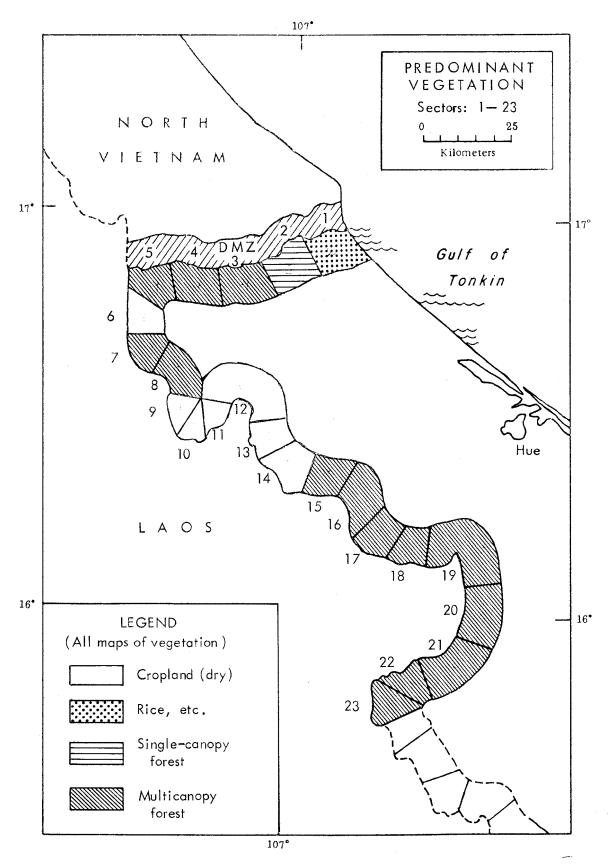


Fig. 8—Predominant vegetation of Sectors 1-23

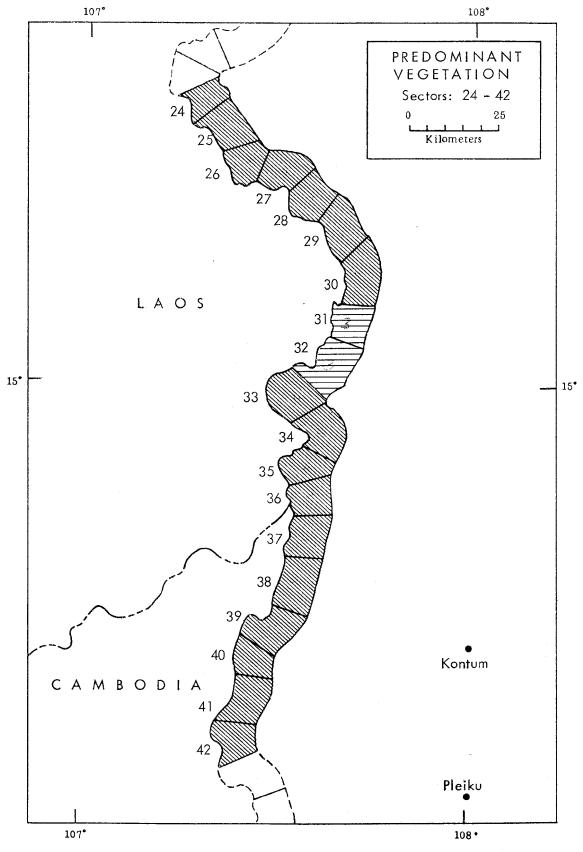


Fig. 9—Predominant vegetation of Sectors 24-42

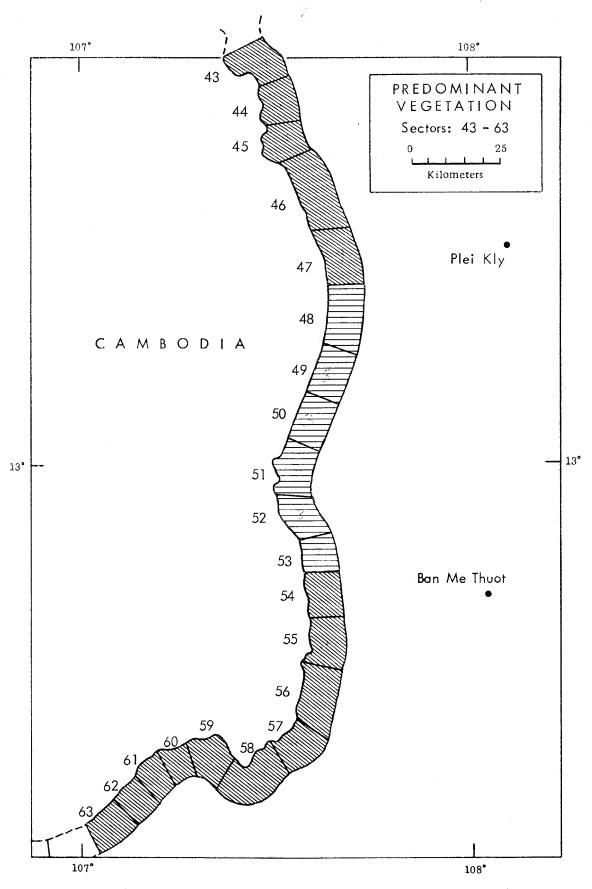


Fig. 10—Predominant vegetation of Sectors 43-63

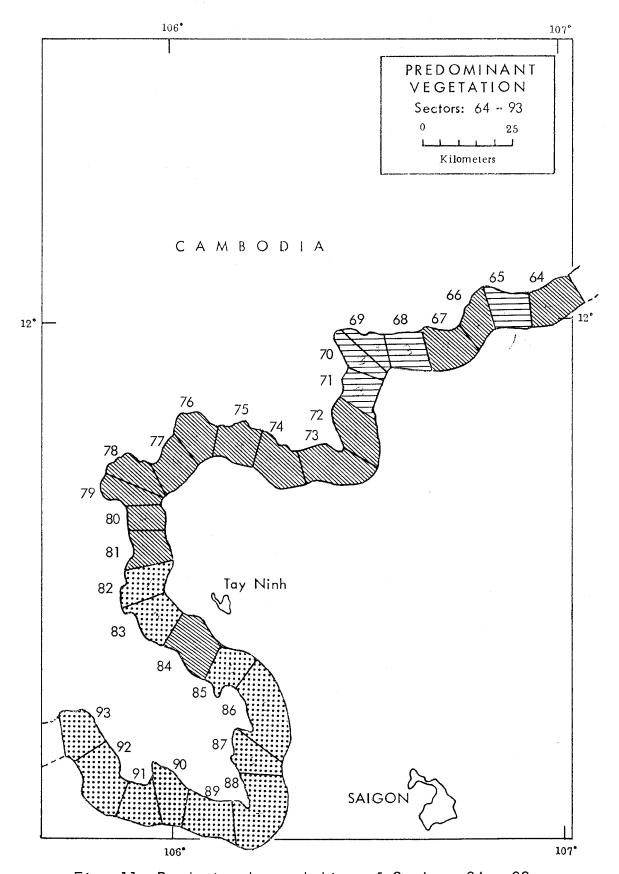


Fig. 11—Predominant vegetation of Sectors 64-93

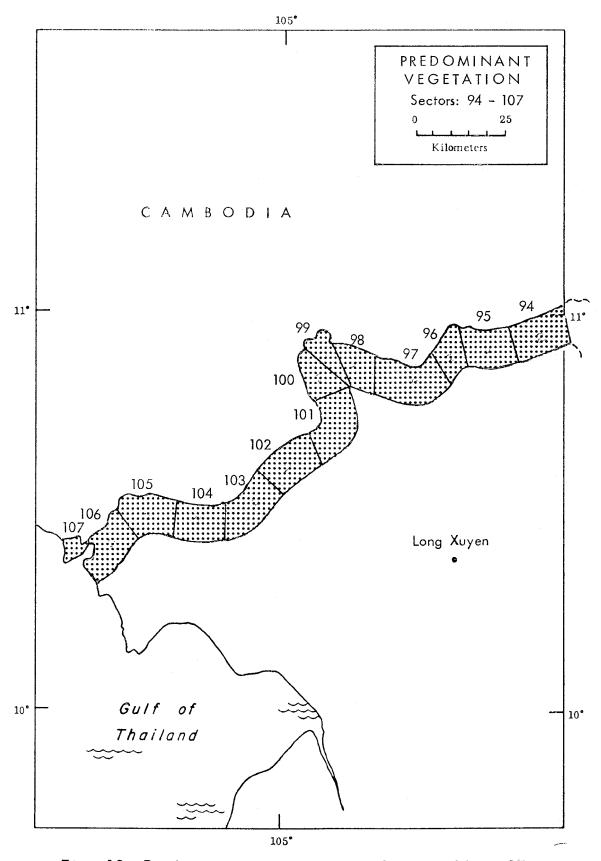


Fig. 12—Predominant vegetation of Sectors 94-107

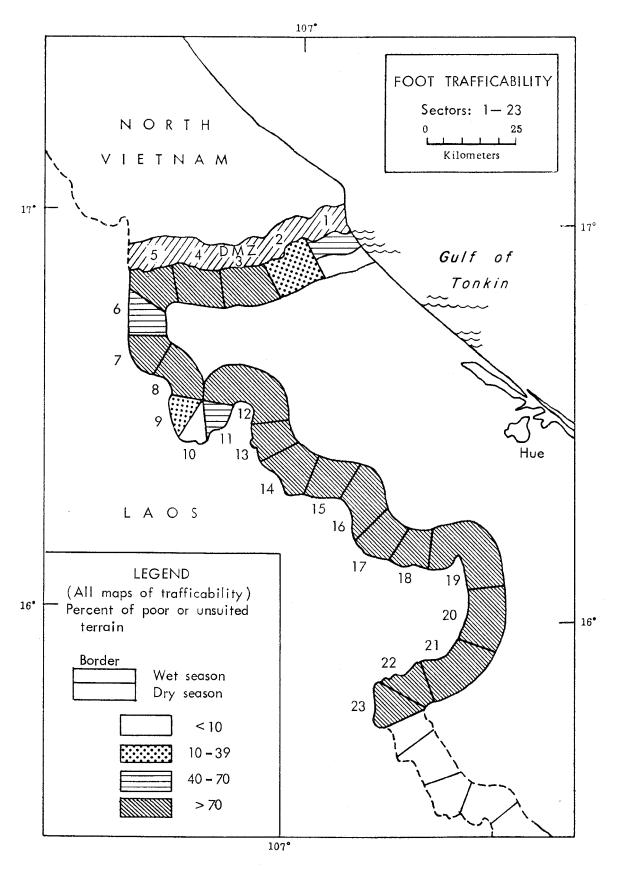


Fig. 13—Foot trafficability of Sectors 1-23

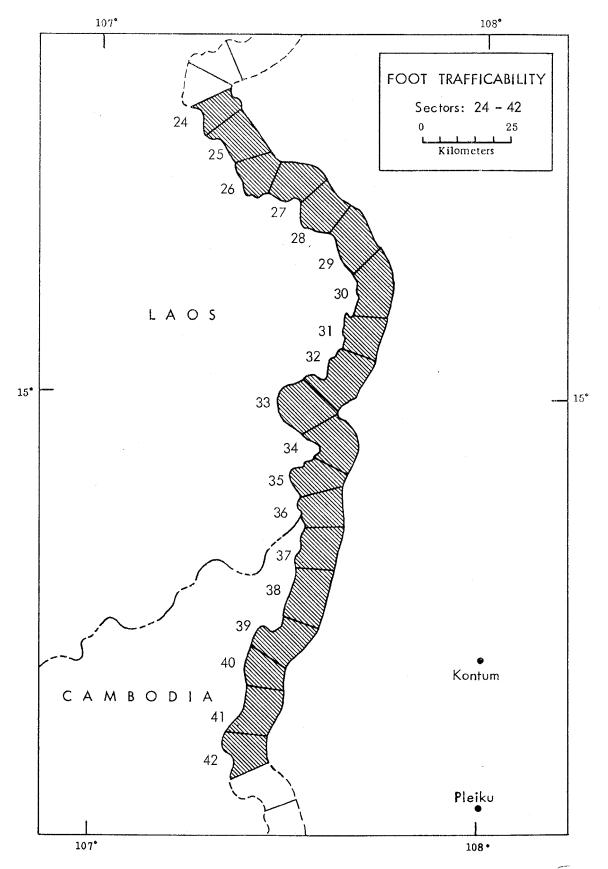


Fig. 14—Foot trafficability of Sectors 24-42

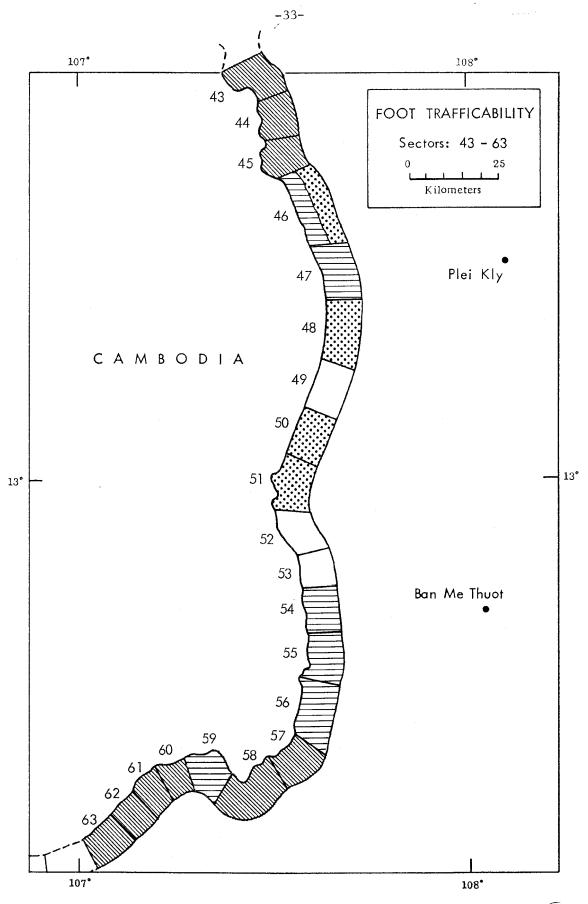


Fig. 15—Foot trafficability of Sectors 43-63

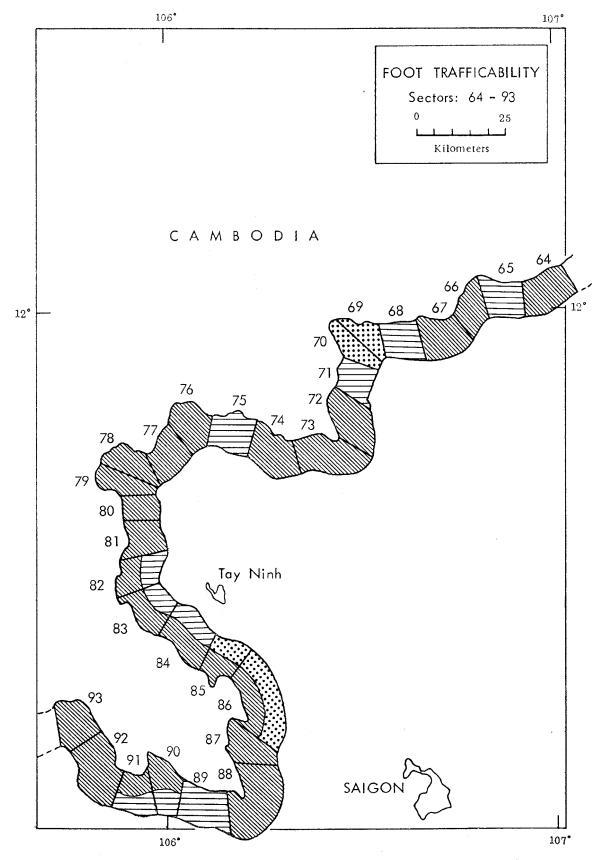


Fig. 16—Foot trafficability of Sectors 64 – 93

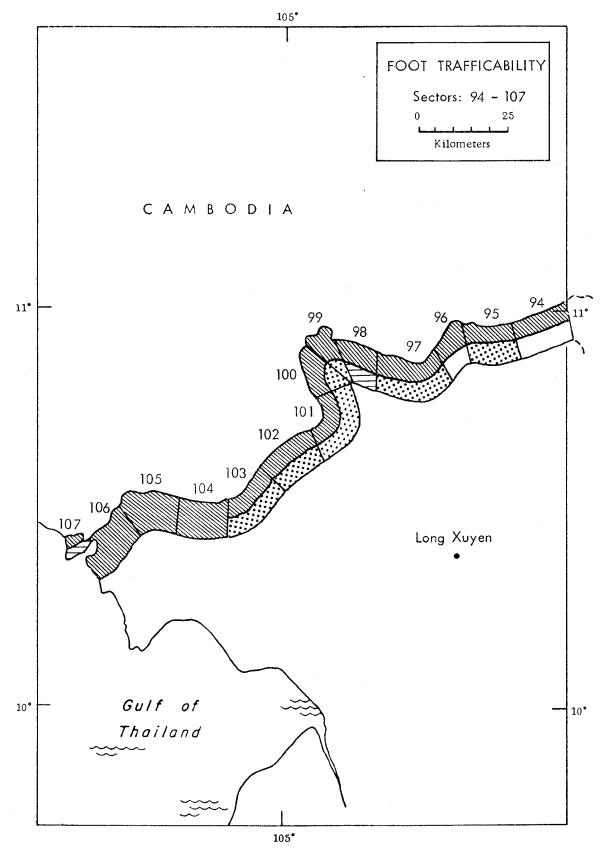


Fig. 17—Foot trafficability of Sectors 94 - 107

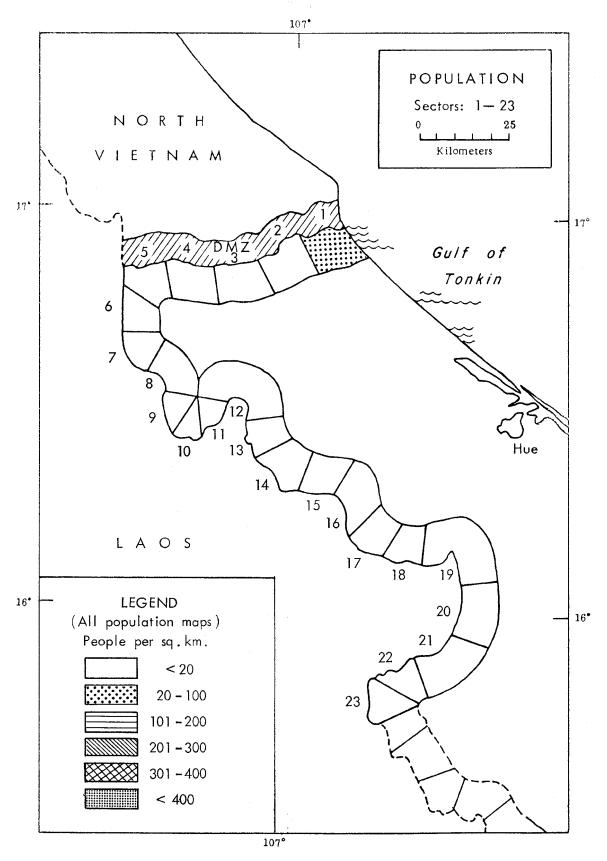


Fig. 18—Population density of Sectors 1 - 23  $\,$ 

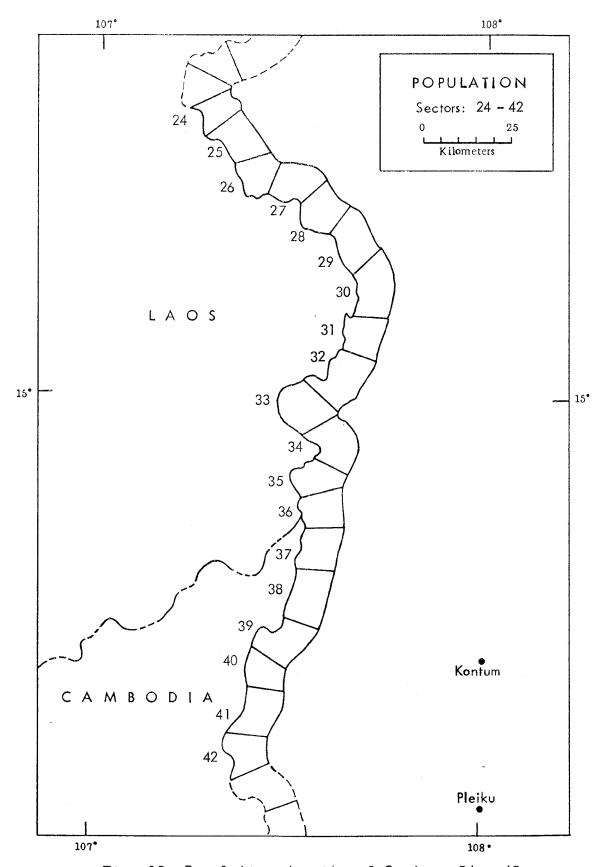


Fig. 19—Population density of Sectors 24-42

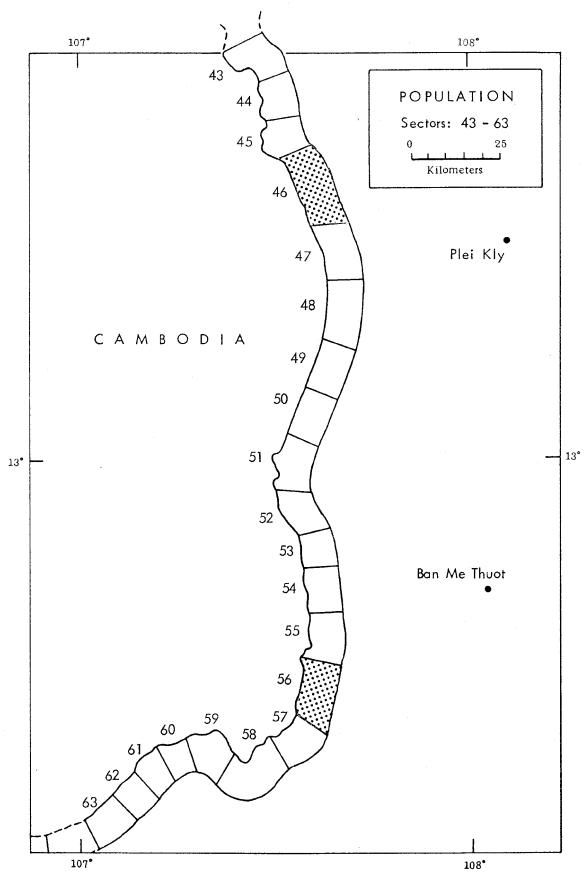


Fig. 20—Population density of Sectors 43 - 63

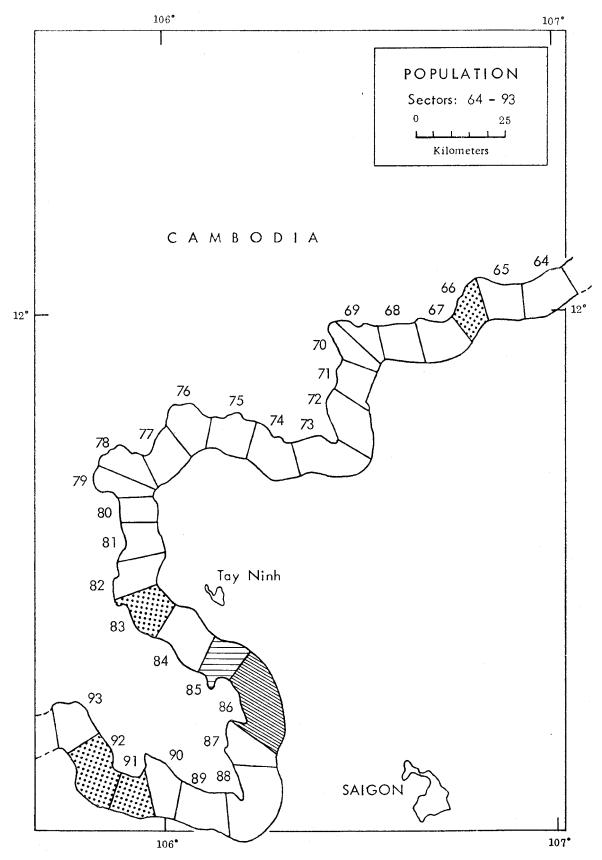


Fig. 21—Population density of Sectors 64-93

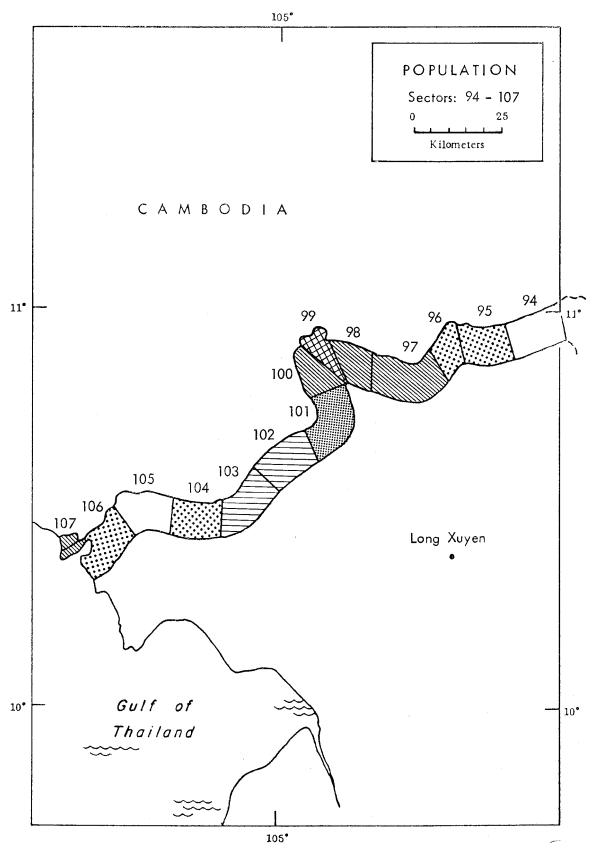


Fig. 22—Population density of Sectors 94 - 107

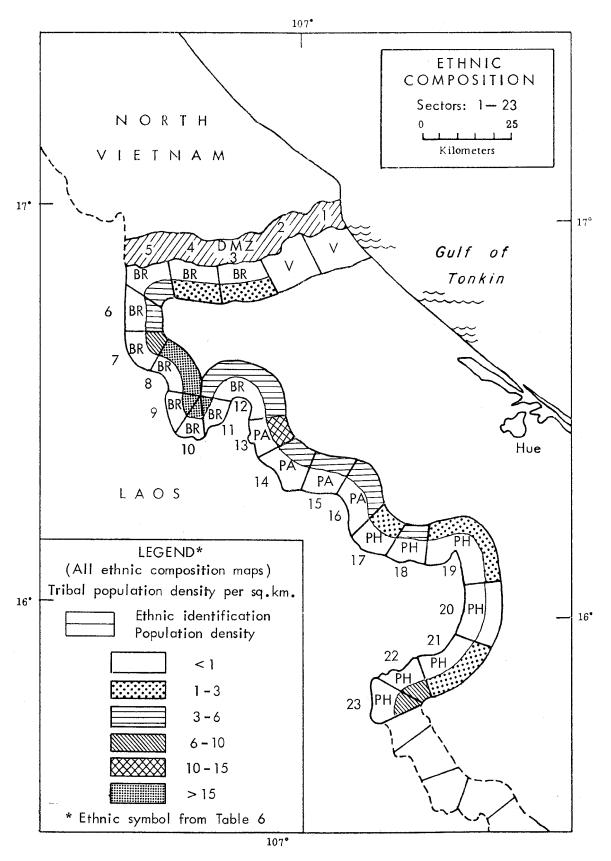


Fig. 23—Ethnic composition of Sectors 1-23

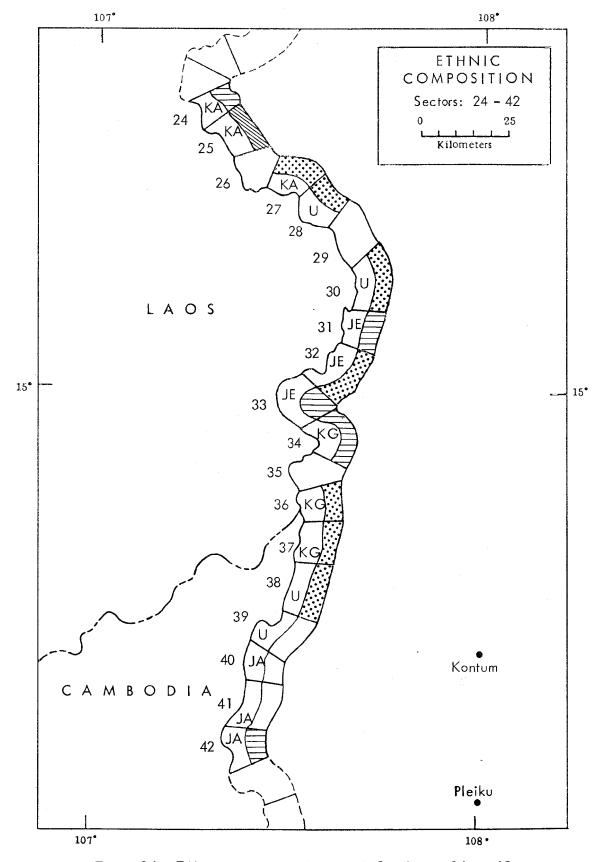


Fig. 24—Ethnic composition of Sectors 24-42

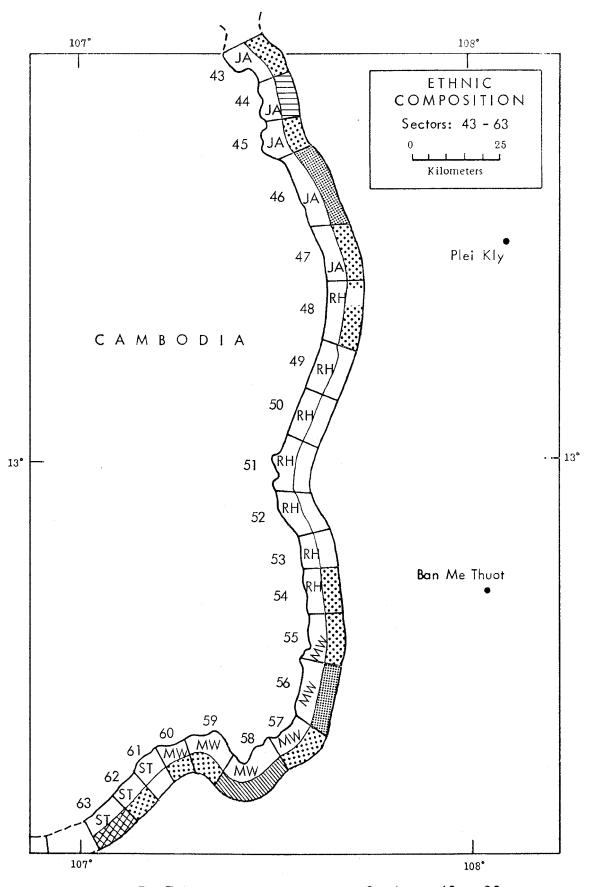


Fig. 25—Ethnic composition of Sectors 43-63

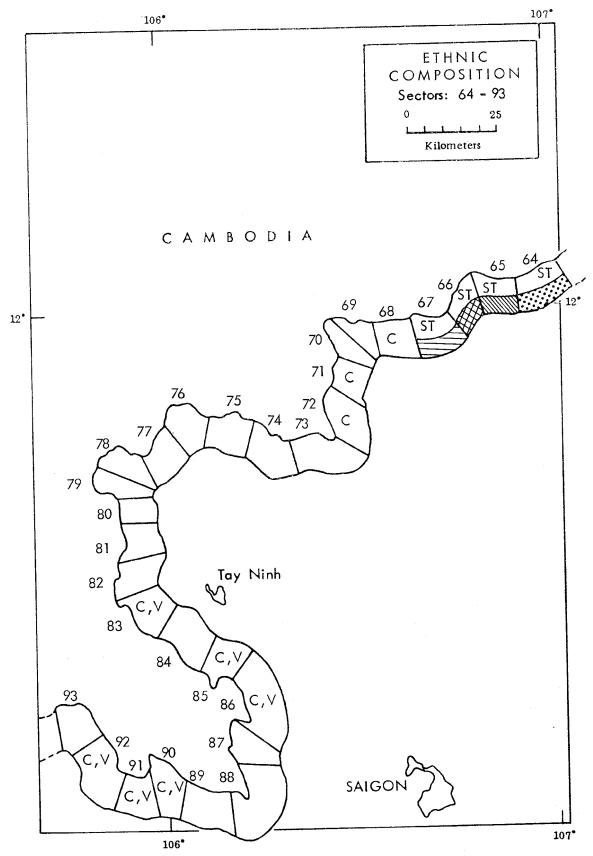


Fig. 26—Ethnic composition of Sectors 64 - 93

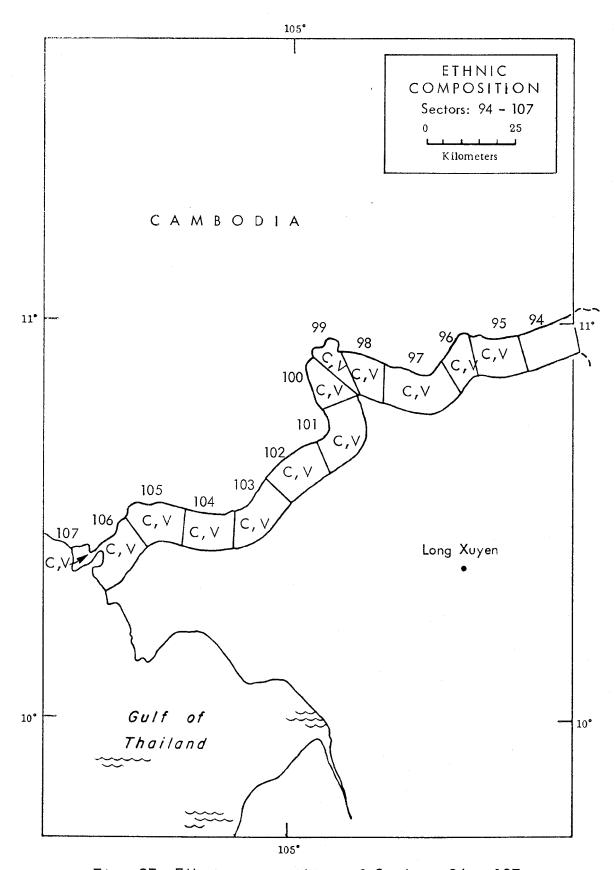


Fig. 27—Ethnic composition of Sectors 94 - 107

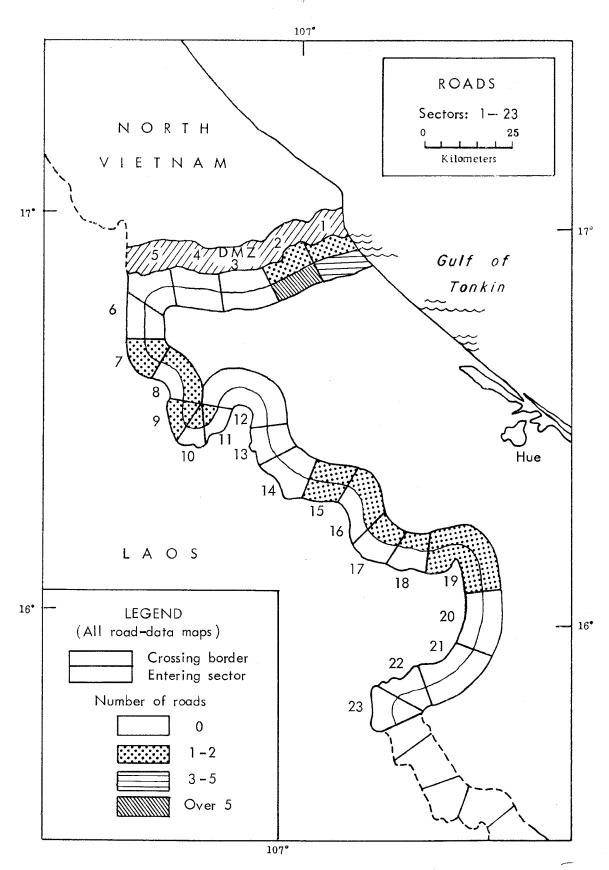


Fig. 28—Road data for Sectors 1-23

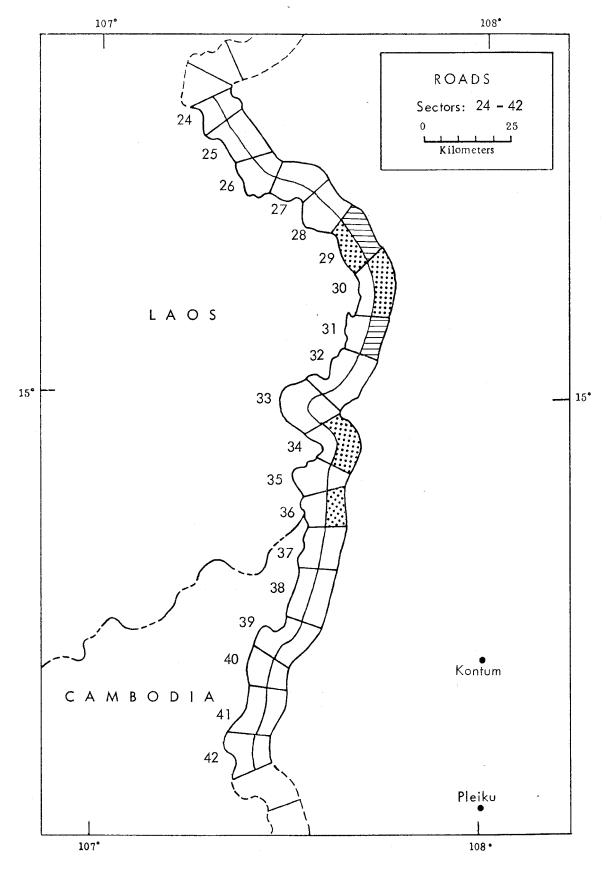


Fig. 29—Road data for Sectors 24-42

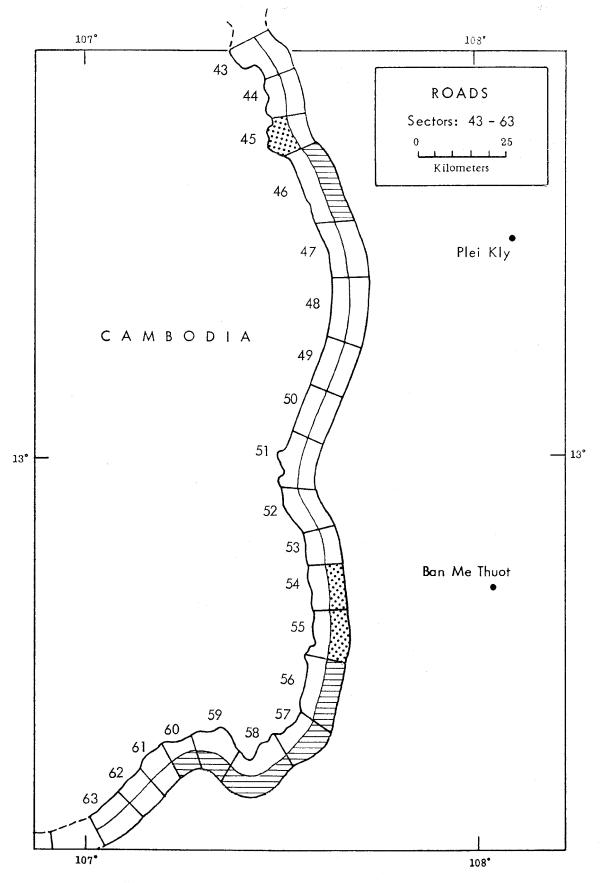


Fig. 30—Road data for Sectors 43-63

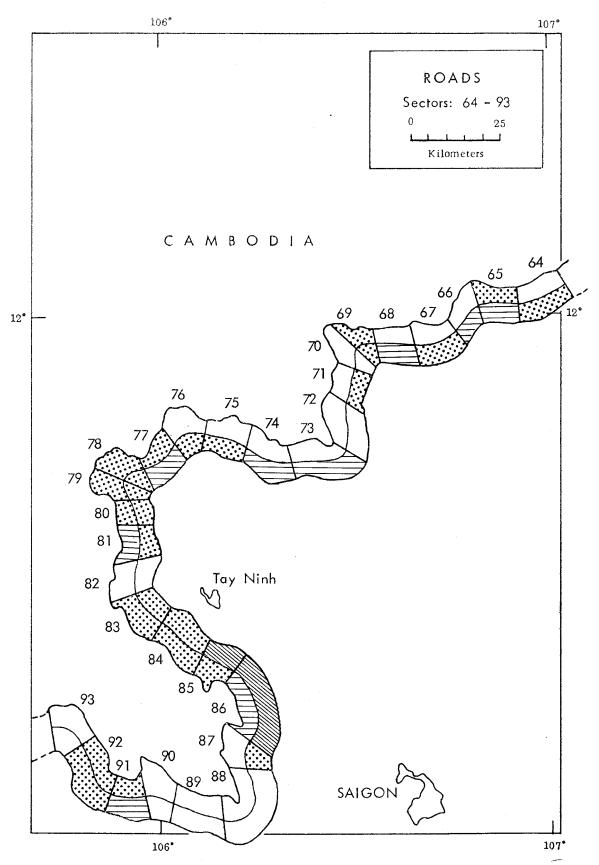


Fig. 31—Road data for Sectors 64-93

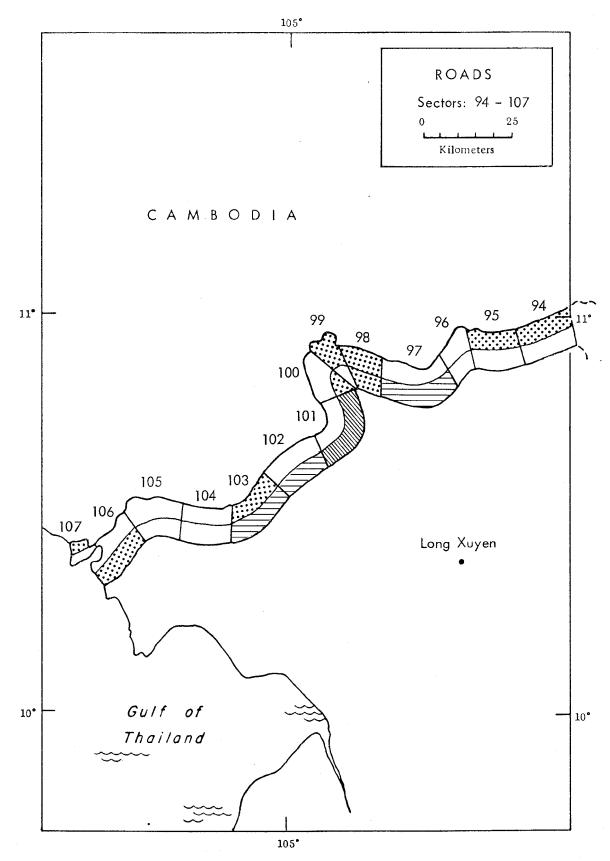


Fig. 32—Road data for Sectors 94 - 107

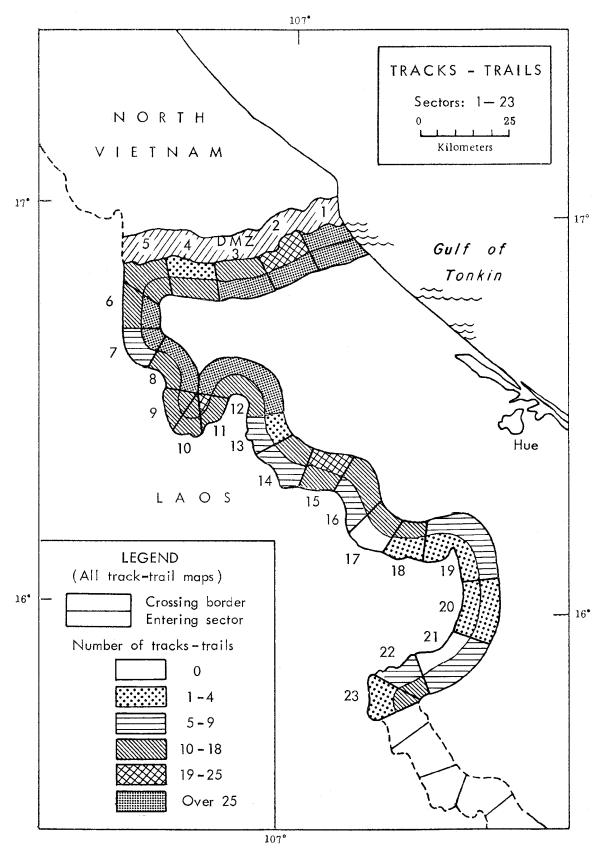


Fig. 33—Tracks-trails data for Sectors 1 - 23

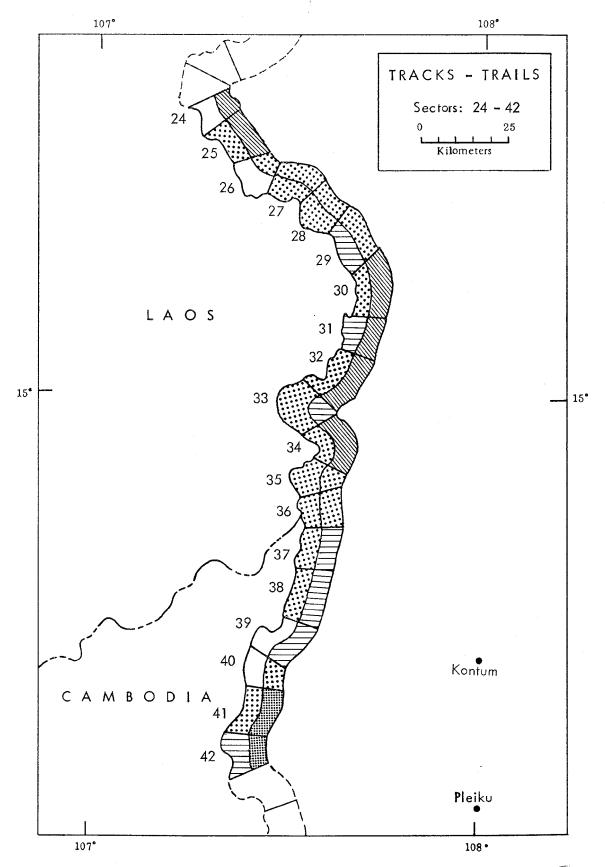


Fig. 34—Tracks-trails data for Sectors 24 - 42

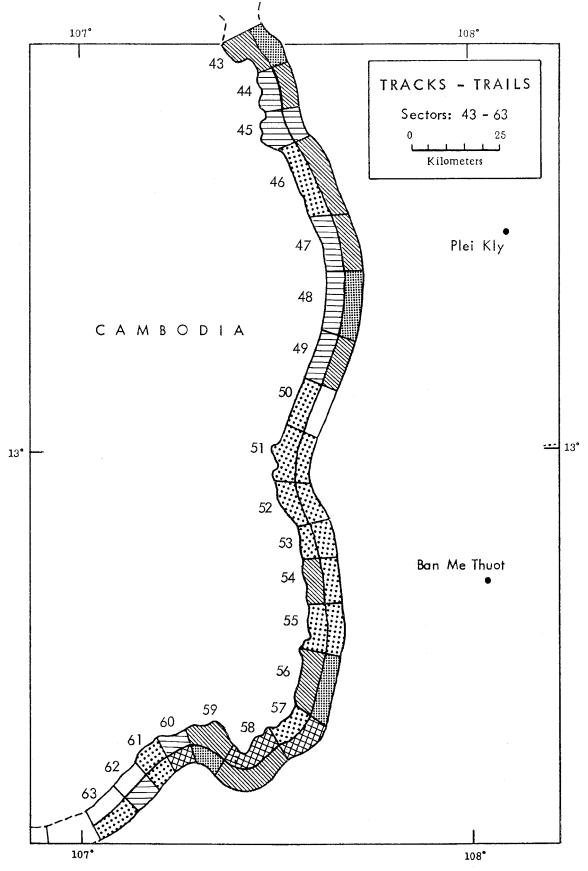


Fig. 35—Tracks-trails data for Sectors 43-63

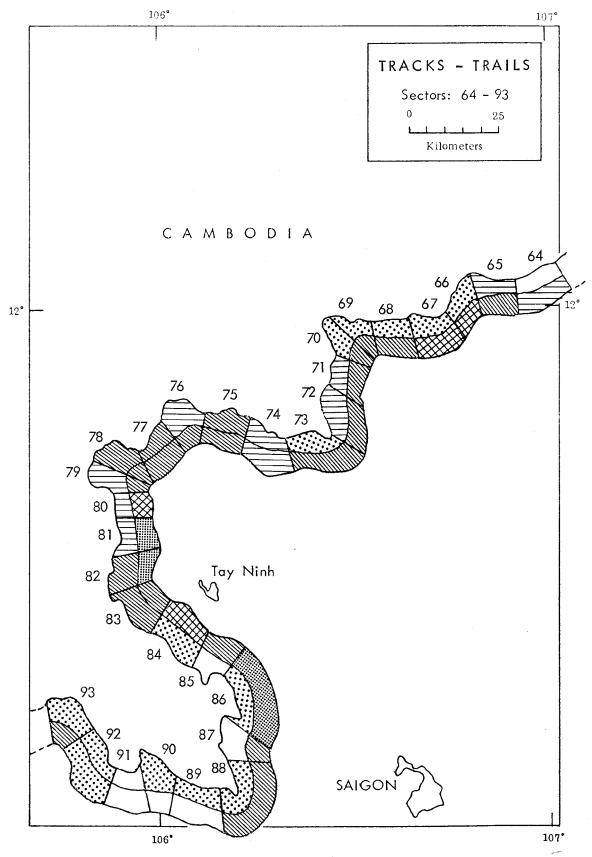


Fig. 36—Tracks-trails data for Sectors 64-93

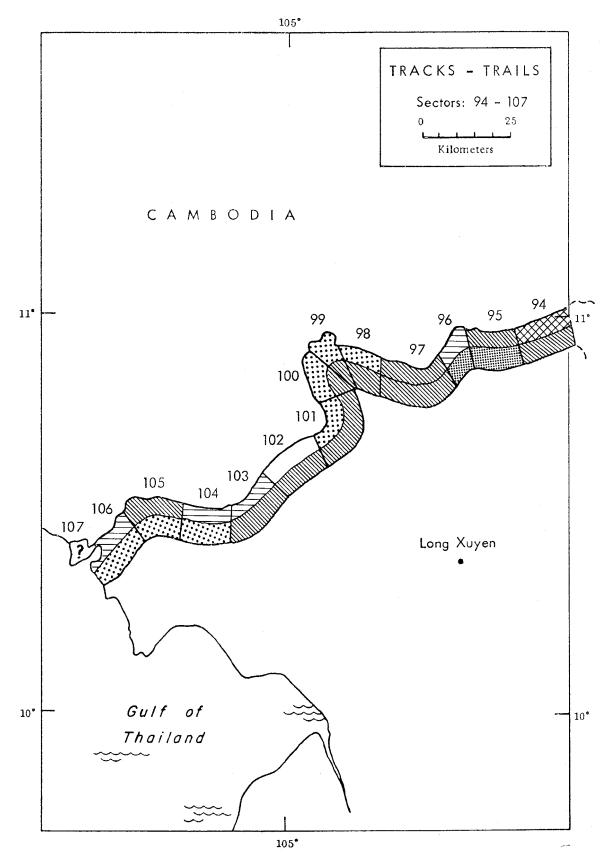


Fig. 37—Tracks-trails data for Sectors 94 - 107

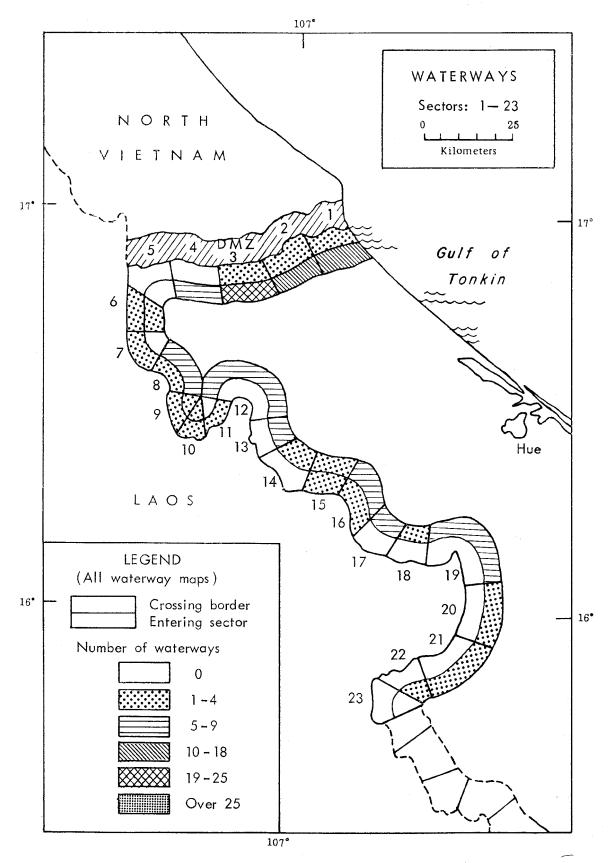


Fig. 38—Waterways in Sectors 1 - 23

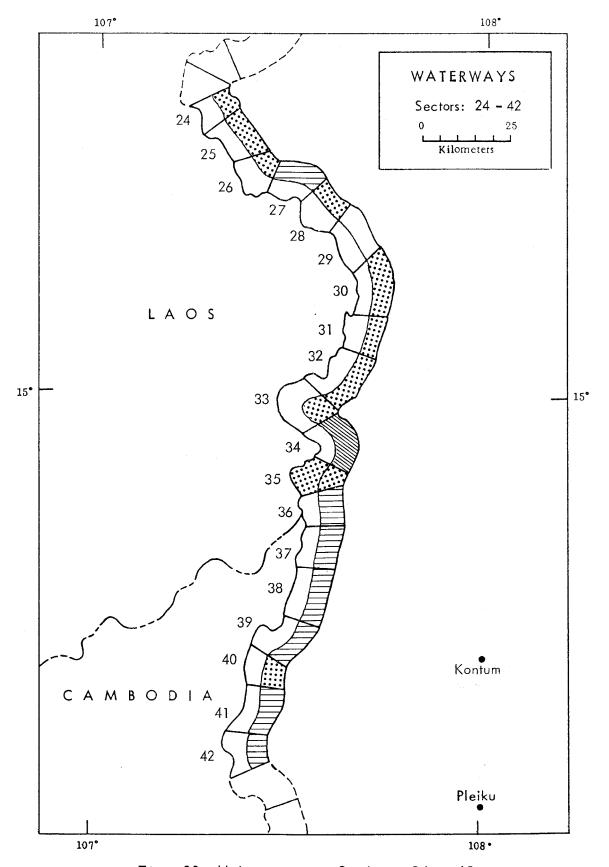


Fig. 39—Waterways in Sectors 24 - 42

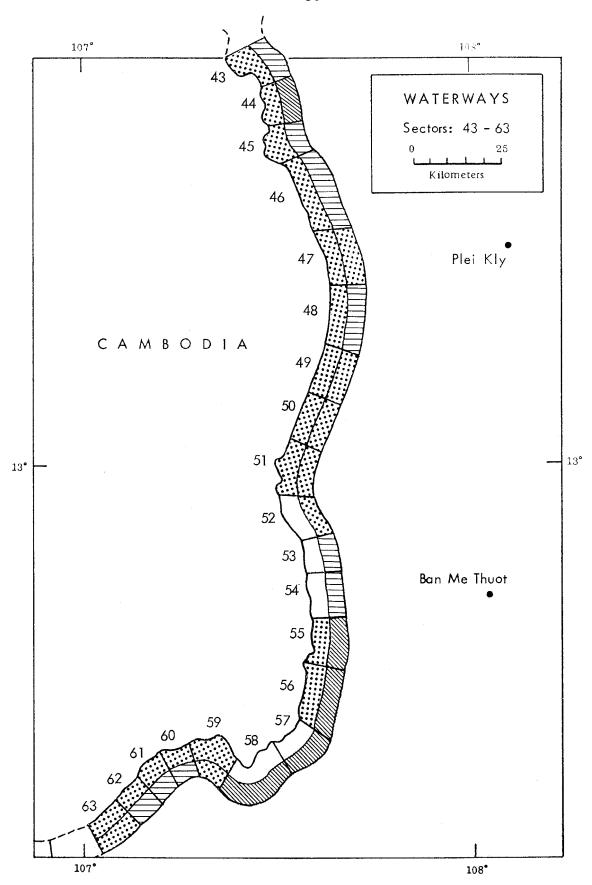


Fig. 40—Waterways in Sectors 43 - 63

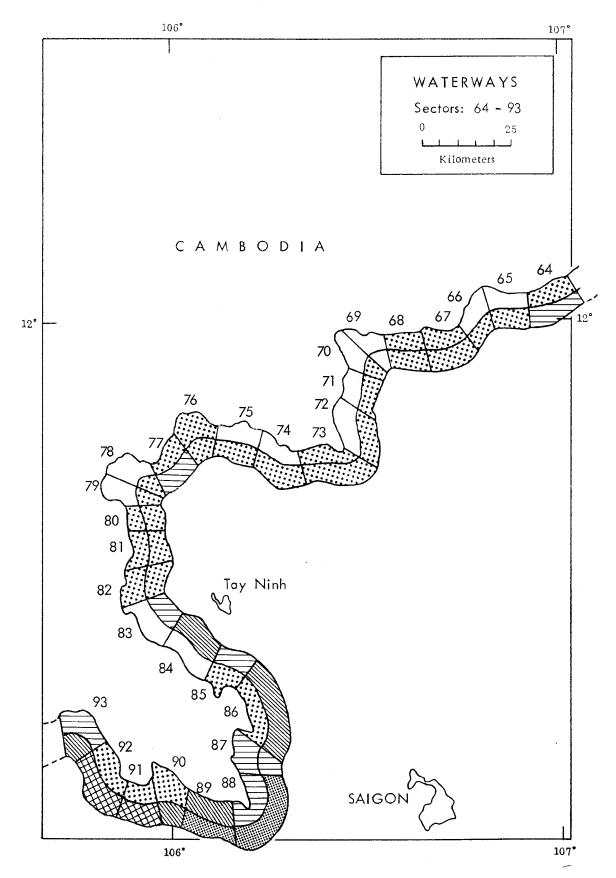


Fig. 41—Waterways in Sectors 64 - 93

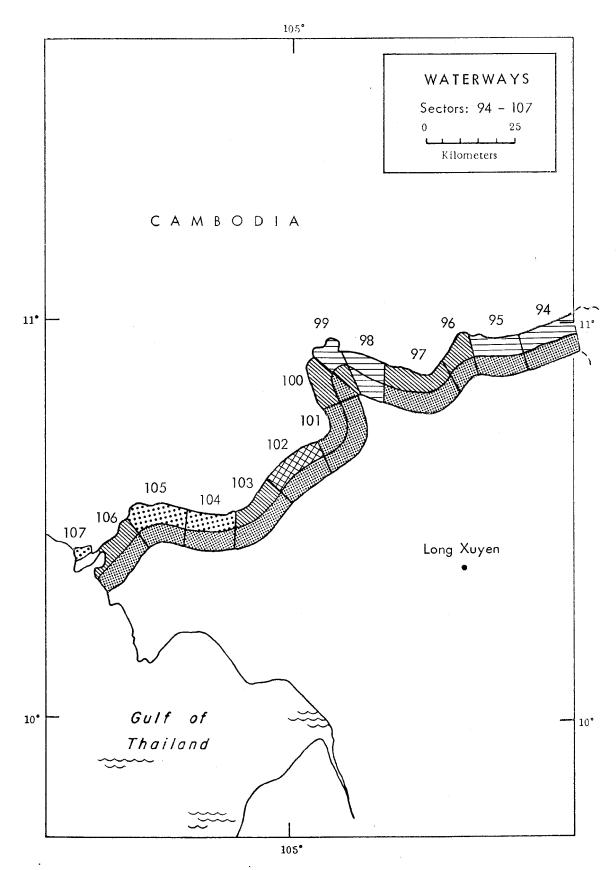


Fig. 42—Waterways in Sectors 94 - 107

#### III. SUMMARY OF CHARACTERISTICS

For convenience in analytical studies (e.g., analyses of counter-infiltration systems), the data presented in Section II are summarized below.

Based on the two major physical characteristics, topography and vegetation, the approximately 1700 km of South Vietnam's land border can be divided into ten regions, which are delineated in Fig. 43.

Region 1 (Sectors 1 and 2) extends approximately 32 km from the eastern end of the DMZ to the foothills near the old Agricultural Development Center, west of Con Thien. This region has essentially flat terrain, with rice-growing areas in the eastern portion and the start of single-canopy forest on the western edge.

Region 2 (Sectors 3 through 6) extends from Region 1 approximately 65 km to the point at which the Xe Pon River turns west into Laos. It includes the western end of the DMZ and Route 9, which goes from the border toward the seacoast. Region 2 has rugged terrain, largely covered by multicanopy forest.

Region 3 (Sectors 7 through 11) extends approximately 80 km south from Region 2. It is bounded almost entirely by the Xe Pon River, from the point at which the river comes out of Laos to a point south of where it reenters Laos. The terrain of Region 3 is essentially rolling, covered by single-canopy forest.

Region 4 (Sectors 12 through 38) extends approximately 435 km from Region 3 to the boundary of the Kontum and Dakto districts of Kontum province. This region has almost entirely rough terrain with elevations of from 200 to 2000 m and is covered with multicanopy forest. It includes the entrances to the A Shau Valley.

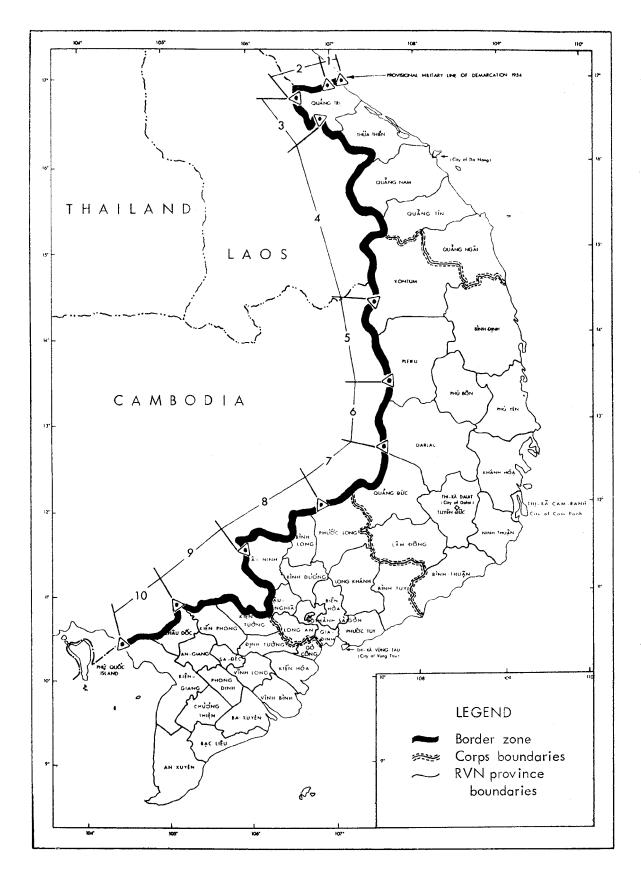


Fig. 43—The border regions of South Vietnam

Region 5 (Sectors 39 through 47) extends from Region 4 approximately 45 km to the boundary line between Pleiku and Darlac provinces, just south of where the Ya Lop River enters Cambodia. The terrain in the region is moderately rolling, with multicanopy forest at elevations from 100 to 1000 m.

Region 6 (Sectors 48 through 53) extends from Region 5 along the border of Darlac province to a point just north of the boundary between Darlac and Quang Duc provinces, a distance of approximately 97 km. The terrain is moderately rolling, covered with single-canopy forest, and has elevations ranging from 100 to 500 m.

Region 7 (Sectors 54 through 64) extends from Region 6 approximately 177 km to the point where South Vietnam Route 14A reaches the border. It has moderately rolling terrain, with multicanopy forest.

Region 8 (Sectors 65 through 81) extends from Region 7 approximately 274 km to the intersection of South Vietnam Interprovisional Route 13 (LTL 13) and the border. This region has essentially flat terrain with elevations of less than 200 m and is largely covered with multicanopy forest.

Region 9 (Sectors 82 through 98) extends from Region 8 approximately 274 km to a point just east of where the Mekong River enters South Vietnam. Region 9 is part of the Mekong Delta and has generally flat terrain with elevations of less than 50 m. Much of the area is subject to inundation, and a major part of the region is marshland or riceland.

Region 10 (Sectors 99 through 107) extends from Region 9 to the Gulf of Thailand, approximately 145 km. It includes the area where the Mekong Channel and the Bassac River enter South Vietnam. The terrain of Region 10 is generally flat, except for isolated highlands reaching elevations of up to 600 m. It is largely a rice-growing area.

Data on population level and movement routes (particularly the numbers of tracks and trails crossing the border) are also of great value in studies of counterinfiltration systems. Table 10 summarizes the major characteristics of the ten border regions—their border lengths, approximate geographical limits, predominant topography and vegetation, estimated population, and numbers of tracks and trails that cross the border.

Table 10
SUMMARY OF CHARACTERISTICS OF REGIONS IN SOUTH VIETNAMESE BORDER ZONE

Region	Sectors in Region	Approxima of Reg North		Border Length <sup>a</sup> (km)	Topography	Vegetation	Population <sup>b</sup>	Tracks & Trails Crossing Border
1	1-2	Gulf of Tonkin	Foothills west of Con Thien	32	Flat to rolling	Rice, single crop; single-canopy for- est, dry crops	6,174	48
2	3–6	Foothills west of Con Thien	Exit of Xe Pon River	65	Rough	Multicanopy forest; brushwoods	1,650	48
3	7-11	Exit of Xe Pon River	Entrance of Xe Pon River	80	Rolling	Brushwoods; multi- canopy forest	6,500	55
4	12-38	Entrance of Xe Pon River	Kontum- Dakto dis- trict boundary	435	Rough	Multicanopy forest; brushwoods	15,202	103
5	39-47	Kontum- Dakto dis- trict boundary	Ya Lop River	145	Rolling	Multicanopy forest; single-canopy forest	6,700	51
6	48-53	Ya Lop River	Darlac- Quang Duc boundary	97	Rolling	Single-canopy forest	300	19
7	54-64	Darlac- Quang Duc boundary	Route 14A	177	Rolling	Multicanopy forest; single-canopy forest	15,364	76
8	65-81	Route 14A	Route LTL 13	274	Flat	Multicanopy forest; single-canopy forest	10,028	101
9	82-98	Route LTL 13	Mekong River	274	Flat, sub- ject to inundation	Rice, single crop; marsh	196,982	104
10	99-107	Mekong River	Gulf of Thailand	145	Flat, sub- ject to inundation	Rice, single crop; marsh	223,253	43

<sup>&</sup>lt;sup>a</sup>Total border length = 1,724 km.

 $<sup>^{\</sup>rm b}$ Includes ethnic Vietnamese, Cambodians, and tribal groups; total border-zone population = 482,153.

<sup>&</sup>lt;sup>c</sup>Total tracks/trails crossing border = 648.

### Appendix A

#### DETAILED DATA ON BORDER-ZONE SECTORS

This appendix presents the detailed data on physical and cultural characteristics of the 107 sectors of the border zone. The locations and general outlines of the sectors are indicated by maps (Figs. 44 through 79) which include reference geographical coordinates. The sectors are outlined in groups of three on 1:250,000 scale maps; small-scale inserts are also given for each outline map to show sector locations with respect to the total border zone.

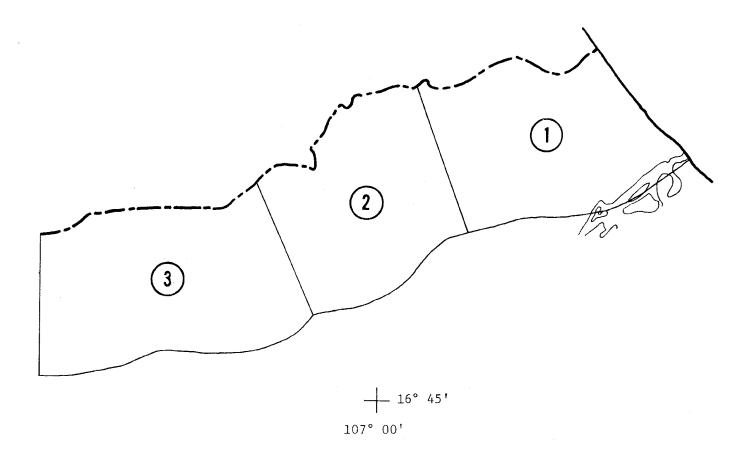
An environmental-detail summary is given for the three sectors depicted by each map. These summaries provide the following data, reduced to numerical form (as much as possible), for each sector.

- 1. Sector number
- 2. Map reference (the sheet number(s) of the Army Map Service Series L-7014 maps for the sector)
- Total area (the area of the sector, in square kilometers, based on planimeter measurements)
- 4. Border in waterway (the percentage of the sector's border that is composed of waterways)
- 5. Topographic class (flat; flat, subject to inundation; rolling; rough)
- 6. Elevation (the maximum and minimum elevation points of the sector, measured to the nearest 50 m)
- 7. Vegetation type (the percentage of the sector covered by the various vegetation classes described in Section II, based on planimeter measurement)

- 8. Foot trafficability (the percentage of the sector that falls into each of the classes of trafficability during the wet and dry seasons, based on planimeter measurement)
- 9. Movement routes (the number of tracks and trails, roads, and waterways crossing the border and entering the other sides of the sector)
- 10. Population (the estimated ethnic Vietnamese and Cambodian population, and its approximate density per square kilometer; the name of the principal ethnic group (or tribe), and the estimated population of that group \*)

<sup>\*</sup>Some sectors are labeled "Uninhabited," although they are, in fact, nominally occupied. These are sectors that were shown in Ref. 6 to have a population of 0, but in many cases a visual examination of topographic maps indicated that this may be inaccurate. Other sectors are shown in this appendix to have no population, yet are given tribal designations. This indicates that the tribal group shown considers the area to be their territory and may occasionally enter the sector. Where there are no tribal groups in a sector, the ethnic designation (Vietnamese or Cambodian) is given in the space labeled "TRIBES." In these cases, the total population (taken solely from Ref. 6) and the "tribal" population are identical and are not to be considered additive.

DATA SUMMARIES



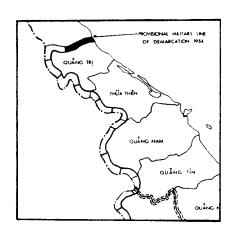
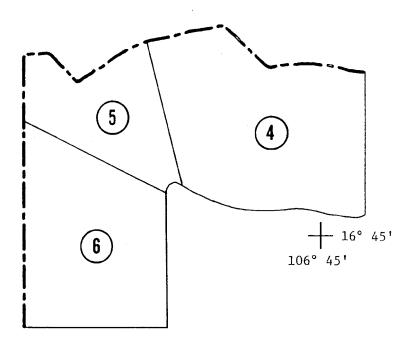


Fig. 44—Configuration and location of Sectors  $1\,-\,3$ 

### SUMMARY OF CHARACTERISTICS OF SECTORS 1 - 3

SECTOR NO: 1	MAP REF:	64	42 IV ,_		,	
TOTAL AREA (SQ KM): 152		BORDER	IN WATERWA	Y (%): 5	2	
TOPOGRAPHIC CLASS: Flat			_ ELEVATIO	N (M) MAX:_	50	MIN: SL
VEGETATION-TYPE: 1 2 3 %:			-	11 12 8 47		15
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	GOOD 27 / 2	-	<u>YAIR</u> / 98	<u>POOR</u> 46/0		<u>UITED</u> /0
CROSSING BORDER/ENTER SECTOR:	29 /	40	2/5	0 /	3	SMALL WATERWAYS 2/8
POPULATION: 4,574 <sup>a</sup> PER SQ KM:		RIBES:	Ethnic Vie	tnamese		POP: 4,574
a <sub>Does not include 25,650 refug</sub>	ees.	63	42I	6442 IV		)
TOTAL AREA (SQ KM): 146		BORDER	IN WATERWA	Y (%):6	4	
TOPOGRAPHIC CLASS: Rolling						
VEGETATION-TYPE: 1 2 3 %: 15		7 8		11 12		
FOOT TRAFFICABILITY (%):	GOOD		FAIR	POOR	UNS	SUITED
WET/DRY SEASON:				15/16	10	6/ 0
MOVEMENT ROUTES:	TRACKS	TRAIL	S ROADS	LARGE W	ATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	19	/72	1 / 6	0 /	1	3 / 13
POPULATION: 1,600 PER SQ KM	:11	TRIBES:	Ethnic Vi	etnamese		POP: 1,600
	MAD DEE.	6	342 I ,			
52010K No	MAP REF:			(4) 0		
TOTAL AREA (SQ KM): 185						
TOPOGRAPHIC CLASS: Rough						_ MIN: SL
VEGETATION-TYPE: 1 2 3 %: 69		7 8 19	3 9 10	11 12 1	13 14	15
FOOT TRAFFICABILITY (%):	GOOD		FAIR	POOR		SUITED
WET/DRY SEASON:	0 /0		24 / 27	6 / 5		0 / 68
MOVEMENT ROUTES:				LARGE		
CROSSING BORDER/ENTER SECTOR:	15	/ 54	0 /0	0	/ 1	2/18
POPULATION: 0 PER SQ K	1:0	TRIBES	: Brou			POP: 300



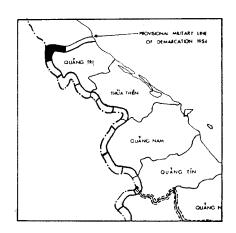
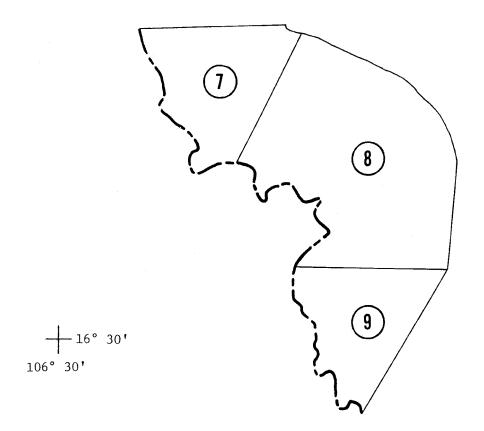


Fig. 45—Configuration and location of Sectors 4-6

### SUMMARY OF CHARACTERISTICS OF SECTORS 4 - 6

SECTOR NO: 4 MAP REI	` <b>:</b>	6342	<u> </u>	6342	<u>IV</u> ,		
TOTAL AREA (SQ KM): 150	во	RDER IN	WATERWA	Y (%):	0	· 	
TOPOGRAPHIC CLASS: Rough							MIN: 100
VEGETATION-TYPE: 1 2 3 4 5 %: 94	6 7			11 :	12 13	14	15
FOOT TRAFFICABILITY (%):	OD	FAI	<u>R</u>	P001	<u> </u>	UNSI	JITED
WET/DRY SEASON: 0 /	0	3 / 3	3	0/	)	97,	97
MOVEMENT ROUTES:	RACKS, TI	RAILS	ROADS	LARC	E WATERV	IAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:			0 /0				1/19
POPULATION: 0 PER SQ KM: 0	TRI	BES:	Brou				POP: 350
SECTOR NO: 5 MAP REF							
TOTAL AREA (SQ KM): 68	BOI	RDER IN	WATERWA	Y (%):_	0	<del></del>	
TOPOGRAPHIC CLASS: Rough			ELEVATIO	N (M) 1	MAX: 160	<u> </u>	MIN: 400
VEGETATION-TYPE: 1 2 3 4 5 %: 84 2	6 7 14			11 < 1	12 13	14	15
FOOT TRAFFICABILITY (%): GO		FAI		P001	<b>t</b>	UNS	UITED
<del></del>	<del>-</del> /0		0		-	89/8	
MOVEMENT ROUTES:	RACKS, TI	RAILS	ROADS	LAR	E WATER	JAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	15/12		0/0		0/0		0 / 0
POPULATION: 0 PER SQ KM: 0	TRI	BES:B	rou				POP: 300
SECTOR NO: 6 MAP REF	!	6342	III_,	6342	IV ,		,
TOTAL AREA (SQ KM): 124	BO	RDER IN	WATERWA	Y (%):	0	<del></del>	
TOPOGRAPHIC CLASS: Rough	<u>-</u>		ELEVATIO	N (M)	MAX: 1350	)	MIN: 600
VEGETATION-TYPE: 1 2 3 4 5	6 7	8	9 10	11	12 13	14	15
%: 30 2 <	l 1 6	7		< 1			
FOOT TRAFFICABILITY (%):	OD	FAI	<u>R</u>	P00	<u> </u>	UNS	UITED
WET/DRY SEASON: 0	0	38 /	40	4 / 3		58	/ 57
MOVEMENT ROUTES:	RACKS, T	RAILS	ROADS	LAR	GE WATER	<u> IAYS</u>	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:		4			0/0		2 /2
POPULATION: 0 PER SQ KM: 0	TRI	BES:	Brou				POP: 700



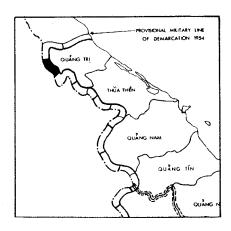
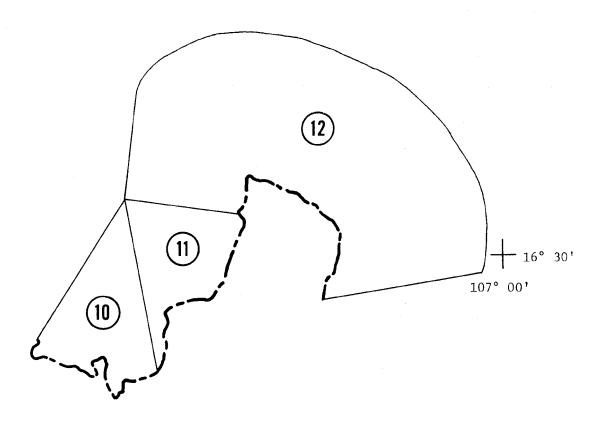


Fig. 46—Configuration and location of Sectors 7-9

# SUMMARY OF CHARACTERISTICS OF SECTORS 7 - 9

SECTOR NO: 7 MAP REF: 6342 III , , , , , , , , , , , , , , , , ,
IOTAL AREA (SQ KM): 67 BORDER IN WATERWAY (%): 35
TOPOGRAPHIC CLASS: Rolling ELEVATION (M) MAX: 1000 MIN: 200
YEGETATION-TYPE:       1       2       3       4       5       6       7       8       9       10       11       12       13       14       15         %:       1       73       1       25
FOOT TRAFFICABILITY (%): GOOD FAIR POOR UNSUITED  WET/DRY SEASON: 0 / 0 12 / 12 0 / 0 88 / 88
MOVEMENT ROUTES: TRACKS, TRAILS ROADS LARGE WATERWAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR: 5/28 1 / 1 0 / 0 4 / 0
POPULATION: 0 PER SQ KM: 0 TRIBES: Brou POP: 600
SECTOR NO: 8 MAP REF: 6342 III, , , , , , , , , , , , , , , , , ,
TOTAL AREA (SQ KM): 174 BORDER IN WATERWAY (%): 100
TOPOGRAPHIC CLASS: Rolling ELEVATION (M) MAX: 900 MIN: 200
VEGETATION-TYPE: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 %: 65 4 1 1 29
FOOT TRAFFICABILITY (%): GOOD FAIR POOR UNSUITED
WET/DRY SEASON: 0 / 0 18/18 2 / 2 80 / 80
MOVEMENT ROUTES: TRACKS, TRAILS ROADS LARGE WATERWAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR: 15/46 0/2 0/0 2/6
POPULATION: 0 PER SQ KM: 0 TRIBES: Brou POP: 2800
SECTOR NO: 9 MAP REF: 6341 IV , 6342 III ,,
TO THE MEN (V) MAY. 750 MIN. 200
10.000
VEGETATION-TYPE: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
DOOD INCLITED
FOOT TRAFFICABILITY (%): GOOD FAIR POOR UNSUITED  WET/DRY SEASON: 0 / 0 90 / 90 0 / 0 10 / 10
MOVEMENT ROUTES: TRACKS, TRAILS ROADS LARGE WATERWAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR: 11/16 1/1 0/0 1/3
POPULATION: 0 PER SQ KM: 0 TRIBES: Brou POP: 1100



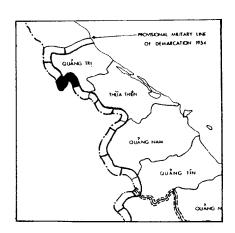
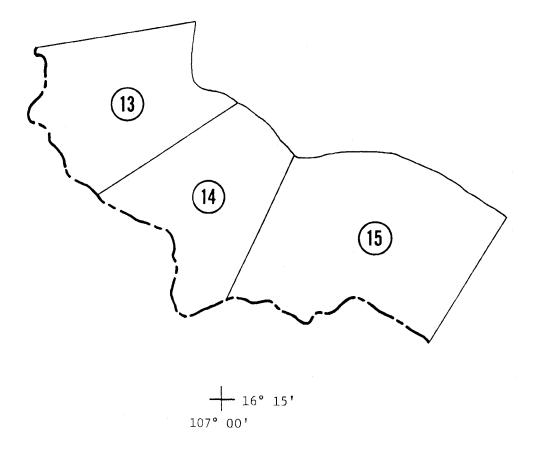


Fig. 47—Configuration and location of Sectors 10-12

## SUMMARY OF CHARACTERISTICS OF SECTORS 10 - 12

### TOTAL AREA (SQ KM): 57 BORDER IN WATERWAY (%): 100  ##################################
VEGETATION-TYPE:       1       2       3       4       5       6       7       8       9       10       11       12       13       14       15         "## FOOT TRAFFICABILITY (%):       GOOD       FAIR       POOR       UNSUITED         WET/DRY SEASON:       0/0       83 / 83       0/0       7/7         MOVEMENT ROUTES:       TRACKS, TRAILS       ROADS       LARGE WATERWAYS       SMALL WATER
%:       1       98       1         FOOT TRAFFICABILITY (%):       GOOD FAIR POOR UNSUITED O/O 83 / 83       POOR O/O 7/7         WET/DRY SEASON:       0/O 83 / 83       0/O 7/7         MOVEMENT ROUTES:       TRACKS, TRAILS ROADS LARGE WATERWAYS SMALL WATER
WET/DRY SEASON: 0/0 83/83 0/0 7/7  MOVEMENT ROUTES: TRACKS, TRAILS ROADS LARGE WATERWAYS SMALL WATER
POPULATION: 0 PER SQ KM: 0 TRIBES: Brou POP: 1200
SECTOR NO: 11 MAP REF: 6341 I , 6342 II , , , , , , , , , , , , , , , , , ,
TOPOGRAPHIC CLASS: Rolling ELEVATION (M) MAX: 500 MIN: 200
VEGETATION-TYPE: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 %: 3 13 84
FOOT TRAFFICABILITY (%): GOOD FAIR POOR UNSUITED  WET/DRY SEASON: 0 / 0 49/49 0 /8 51/43
MOVEMENT ROUTES: TRACKS, TRAILS ROADS LARGE WATERWAYS SMALL WATER CROSSING BORDER/ENTER SECTOR: 14/19 0/1 0/0 1/0
POPULATION: 0 PER SQ KM: 0 TRIBES: Brou POP: 800
SECTOR NO: 12 MAP REF: 6341 I , 6342 II ,,
EXECUTION (M) MAY: 900 MIN: 200
TOPOGRAPHIC CLASS: Rough  VEGETATION-TYPE: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  %: 44 1 6 1 48
FOOT TRAFFICABILITY (%): GOOD FAIR POOR UNSUITED  WET/DRY SEASON: 0 / 0 1 / 5 4 / 1 95 / 94
MOVEMENT ROUTES: TRACKS, TRAILS ROADS LARGE WATERWAYS SMALL WATER CROSSING BORDER/ENTER SECTOR: 13/30 0/0 0/2 0/6
POPULATION: 0 PER SQ KM: 0 TRIBES: Brou POP: 150



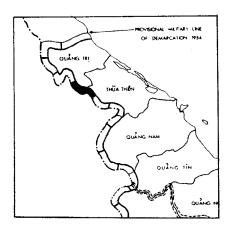


Fig. 48—Configuration and location of Sectors 13-15

# SUMMARY OF CHARACTERISTICS OF SECTORS 13 - 15

SECTOR NO: 13	MAP R	EF:	634	<u>l I</u> _,_			,
TOTAL AREA (SQ KM):	97	1	BORDER I	N WATERWAY			
TOPOGRAPHIC CLASS:	Rough			ELEVATION	(M) MAX:	1000	MIN: 300
VEGETATION-TYPE: 1 %: 30			7 8 54	9 10	1,1 12	13 14	15
FOOT TRAFFICABILITY (%	<b>(,)</b> :	GOOD	FA	<u>IR</u>	POOR		UITED
WET/DRY SEASO	on:	0 / 0	3 /	3	0 /0	97	/ 97
MOVEMENT ROUTES:		TRACKS,	TRAILS	ROADS	LARGE W	ATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER	SECTOR:	9/	4	0/0	0 /	/ 2	0 / 6
POPULATION: 0	PER SQ KM: 0	T	RIBES:	Pacoh			POP: 1400
SECTOR NO: 14	MAP I	REF:	<u>634</u>	<u>1 I</u> ,_	6441 IV		
TOTAL AREA (SQ KM):	101		BORDER 1	IN WATERWA	Y (%):0	)	
TOPOGRAPHIC CLASS:	Rough			ELEVATIO	N (M) MAX	: 1300	MIN: 300
VEGETATION-TYPE: 1 %: 46	2 3 4	5 6	7 8 51	9 10	11 12	13 14	15
FOOT TRAFFICABILITY (	′%)·	GOOD	F	AIR	POOR	UN	SUITED
WET/DRY SEAS			11	/ 11	0/0	89	) / 89
MOVEMENT ROUTES: CROSSING BORDER/ENTER	R SECTOR:	<u>tracks</u>	TRAILS	<u>ROADS</u> 0 / 0	LARGE 0	WATERWAYS /0	SMALL WATERWAYS 0 / 4
POPULATION: 0	DER SO KM.	0	TRIBES:	Pacoh			POP: 500
POPULATION.		·					
	MAP			441 IV,			
TOTAL AREA (SQ KM):_	161		BORDER	IN WATERW	YAY (%):	0	
TOPOGRAPHIC CLASS:				ELEVATI	ON (M) MA	X: 1200	MIN: 400
VEGETATION-TYPE: 1		5 6 1 3		9 10	11 12	2 13 14	15
		GOOD		FAIR	POOR	<u> ប</u>	NSUITED
FOOT TRAFFICABILITY WET/DRY SEA				5 / 5	0/0	9	5 /95
MOVEMENT ROUTES:				S ROADS		e waterways	SMALL WATERWAYS
CROSSING BORDER/ENTE			8/ 19			-,-	POP: 500
PODIU ÁTION O	PER SO KM.	0	TRIBES:	Pacoh			

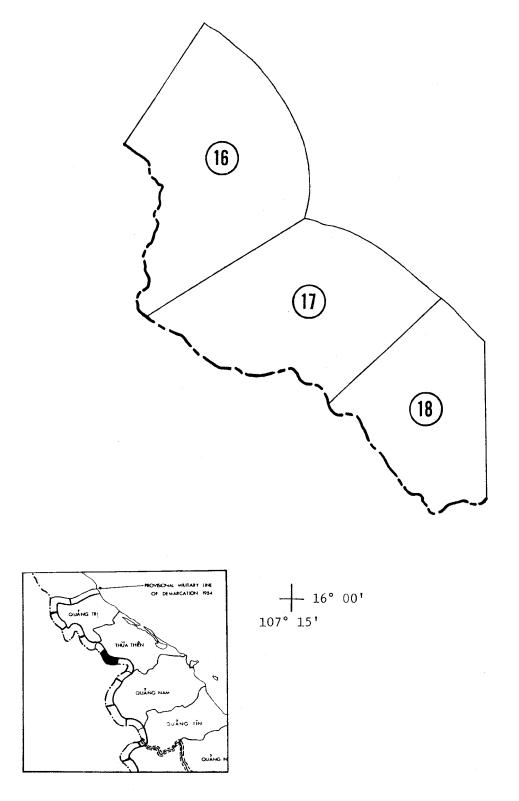


Fig. 49—Configuration and location of Sectors 16-18

## SUMMARY OF CHARACTERISTICS OF SECTORS 16 - 18

SECTOR NO: 16 MAP 1	REF:	644	1 III ,_	6441 IV	,	<b>7</b>
TOTAL AREA (SQ KM): 160						
TOPOGRAPHIC CLASS: Rough						
				11 12		
FOOT TRAFFICABILITY (%):	GOOD	FA	IR	POOR	UNSL	ITED
WET/DRY SEASON:	0 / 0	15 /	15	0 / 6	85/	79
MOVEMENT ROUTES:	TRACKS	TRAILS	ROADS	LARGE WA	TERWAYS	SMALL WATERWAYS
CROCCING BORRER /FINNER CT	8 /			2 /		0 / 3
POPULATION: 0 PER SQ KM:	0 1	RIBES:	Pacoh			POP: 500
SECTOR NO: 17 MAP	REF:	644	1 II ,	6441 III	,	
TOTAL AREA (SQ KM): 133						
TOPOGRAPHIC CLASS: Rough						
VEGETATION-TYPE: 1 2 3 4				11 12		
%: 74	12		9 10	11 12	13 14	
FOOT TRAFFICABILITY (%): WET/DRY SEASON:		<u>FA</u> 17 /	<u>IR</u>	<u>POOR</u> 1 / 2	<u>UNS1</u> 82	JITED / 81
MOVEMENT ROUTES:	TRACKS	TRAILS	ROADS	LARGE WA	ATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	0 ,	/16	0 / 2	0 /:	2	0 / 3
POPULATION: 0 PER SQ KM: (	0	TRIBES:	Phuong			POP: 200
SECTOR NO. 10	DDD.					
	REF:					
TOTAL AREA (SQ KM): 107						
TOPOGRAPHIC CLASS: Rough			ELEVATIO	ON (M) MAX:	1600	MIN: 500
VEGETATION-TYPE: 1 2 3 4 %: 64	5 6 10 14	7 8 12	9 10	11 12	13 14	15
FOOT TRAFFICABILITY (%):	GOOD	<u>F/</u>		POOR	UNS	UITED
WET/DRY SEASON:	0 / 0	20	/20	1/,1	79	/79
MOVEMENT ROUTES:				LARGE W		SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2	/12	0 / 2	0 /	1	0 / 3
POPULATION: 0 PER SQ KM:	0	TRIBES:	Phuong			POP: 400

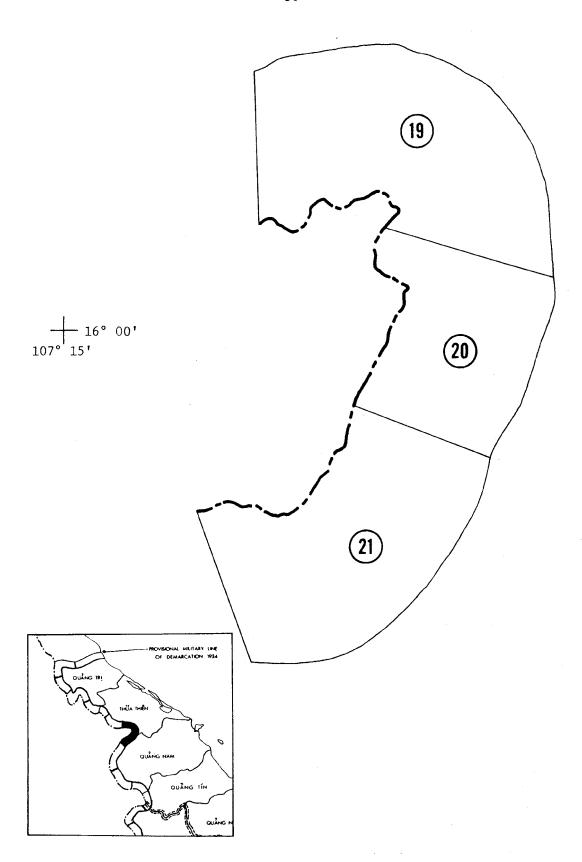


Fig. 50—Configuration and location of Sectors  $19\,-\,21$ 

# SUMMARY OF CHARACTERISTICS OF SECTORS 19 - 21

SECTOR NO: 19 MAP	REF:	0441 II , t	))41 III ,_	<del></del>	
TOTAL AREA (SQ KM): 236	BORDEF	R IN WATERWAY	(%):0		·
TOPOGRAPHIC CLASS: Rough		ELEVATION	(M) MAX: 12	00	MIN: 200
VEGETATION-TYPE: 1 2 3 4 %: 88	5 6 7 8 3 9	9 10	11 12 13	14 1	5
FOOT TRAFFICABILITY (%): WET/DRY SEASON:		FAIR 4/5		<u>UNSUI</u>	<del></del>
					SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:				KMIIIO	0 / 8
POPULATION: 0 PER SQ KM:_				<del> </del>	POP: 400
SECTOR NO: 20 MAP TOTAL AREA (SQ KM): 154					
TOPOGRAPHIC CLASS: Rough		ELEVATION	(M) MAX:_1	500	MIN: 300
VEGETATION-TYPE: 1 2 3 4 %: 69 6	5 6 7				
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSU	ITED
WET/DRY SEASON:	0/0	0 / 0	0/0	100/	100
HOVEMENT ROUTES:					SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:					0 / 4
POPULATION: 0 PER SQ KM:	O TRIBES	:Phuon	3		POP: 100
SECTOR NO: 21 MAR TOTAL AREA (SQ KM): 213		6440 I ,			
TOPOGRAPHIC CLASS: Rough		ELEVATIO	N (M) MAX:	1900	MIN: 600
VEGETATION-TYPE: 1 2 3 4 %: 87 1	5 6 7 3 4 5	8 9 10	11 12 1	13 14	15
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNS	UITED
WET/DRY SEASON:	0 / 0	0 / 0	0/ 0	100	y 100
MOVEMENT ROUTES:		ILS ROADS	፣ ለውርም ሀልግ	TERWAYS	SMALL WATERWAY
HOVELERT ROOTED:	TRACKS, TRA	ILS KUADS	DAKGE MA		
CROSSING BORDER/ENTER SECTOR:	TRACKS, TRA	0 / 0	0/ 6		0 / 3 POP: 400

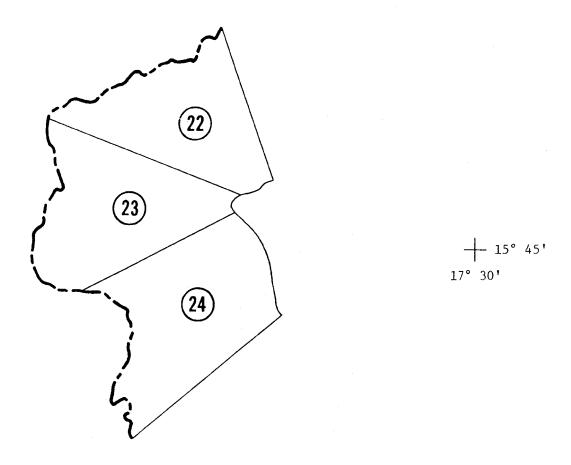




Fig. 51—Configuration and location of Sectors 22-24

## SUMMARY OF CHARACTERISTICS OF SECTORS 22 - 24

SECTOR NO: 22 MAP F	EF:	6440 I,	,	,
TOTAL AREA (SQ KM): 83	BORD	ER IN WATERWAY	(%): 0	
TOPOGRAPHIC CLASS: Rough		ELEVATION	(M) MAX: 1800	MIN: 800
VEGETATION-TYPE: 1 2 3 4 %: 62		8 9 10 1	11 12 13 14	15
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR U	NSUITED
WET/DRY SEASON:	/0	0 / 0	0 / 0	00 / 100
MOVEMENT ROUTES:	TRACKS, TRA	ILS ROADS	LARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	6 / 11	0/0	0 / 0	0/ 1
POPULATION: 0 PER SQ KM:	O TRIBES	S: Phuong		POP: 600
SECTOR NO: 23 MAP F	ÆF: _	6440 I ,	6440 II <u>,</u> 6440	III <u>, 6440 IV</u>
TOTAL AREA (SQ KM): 91	BORD	ER IN WATERWAY	(%): 0	
TOPOGRAPHIC CLASS: Rough				
VEGETATION-TYPE: 1 2 3 4 %: 71			11 12 13 14	
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	GOOD 0 / 0	<u>FAIR</u> 0/0	<u>POOR</u> <u>I</u>	INSUITED 100/100
MOVEMENT ROUTES:	TRACKS, TRA	ILS ROADS	LARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	4 /10	0 / 0	0/0	0 / 0
POPULATION: 0 PER SQ KM:	O TRIBE	ES: Phuon	g	POP: 700
			6440 JT	
	•		6440 II ,	
TOTAL AREA (SQ KM): 104				
TOPOGRAPHIC CLASS: Rough				
VEGETATION-TYPE: 1 2 3 4 %: 79	5 6 7 5 16	8 9 10	11 12 13 1	4 15
FOOT TRAFFICABILITY (%):	GOOD	FAIR		UNSUITED
WET/DRY SEASON:	0 /0	0/0	0 / 0	100/100
MOVEMENT ROUTES:	TRACKS, TR	AILS ROADS	LARGE WATERWAY	
CROSSING BORDER/ENTER SECTOR:	0 / 13	0/0	0 / 0	0 / 2
POPULATION: 0 PER SQ KM:	O TRIB	ES: Katu		POP: 500

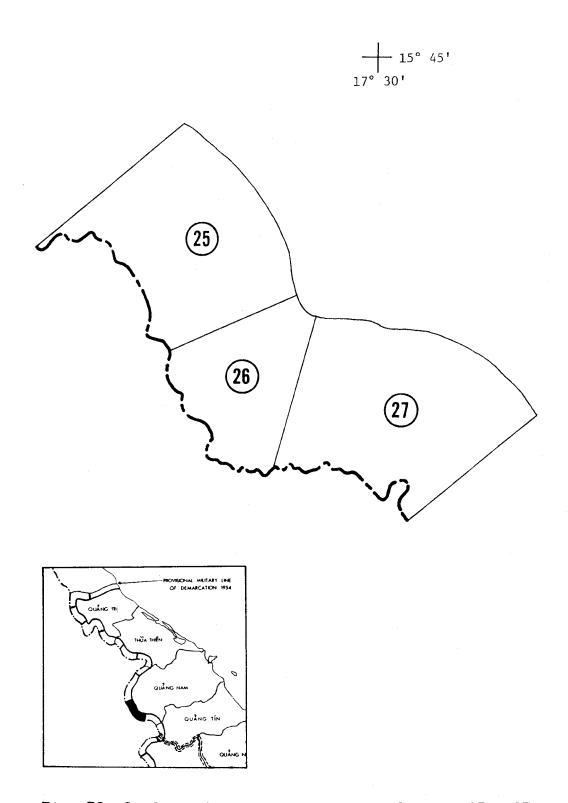


Fig. 52—Configuration and location of Sectors 25-27

### SUMMARY OF CHARACTERISTICS OF SECTORS 25 - 27

SECTOR NO: 25 MAP R	EF:	64	40 II ,		,	,
TOTAL AREA (SQ KM): 139	В	ORDER I	N WATERWAY	(%):0		
TOPOGRAPHIC CLASS: Rough			ELEVATION	(M) MAX:_	1400	MIN: 400
VEGETATION-TYPE: 1 2 3 4 %: 62	5 6 10		9 10	11 12	13 14	15
FOOT TRAFFICABILITY (%):	GOOD	FA	<u>IR</u>	POOR	UNSU	JITED
WET/DRY SEASON:	0/0	0 /	0	0/ 0	100/	100
MOVEMENT ROUTES:	TRACKS,	TRAILS	ROADS	LARGE WA	TERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	1 /	10	0/0	0/0		0 / 2
POPULATION: 0 PER SQ KM:	0 TR	IBES:	Katu			POP: 1200
SECTOR NO: 26 MAP MA						
TOTAL AREA (SQ KM): 78						
TOPOGRAPHIC CLASS: Rough			ELEVATION	:XAM (M)	1400	MIN: 400
VEGETATION-TYPE: 1 2 3 4 %: 88		7 8 3	9 10	11 12	13 14	15
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	GOOD 0 /0	<u>F</u> /	AIR / O	<u>POOR</u> 0/0	<u>uns</u> 100	
MOVEMENT ROUTES:	TRACKS,	TRAILS	ROADS	LARGE W	ATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	0 /	4	0/0	0 /	0	0/3
POPULATION: 0 PER SQ KM:	0 T	RIBES:	Katu			POP: 0
SECTOR NO: 27 MAP	REF:	643	39 I ,	6440 II	, <u>6539</u>	IV, 6540 III
TOTAL AREA (SQ KM): 170						
TOPOGRAPHIC CLASS: Rough						
VEGETATION-TYPE: 1 2 3 4 %: 95	1 4	/ 8	9 10	11 12	15 14	•
FOOT TRAFFICABILITY (%):	GOOD	_	FAIR	POOR		SUITED
WET/DRY SEASON:	0/0		0/0	1/1	99	9 / 99
MOVEMENT ROUTES:			ROADS		WATERWAYS	SMALL WATERWAYS  0 / 5
CROSSING BORDER/ENTER SECTOR:				0	/υ	•
POPULATION: 0 PER SQ KM:	0 '	TRIBES:	Katu			POP:

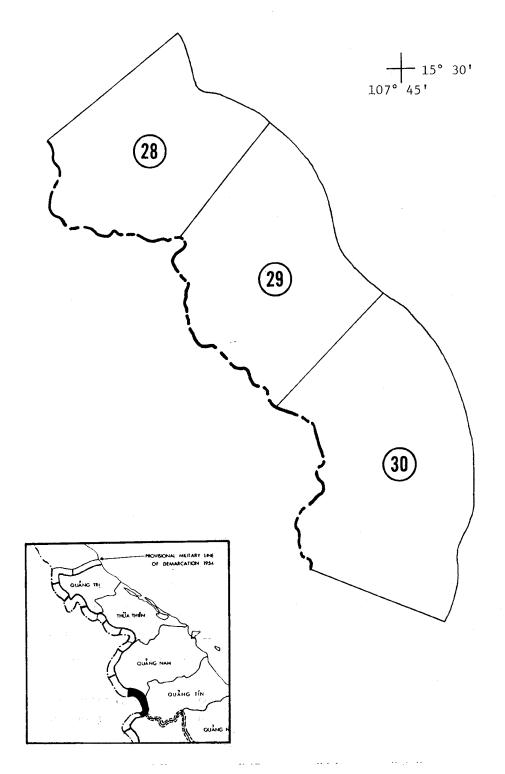
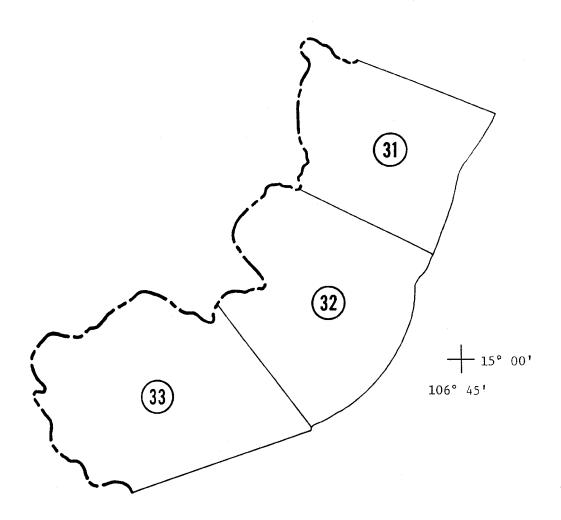


Fig. 53—Configuration and location of Sectors 28-30

## SUMMARY OF CHARACTERISTICS OF SECTORS 28 - 30

SECTOR NO: 28 MAP	<b>REF:</b> <u>65</u>	39 IV ,	_,	·
TOTAL AREA (SQ KM): 126	BORDER	IN WATERWAY (%):	0	
TOPOGRAPHIC CLASS: Rough		ELEVATION (M) MAX	: 1600	MIN: 500
VEGETATION-TYPE: 1 2 3 4 %: 74 2		9 10 11 12	13 14 1	15
FOOT TRAFFICABILITY (%):	GOOD F.	AIR POOR	UNSUI	(TED
WET/DRY SEASON:				
		ROADS LARGE		SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2/1	0 / 0 0	/ 0	0 / 1
POPULATION: O PER SQ KM:	O TRIBES:	Unknown		POP: 200
SECTOR NO: 29 MAP TOTAL AREA (SQ KM): 161				
•				
TOPOGRAPHIC CLASS: Rough				•
VEGETATION-TYPE: 1 2 3 4 %: 85 14		9 10 11 12	13 14	15
FOOT TRAFFICABILITY (%):				
WET/DRY SEASON:	0/<1 < 1	/ 14 14 / 0	85 /	85
		ROADS LARGE		
CROSSING BORDER/ENTER SECTOR:				
POPULATION: 0 PER SQ KM: 0	TRIBES:	Uninhabited		POP:U
SECTOR NO: 30 MAP	REF: <u>6</u>	539 I , 6539 II	<u>, 6539 II</u>	r , 6539 TV
TOTAL AREA (SQ KM): 207	BORDER	IN WATERWAY (%):	0	
TOPOGRAPHIC CLASS: Rough		ELEVATION (M) MA	x: 2000	MIN: 400
VEGETATION-TYPE: 1 2 3 4	5 6 7 8	9 10 11 12	13 14	15
<b>%:</b> 79 1 5	12 3			
FOOT TRAFFICABILITY (%):	GOOD	FAIR POOR	UNSI	UITED
WET/DRY SEASON:	0/0 0	/ 2 2/0	98 /	/ 98
MOVEMENT ROUTES:	TRACKS, TRAIL	S ROADS LARGE	WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	3/14	0 / 2 0	/ 0	0 / 4
POPULATION: 0 PER SQ KM:_	0 TRIBES:	Unknown		POP: 300



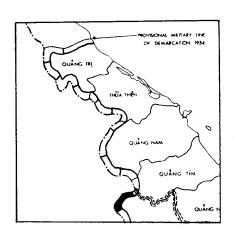


Fig. 54—Configuration and location of Sectors 31 – 33  $\,$ 

# SUMMARY OF CHARACTERISTICS OF SECTORS 31 - 33

SECTOR NO: 31 MAP RE	.F:	39 II , 653	9 III ,	
TOTAL AREA (SQ KM): 124	BORDER	IN WATERWAY (%	):_ 0	
TOPOGRAPHIC CLASS: Rough			1	MIN: 600
VEGETATION-TYPE: 1 2 3 4 %: 11 2 46		9 10 11	12 13 14	15
FOOT TRAFFICABILITY (%):  WET/DRY SEASON:  0		FAIR PO 2		
MOVEMENT ROUTES:	TRACKS, TRAILS	S ROADS LA	RGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:				0 / 4
POPULATION: 1802 PER SQ KM: 14	TRIBES:	Jeh		POP: 600
SECTOR NO: 32 MAP R TOTAL AREA (SQ KM): 150				
TOPOGRAPHIC CLASS: Rough				
VEGETATION-TYPE: 1 2 3 4 %: 38 1 13		9 10 11	12 13 14	15
FOOT TRAFFICABILITY (%):	GOOD	FAIR P	OOR UNS	UITED
WET/DRY SEASON:	0/0	0/6 .6	5/0 94,	/ 94
MOVEMENT ROUTES:	TRACKS, TRAIL	S ROADS L	ARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2 / 11	0 / 0	0/0	0/ 1
POPULATION: 0 PER SQ KM:	O TRIBES:	Jeh		POP: 400
TOTAL AREA (CO MA) . 17/		38 I <u>, 6439</u>	O II	III , 6538 IV
TOPOGRAPHIC CLASS: Rough		<del></del>	1) MAX: 2000	MTN: 800
VEGETATION-TYPE: 1 2 3 4 %: 79 2 4	5 6 7 8 5 10	3 9 10 11	12 13 14	15
FOOT TRAFFICABILITY (%):	GOOD	FAIR I	POOR UNS	GUITED
WET/DRY SEASON:	0 /0	0 / 10 10	0/ 0 90	/ 90
MOVEMENT ROUTES:	TRACKS, TRAIL	LS ROADS I	ARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2 / 9	0/0	0/0	0 / 2
POPULATION: 0 PER SQ KM:	O TRIBES	Jeh		POP: 900

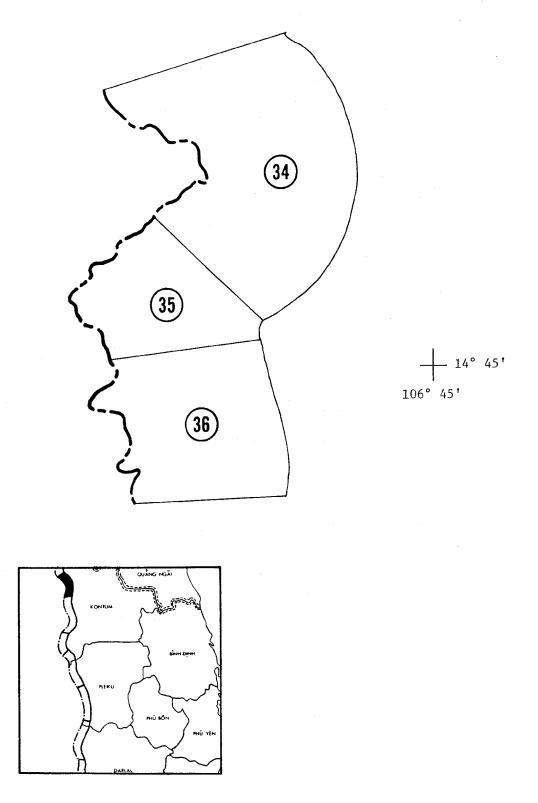


Fig. 55—Configuration and location of Sectors  $34\,-\,36$ 

# SUMMARY OF CHARACTERISTICS OF SECTORS 34 - 36

SECTOR NO: 34 MAP I	REF:	_6538_IV,		·
TOTAL AREA (SQ KM): 213	BORD	ER IN WATERWAY	7 (%): 0	
TOPOGRAPHIC CLASS: Rough		ELEVATION	(M) MAX: 1500	MIN: 600
VEGETATION-TYPE: 1 2 3 4 %: 67 4 14		8 9 10	11 12 13	14 15
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITED
WET/DRY SEASON:	0 / 0	0 / 7	7 / 0	93/93
		ILS ROADS	LARGE WATERWAY	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2/11	0 / 2	0 / 1	0 / 10
POPULATION: 0 PER SQ KM: 0	TRIBE	S: Kayong	······································	POP: 900
SECTOR NO: 35 MAP	REF:	6538 IV,		
TOTAL AREA (SQ KM): 80				
TOPOGRAPHIC CLASS: Rough				
VEGETATION-TYPE: 1 2 3 4 %: 94	5 6 7 5 1	8 9 10	11 12 13	14 15
• •	<u>GOOD</u> 0 / 0	<u>FAIR</u> 0 / 6		<u>UNSUITED</u> 94 / 94
MOVEMENT ROUTES:	TRACKS, TRA	ILS ROADS	LARGE WATERWA	YS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	1 /1	0 / 0	0 /0	1 / 1
POPULATION: 0 PER SQ KM:	O TRIBE	ES: <u>Uninhab</u>	ited	POP: 0
SECTOR NO: 36 MAP F	REF:	6538 III ,_	6538 IV ,	
TOTAL AREA (SQ KM): 115	BOR	DER IN WATERWA	Y (%): 0	
TOPOGRAPHIC CLASS: Rough		ELEVATIO	N (M) MAX: 110	00 MIN: 500
VEGETATION-TYPE: 1 2 3 4 %: 98	5 6 7 1	8 9 10	11 12 13 1	14 15
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITED
WET/DRY SEASON:	< 1/< 1	< 1 / 2	2 / < 1	97 / 97
MOVEMENT ROUTES: CROSSING BORDER/ENTER SECTOR:	TRACKS, TR	AILS ROADS 0/1	LARGE WATERWA	SMALL WATERWAY 0 / 6
POPULATION: 0 PER SO KM:	ח יים ח	FC. Vayong		POP: 300

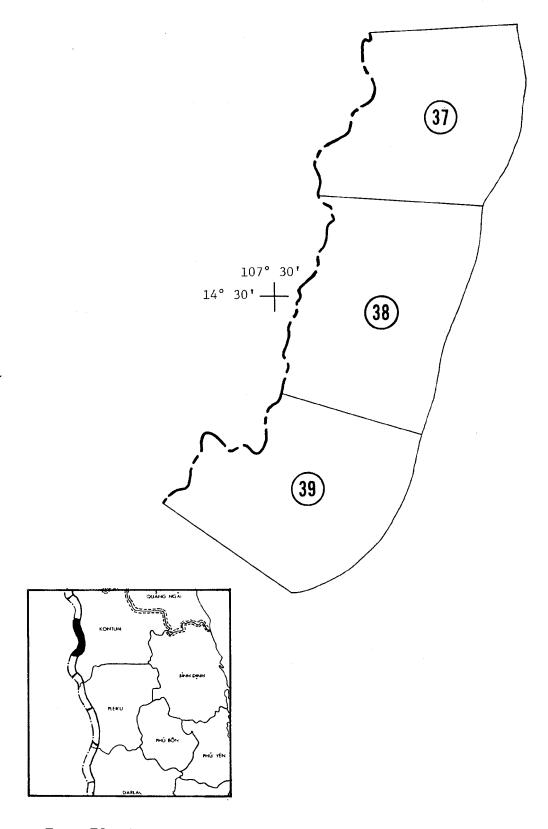


Fig. 56—Configuration and location of Sectors 37-39

# SUMMARY OF CHARACTERISTICS OF SECTORS 37 - 39

SECTOR NO: 37 MAP	EF: _	6538 III ,	,,,,,,	·,-	
TOTAL AREA (SQ KM): 148	BORI	DER IN WATERWAY	(%):0		
TOPOGRAPHIC CLASS: Rough		ELEVATION	(M) MAX: 110	00 MIN:	600
VEGETATION-TYPE: 1 2 3 4 %: 97	5 6 7	8 9 10	11 12 13	14 15	
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITED	
WET/DRY SEASON: <	1 /< 1	0 / 3	3 /0	96 / 96	
MOVEMENT ROUTES:	TRACKS, TRA	AILS ROADS	LARGE WATER		L WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2 /6	0/0	0 / 0	1	0 / 6
POPULATION: 0 PER SQ KM:	O TRIBE	S: Kayong		POP:	400
SECTOR NO: 38 MAP I TOTAL AREA (SQ KM): 165					
TOPOGRAPHIC CLASS: Rough					
VEGETATION-TYPE: 1 2 3 4					
%: 92	8	8 9 10	11 12		
FOOT TRAFFICABILITY (%): WET/DRY SEASON:			<u>POOR</u> 16 / 9		
MOVEMENT ROUTES:	TRACKS, TR	AILS ROADS	LARGE WATER	WAYS SMAI	LL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2/9	0 / 0	0 / 0		0 / 8
POPULATION: 0 PER SQ KM:_	O TRIB	BES: Unknown	1	POP	:300
SECTOR NO: 39 MAP TOTAL AREA (SQ KM): 139		<u>6437 I</u> ,_ RDER IN WATERWA		,	
			ON (M) MAX: 1	100 MIN	: 200
TOPOGRAPHIC CLASS: Rolling  VEGETATION-TYPE: 1 2 3 4	5 6 7	8 9 10		14 15	
%: 88	12	2			
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITED	<u>)</u>
WET/DRY SEASON:	0 / 0	12 / 12	33 / 82	55 / 6	
MOVEMENT ROUTES:		RAILS ROADS		RWAYS SMA	LL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	0 /8	0 /0	0 / 1		0 /8
POPITIATION: O PER SO KM:	O TRI	BES: Unknow	n	POT	P: 100

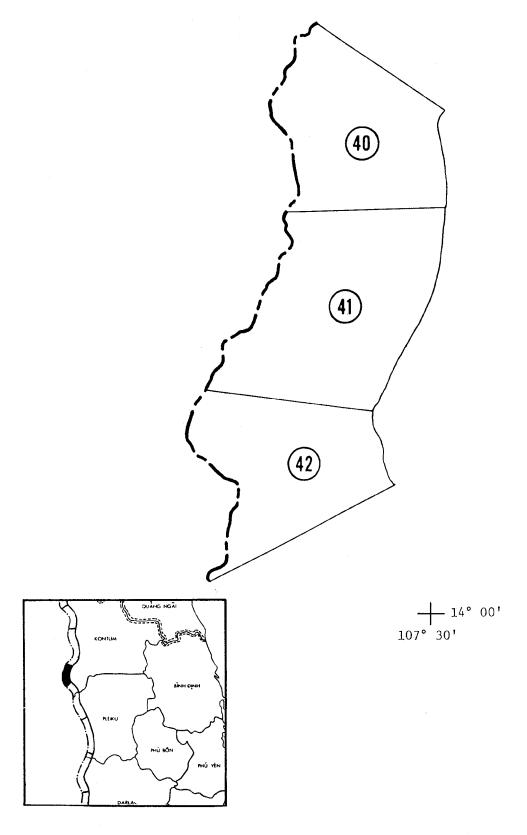


Fig. 57—Configuration and location of Sectors 40-42

#### SUMMARY OF CHARACTERISTICS OF SECTORS 40 - 42

SECTOR NO: 40 MAP	REF:	6437 1	·,	,	
TOTAL AREA (SQ KM): 115	В	ORDER IN	VATERWAY (%	(): <u> </u>	
TOPOGRAPHIC CLASS: Rolling		EI	EVATION (M	) MAX: 1000	MIN: 2000
VEGETATION-TYPE: 1 2 3 4 %: 98	5 6 ·		10 11	12 13 1	14 15
FOOT TRAFFICABILITY (%): WET/DRY SEASON:		<u>FAIR</u> 3 / 3	_	<u>POOR</u> / 70	UNSUITED 40 / 27
MOVEMENT ROUTES: CROSSING BORDER/ENTER SECTOR:					SMALL WATERWAYS 0 / 1
POPULATION: 0 PER SQ KM:	0 TR	IBES:	Jarai		POP:0
SECTOR NO: 41 M					
TOTAL AREA (SQ KM): 161					
TOPOGRAPHIC CLASS: Rolling					
VEGETATION-TYPE: 1 2 3 %: 100	4 5 6	7 8 9	10 11	12 13	14 15
FOOT TRAFFICABILITY (%): WET/DRY SEASON:			-	<u>POOR</u> 19/58	<u>UNSUITED</u> 81 / 42
MOVEMENT ROUTES:	TRACKS,	TRAILS	ROADS	LARGE WATERWA	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:					0 /4
POPULATION: 0 PER SQ KM:	<u>0</u> T)	RIBES:	Jarai		POP: 0
				,	
TOTAL AREA (SQ KM): 120					
TOPOGRAPHIC CLASS: Rolling			ELEVATION	(M) MAX: 700	MIN: 200
VEGETATION-TYPE: 1 2 3 %: 97	4 5 6	7 8 1	9 10 1	1 12 13	14 15
FOOT TRAFFICABILITY (%):	GOOD	<u>FA</u> ]	<u>:R</u>	POOR	UNSUITED
WET/DRY SEASON:	2 / 2	1 /	< 1	57/60	40 / 37
MOVEMENT ROUTES:	TRACKS			LARGE WATER	
CROSSING BORDER/ENTER SECTOR:	8 ,	/ 48	0/0	0 / 2	0 / 4
POPULATION: 0 PER SQ KM	:0:	TRIBES:	Jarai		POP: 400

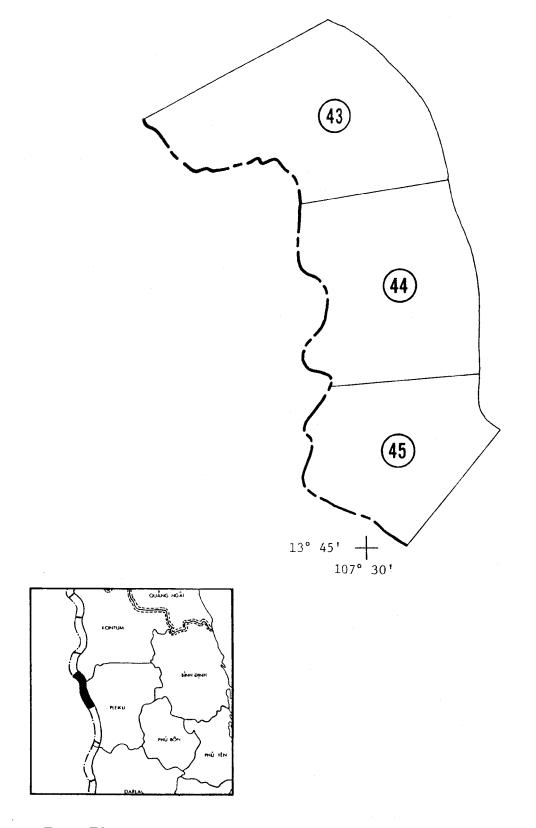


Fig. 58—Configuration and location of Sectors 43-45

#### SUMMARY OF CHARACTERISTICS OF SECTORS 43 - 45

SECTOR NO: 45 MAP REF:	0430 I	, 6437 11 ,	0550 10 , 0557 111
TOTAL AREA (SQ KM): 165	BORDER IN WATER	RWAY (%): 69	
TOPOGRAPHIC CLASS: Rolling			
VEGETATION-TYPE: 1 2 3 4 5 6 %: 91 6		11 12 13	14 15
FOOT TRAFFICABILITY (%): GOOD	FAIR	POOR	UNSUITED
WET/DRY SEASON: < 1 / 4	8 / 6	35 / 83	57 / 7
MOVEMENT ROUTES: TRACKS	, TRAILS ROAL	S LARGE WATER	RWAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR: 15	/ 36 0 /	0 1/3	2 / 6
POPULATION: 0 PER SQ KM: 0	TRIBES: Jarai		POP: 200
SECTOR NO: 44 MAP REF: TOTAL AREA (SQ KM): 148			
TOPOGRAPHIC CLASS: Rolling			
VEGETATION-TYPE: 1 2 3 4 5 6 %: 82 11	7 8 9 1 . 7	0 11 12 13	14 15
	FAIR		
WET/DRY SEASON: 0 / 15			
			RWAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR: 7			
POPULATION: 0 PER SQ KM: 0	TRIBES: Ja	rai	POP:500
SECTOR NO: 45 MAP REF:	6436 I	, 6536 IV ,	,,,,,,
TOTAL AREA (SQ KM): 108		ERWAY (%): 48	
TOPOGRAPHIC CLASS: Rolling	_	ATION (M) MAX: 7	00 MIN: 100
VEGETATION-TYPE: 1 2 3 4 5 6			
FOOT TRAFFICABILITY (%): GOOD	FAIR	POOR	UNSUITED
WET/DRY SEASON: < 1 / 15	<del></del>	1/63	86 / 21
MOVEMENT ROUTES: TRACK	(S, TRAILS RO	ADS LARGE WAT	ERWAYS SMALL WATERWAY
CROSSING BORDER/ENTER SECTOR:	7 / 7 1	/ 0 1/0	0 / 6
POPULATION: 0 PER SQ KM: 0	TRIBES: Jan	ai	POP: 200

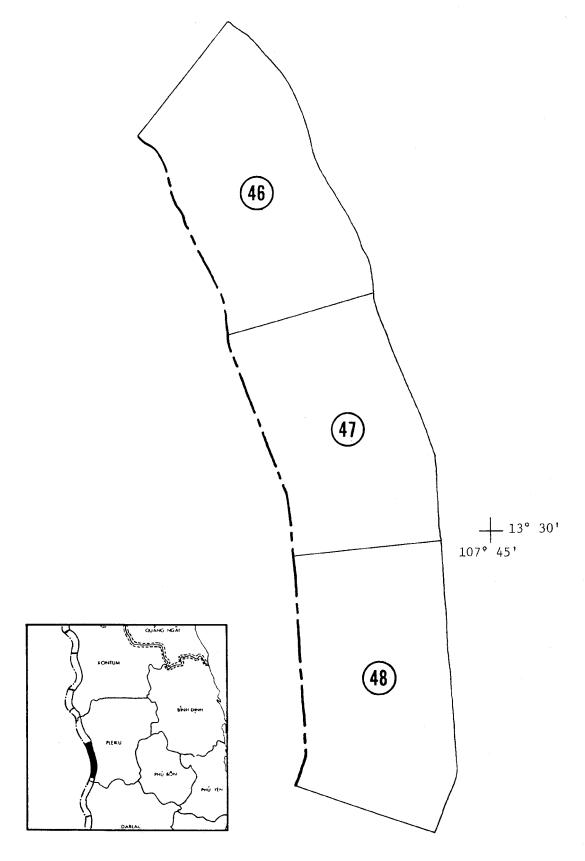


Fig. 59—Configuration and location of Sectors 46-48

## SUMMARY OF CHARACTERISTICS OF SECTORS 46 - 48

SECTOR NO: 45 MAP RE	GF:	6536 111 ,_	6536 17	
TOTAL AREA (SQ KM): 198	BOR	DER IN WATERWAY	Y (%): 0	
TOPOGRAPHIC CLASS: Rolling				
VEGETATION-TYPE: 1 2 3 4 %: 37 1	5 6 7 35 13			15
FOOT TRAFFICABILITY (%): WET/DRY SEASON: 3				SUITED 88/2
MOVEMENT ROUTES:	TRACKS, TR	AILS ROADS	LARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:				4 / 6
POPULATION: 0 PER SQ KM: (	TRIBI	ES: Jarai		POP: 5000
SECTOR NO: 47 MAP				
TOTAL AREA (SQ KM): 189				
TOPOGRAPHIC CLASS: Rolling				
VEGETATION-TYPE: 1 2 3 4 %: 60 2		8 9 10	11 12 13 14	15
FOOT TRAFFICABILITY (%): WET/DRY SEASON: <		<u>FAIR</u> 34/6		NSUITED 63/36
MOVEMENT ROUTES:	TRACKS, TR	AILS ROADS	LARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	9 / 11	0 / 0	0 / 0	3 / 1
POPULATION: 0 PER SQ KM: 0	TRIE	BES: Jarai		POP: 300
SECTOR NO: 48 MAP	REF:	6535 IV ,_		
TOTAL AREA (SQ KM): 197	BOI	RDER IN WATERWA	Y (%): 0	
TOPOGRAPHIC CLASS: Rolling		ELEVATIO	ON (M) MAX: 400	MIN: 100
VEGETATION-TYPE: 1 2 3 4	5 6 7	8 9 10	11 12 13 14	4 15
<b>%:</b> 7 4	<b>8</b> 5 3		1	
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR I	UNSUITED
WET/DRY SEASON:	0 /< 1	88 / 88	0 / 7	12/5
MOVEMENT ROUTES:	TRACKS, T	RAILS ROADS	LARGE WATERWAYS	
CROSSING BORDER/ENTER SECTOR:	8/37	0 / 0	0/2	2 /3
POPULATION: 0 PER SQ KM:	0 TRI	BES: Rhade	· · · · · · · · · · · · · · · · · · ·	POP: 200

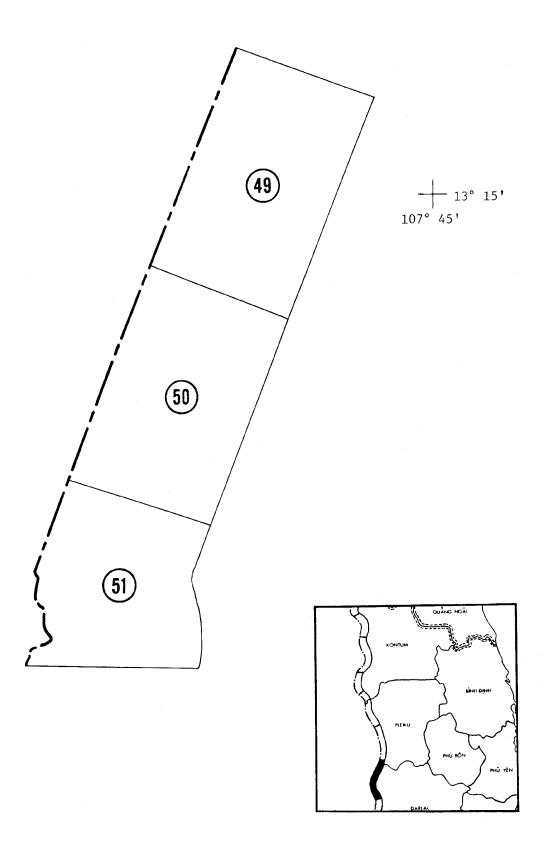


Fig. 60—Configuration and location of Sectors 49-51

# SUMMARY OF CHARACTERISTICS OF SECTORS 49 - 51

SECTOR NO: 49	MAP F	REF:	653	35 III ,	6535 IV	.>	
TOTAL AREA (SQ KM):	174	·	BORDER	IN WATERWA	AY (%): 0		
TOPOGRAPHIC CLASS:	Rolling			ELEVATIO	N (M) MAX:_	200	MIN: 100
VEGETATION-TYPE: 1 %: 1		5 6 93		9 10	11 12	13 14	15
FOOT TRAFFICABILITY (%	%):	GOOD	<u>F.</u>	AIR	POOR	UNSU	ITED
WET/DRY SEASO	ON:	0 / 0	94	/ 94	< 1/1	6 /	5
							SMALL WATERWAYS
CROSSING BORDER/ENTER	SECTOR:	6 /	17	0 / 0	1 / 2	2	1 / 2
POPULATION: 0	PER SQ KM: 0	T	RIBES:_	Rhade			POP: 0.
SECTOR NO: 50							
TOTAL AREA (SQ KM):							
TOPOGRAPHIC CLASS:							
VEGETATION-TYPE: 1 %: 9	2 3 4	5 6 89		9 10	11 12	13 14	15
FOOT TRAFFICABILITY (							
WET/DRY SEAS							
MOVEMENT ROUTES:							SMALL WATERWAYS 3 / 4
CROSSING BORDER/ENTER							
POPULATION: 0	PER SQ KM:	0	TRIBES:	RI	ade		POP: 0
SECTOR NO: 51	MAP	REF:	6.	534 IV	6535 III	_,	,,
TOTAL AREA (SQ KM):_	130		BORDER	IN WATER	WAY (%): 57		
TOPOGRAPHIC CLASS:				ELEVAT	ION (M) MAX:	500	MIN: 100
VEGETATION-TYPE: 1	2 3 4	5 6	7 8	9 10	11 12	13 14	15
	1	92					
FOOT TRAFFICABILITY	(%):	GOOD		FAIR	POOR	UNS	UITED
WET/DRY SEAS	SON:	0 / 0	8	6 / 86	0 /0	14	/ 14
MOVEMENT ROUTES:		TRACKS	, TRAIL	_	S LARGE V		
CROSSING BORDER/ENTE			/ 2		0 1,	/ 1	0 / 3
POPULATION: 0	PER SQ KM:_	0	TRIBES:	Rl	ade		POP: 0

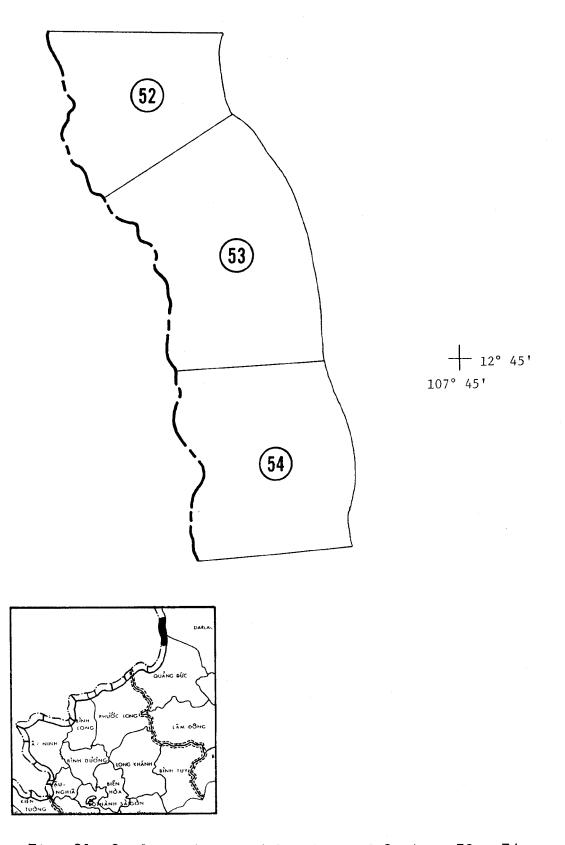


Fig. 61—Configuration and location of Sectors 52-54

## SUMMARY OF CHARACTERISTICS OF SECTORS 52 - 54

SECTOR NO: 52 MAP REF:	6534 IV , , , , , , , , , , , , , , , , , ,	
TOTAL AREA (SQ KM): 109	BORDER IN WATERWAY (%): 100	
TOPOGRAPHIC CLASS: Rolling	ELEVATION (M) MAX: 500	MIN: 100
VEGETATION-TYPE: 1 2 3 4 5 6 %: 100	7 8 9 10 11 12 13 14 1	15
FOOT TRAFFICABILITY (%): GOOD	FAIR POOR UNSUI	ITED
WET/DRY SEASON: 0 / 0	98/98 0 / 0 2/ 2	2
	TRAILS ROADS LARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR: 1/		0 / 4
POPULATION: 0 PER SQ KM: 0 T	RIBES: Rhade	POP: 0
SECTOR NO: 53 MAP REF:	6534 III . 6534 IV .	
TOTAL AREA (SQ KM): 174		
TOPOGRAPHIC CLASS: Rolling		
VEGETATION-TYPE: 1 2 3 4 5 6		
%: 1 95		
FOOT TRAFFICABILITY (%): GOOD		
	99 / 99 0 / 0 1 /	
MOVEMENT ROUTES: TRACKS CROSSING BORDER/ENTER SECTOR: 2	TRAILS         ROADS         LARGE WATERWAYS           / 4         0 / 0         0 / 0	
POPULATION: 0 PER SQ KM: 0	TRIBES: Rhade	POP: 100
SECTOR NO: 54 MAP REF:	6534 III , , , , , , , , , , , , , , , , ,	,
TOTAL AREA (SQ KM): 154	BORDER IN WATERWAY (%): 100	
TOPOGRAPHIC CLASS: Rolling	ELEVATION (M) MAX: 500	MIN: 200
VEGETATION-TYPE:         1         2         3         4         5         6           %:         52         48	7 8 9 10 11 12 13 14	15
FOOT TRAFFICABILITY (%): GOOD	TATE DOOD INC	ITTED
	FAIR POOR UNSI	<u> </u>
WET/DRY SEASON: 0 / 0		
MOVEMENT ROUTES: TRACKS	48/48 0 / 51 52, , TRAILS ROADS LARGE WATERWAYS	1 SMALL WATERWAYS
,	48/48 0 / 51 52,  , TRAILS ROADS LARGE WATERWAYS  6/2 0 / 1 0 / 0	/1

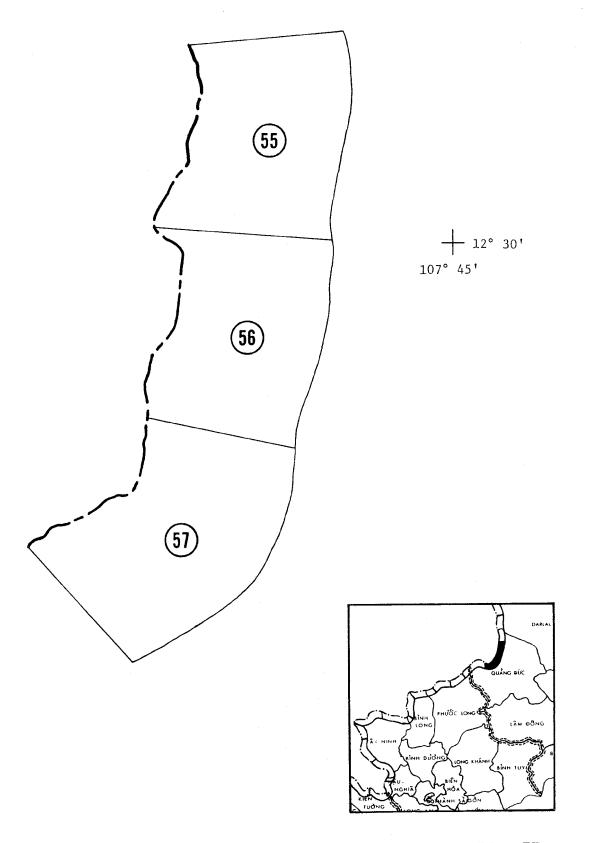
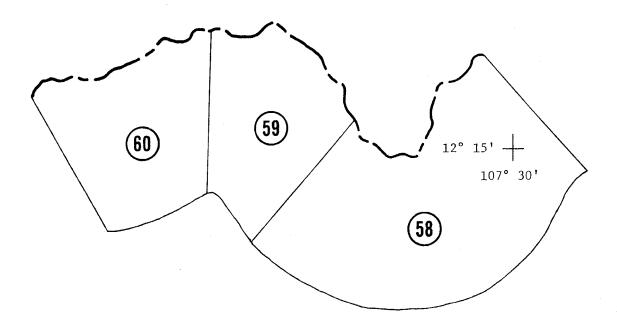


Fig. 62—Configuration and location of Sectors 55-57

## SUMMARY OF CHARACTERISTICS OF SECTORS 55 - 57

SECTOR NO: 55 MA	P REF:	653	4 III ,		_,	,,
TOTAL AREA (SQ KM): 154		BORDER IN	WATERWA	Y (%): 10	0,	
TOPOGRAPHIC CLASS: Rolling			ELEVATION	N (M) MAX:	700	MIN: 300
VEGETATION-TYPE: 1 2 3 4 %: 51	5 6 49	7 8	9 10	11 12	13 14	15
FOOT TRAFFICABILITY (%):	GOOD	FAI	<u>IR</u>	POOR	UNS	UITED
WET/DRY SEASON:	0 /0	47/	47	0 / 43	53	/ 10
						SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	3 /	3	0 / 2	0/	0	1 / 10
POPULATION: 0 PER SQ KM:	<u>0</u> T	RIBES:	Mnong	· · · · · · · · · · · · · · · · · · ·	······································	POP: 300
SECTOR NO: 56 MA	P REF:	653:	3 <u>IV</u> ,_	6534 III	;	>
TOTAL AREA (SQ KM): 148		BORDER IN	N WATERWA	Y (%): <u>10</u>	0	
TOPOGRAPHIC CLASS: Rolling			ELEVATIO	N (M) MAX:	900	MIN: 500
VEGETATION-TYPE: 1 2 3	+ 5 6	7 8	9 10	11 12	13 14	15
%: 66	6	11	12	2 2		1
FOOT TRAFFICABILITY (%):	GOOD	FA	IR	POOR	UNS	BUITED
WET/DRY SEASON:	2/2	29/	31	2 / 64	67	/ 3
MOVEMENT ROUTES:	TRACKS	TRAILS	ROADS	LARGE W	ATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	14 /	/ 27	0 /4	0 /	0	2 /12
POPULATION: 7964 PER SQ KM:	54 7	TRIBES:	Mnong	· · · · · · · · · · · · · · · · · · ·		POP: 2600
SECTOR NO: 57 MA	P REF:	653	3 IV ,		,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
TOTAL AREA (SQ KM): 187						
TOPOGRAPHIC CLASS: Rolli						MIN: 800
	4 5 6		9 10	11 12	13 14	
%: 87	3	6	2	11 10	25 2.	2
FOOT TRAFFICABILITY (%):	GOOD	FA	IR	POOR	UN	SUITED
WET/DRY SEASON:	<1/	11/	11	< 1 / 87	89	/ 2
MOVEMENT ROUTES:	TRACKS	, TRAILS	ROADS	LARGE	WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	3	/ 19	0/3	0	/ 0	2 / 13
POPULATION: 0 PER SQ KM:	0	TRIBES:	Mnons	g		POP: 400



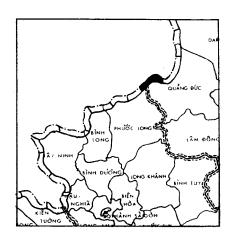


Fig. 63—Configuration and location of Sectors  $58\,-\,60$ 

## SUMMARY OF CHARACTERISTICS OF SECTORS 58 - 60

SECTOR NO: 58 MAI	REF:	6433	<u> </u>	433 11	, 6533 111	, 6533 10
TOTAL AREA (SQ KM): 239	<del> </del>	BORDER IN	WATERWAY	<b>(</b> %): 58		
TOPOGRAPHIC CLASS: Rolling		1	ELEVATION	(M) MAX: 1	000	MIN: 700
VEGETATION-TYPE: 1 2 3 4 %: 72	5 6 7		9 10 18	11 12 1	13 14 1	.5
FOOT TRAFFICABILITY (%): WET/DRY SEASON:		<u>FAI</u> 27 / 2	_		<u>UNSUI</u> 73 /	
MOVEMENT ROUTES:	TRACKS	TRAILS	ROADS	LARGE WAT	ERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	19 /	/ 14	0 / 3	0 / 0		0 /15
POPULATION: 0 PER SQ KM:	<u> </u>	TRIBES:	Mnong			POP: 1200
SECTOR NO: 59 MAP TOTAL AREA (SQ KM): 104						
TOPOGRAPHIC CLASS: Rolling						MIN: 600
VEGETATION-TYPE: 1 2 3 4 %: 42		7 8 7		11 12	13 14	15
FOOT TRAFFICABILITY (%):					<u>unsu</u>	
WET/DRY SEASON:	0 / 0	58 / 5				
MOVEMENT ROUTES:						SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:						1 / 4
POPULATION: 0 PER SQ KM:	0	TRIBES:	Mnong	· · · · · · · · · · · · · · · · · · ·		POP: 300
		(/22	<b>.</b>	64.22 TT	6/22 III	г 6433 TV
						L , 6433 IV
TOTAL AREA (SQ KM): 110						100
TOPOGRAPHIC CLASS: Rolling			ELEVATIO	N (M) MAX:	900	MIN: 400
VEGETATION-TYPE: 1 2 3 4 %: 87	5 6 2	7 8 1	9 10 10	11 12	13 14	15
FOOT TRAFFICABILITY (%):	GOOD	<u>fa</u>	<u>IR</u>	POOR	UNSI	UITED
WET/DRY SEASON:	0/0	12 /	12	1 / 37	87	/ 51
MOVEMENT ROUTES:		S, TRAILS	ROADS			SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	9	/ 19	0 /3	0 /	0	3 / 7
POPULATION: 0 PER SQ KM:	0	TRIBES:	Mnong	<del></del>		POP: 300

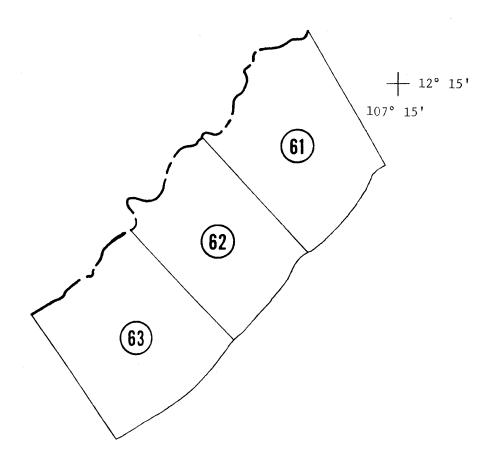




Fig. 64—Configuration and location of Sectors 61 – 63

# SUMMARY OF CHARACTERISTICS OF SECTORS 61 - 63

SECTOR NO: 61	MAP REF: 643	3 111 , 6433	<u></u>	
TOTAL AREA (SQ KM): 104	BORDER	IN WATERWAY (%)	: 100	
TOPOGRAPHIC CLASS: Rolling		ELEVATION (M)	MAX: 800	MIN: 300
VEGETATION-TYPE: 1 2 3 %: 95	4 5 6 7 8 4 1	9 10 11	12 13 14	15
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	GOOD FA		OR UNS 0 97	<u>UITED</u> / 97
MOVEMENT ROUTES:	TRACKS, TRAILS	ROADS LAI	RGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2 / 3	0 / 0	0 / 0	3 / 8
POPULATION: 0 PER SQ KM	:0 TRIBES:	Stieng		POP: 100
SECTOR NO: 62 M TOTAL AREA (SQ KM): 87				
TOPOGRAPHIC CLASS: Rolling				
VEGETATION-TYPE: 1 2 3 %: 98				
FOOT TRAFFICABILITY (%): WET/DRY SEASON:			OR UNS	
MOVEMENT ROUTES:	TRACKS, TRAILS	ROADS LA	RGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	0 / 5	0/0	0 / 0	3 / 6
POPULATION: 0 PER SQ KM	1: 0 TRIBES:	Stieng		POP: 100
SECTOR NO: 63	Map ref: <u>64</u>	33 III ,		
TOTAL AREA (SQ KM): 109	BORDER	IN WATERWAY (%	): 100	
TOPOGRAPHIC CLASS: Rolling		ELEVATION (M	) MAX: 500	MIN: 200
VEGETATION-TYPE: 1 2 3 %: 99		9 10 11	12 13 14	15
FOOT TRAFFICABILITY (%):	GOOD	FAIR P	OOR UN	SUITED
WET/DRY SEASON:	0/0 0	/ 0 0	/ 23 100	) / 77
MOVEMENT ROUTES:	TRACKS, TRAIL		ARGE WATERWAYS	
CROSSING BORDER/ENTER SECTOR:	0 /4	0 / 0	0 / 0	1 /4
POPILIATION: 0 PER SO K	m: 0 TRIBES:	Stieng		POP: 1500

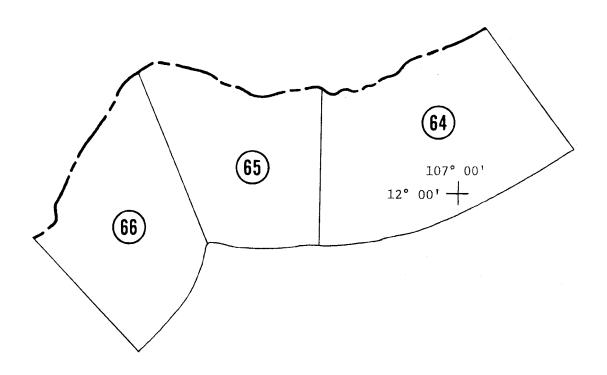
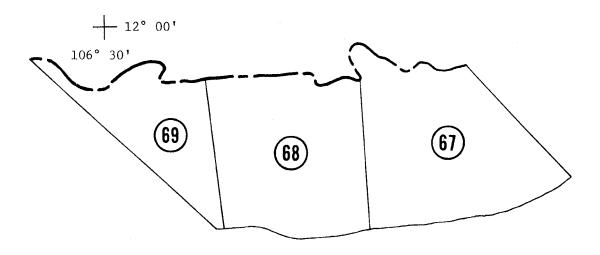




Fig. 65—Configuration and location of Sectors 64-66

## SUMMARY OF CHARACTERISTICS OF SECTORS 64 - 66

SECTOR NO: 64 MA	P REF: 6	332 I , 63	332 11 , 6	433 111 ,
TOTAL AREA (SQ KM): 170	BORDE	R IN WATERWAY	7 (%): 38	
TOPOGRAPHIC CLASS: Rolling	*	ELEVATION	(M) MAX: 400	MIN: 200
VEGETATION-TYPE: 1 2 3 4 %: 37 52	5 6 7 11	8 9 10	11 12 13	14 15
		<u>FAIR</u> 4 / 4	<u>POOR</u> 0 /8	UNSUITED 96 /88
MOVEMENT ROUTES:	TRACKS, TRAI	LS ROADS	LARGE WATERW	AYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	0 / 6	0 /2	0 / 1	1 / 6
POPULATION: 0 PER SQ KM:	0 TRIBES	:Stieng		POP: 400
SECTOR NO: 65 MA  TOTAL AREA (SQ KM): 122				
TOPOGRAPHIC CLASS: Flat				
VEGETATION-TYPE: 1 2 3 %: 39 12		8 9 10	11 12 13	14 15
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITED
WET/DRY SEASON:	<1/-<1	43 / 43	0 /43	57 / 14
MOVEMENT ROUTES:	TRACKS, TRA	ILS ROADS	LARGE WATER	MAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	6 /15	1/3	0 / 2	0 / 2
POPULATION: 102 PER SQ KM:	< 1 TRIBE	S: Stieng	2	POP: 1000
SECTOR NO: 66 MA	P REF:	6332 I,	6332 IV , 6	333 II ,
TOTAL AREA (SQ KM): 124	BORD	ER IN WATERWA	Y (%): 100	
TOPOGRAPHIC CLASS: Flat		ELEVATIO	N (M) MAX: 20	0 MIN: SL
VEGETATION-TYPE:       1       2       3         %:       52       2	4 5 6 7 12 21 4	8 9 10	11 12 13 5	14 15 4
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITED
WET/DRY SEASON:	5 / 5	21/25	4 / 65	70/5
MOVEMENT ROUTES:	TRACKS, TRA	ILS ROADS	LARGE WATER	WAYS SMALL WATERWAY
CROSSING BORDER/ENTER SECTOR:	3 /19	0 / 4	0/0	0 / 3
POPULATION: 4494 PER SQ KM:	36 TRIBE	S: Stien	g	POP: 1400



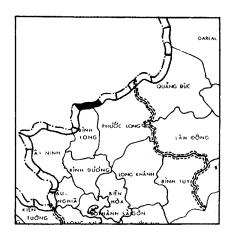


Fig. 66—Configuration and location of Sectors 67 – 69

# SUMMARY OF CHARACTERISTICS OF SECTORS 67 - 69

SECTOR NO: 67 MAP REF	6332	1 , 6332 10 ,	,,
TOTAL AREA (SQ KM): 124	BORDER IN	WATERWAY (%): 100	
TOPOGRAPHIC CLASS: Flat	1	ELEVATION (M) MAX:	200 MIN: SL
VEGETATION-TYPE: 1 2 3 4 5 79 4	5 6 7 8 4 4 1		3 14 15 3 8
FOOT TRAFFICABILITY (%): G  WET/DRY SEASON: 0			UNSUITED 95 / 1
MOVEMENT ROUTES:	TRACKS, TRAILS	ROADS LARGE WAT	ERWAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2 / 19	0/2 0/2	2 / 2
POPULATION: 132 PER SQ KM: 1	TRIBES:	Stieng	POP: 400
SECTOR NO: 68 MAP F TOTAL AREA (SQ KM): 113			
TOPOGRAPHIC CLASS: Flat			
VEGETATION-TYPE: 1 2 3 4			
FOOT TRAFFICABILITY (%): WET/DRY SEASON:		<u>IR</u> <u>POOR</u> 52 0 / 23	
MOVEMENT ROUTES: CROSSING BORDER/ENTER SECTOR:			TERWAYS SMALL WATERWAYS 2 / 3
POPULATION: 1600 <sup>a</sup> PER SQ KM: 14	TRIBES:	Cambodians	POP: 1600
a Does not include 2000 VC (HES).  SECTOR NO: 69 MAP R			
TOTAL AREA (SQ KM): 67	BORDER	IN WATERWAY (%): 40	
TOPOGRAPHIC CLASS: Flat		_ ELEVATION (M) MAX:	200 MIN: SL
VEGETATION-TYPE: 1 2 3 4 %: 8	5 6 7 8 17 74	9 10 11 12 1	13 14 15
FOOT TRAFFICABILITY (%): WET/DRY SEASON: <		<u>POOR</u> 0 / 25	UNSUITED 25/ 0
MOVEMENT ROUTES: CROSSING BORDER/ENTER SECTOR:	TRACKS, TRAILS	ROADS LARGE W	
POPULATION: 0 PER SQ KM: 0	TRIBES:	Uninhabited	POP: 0

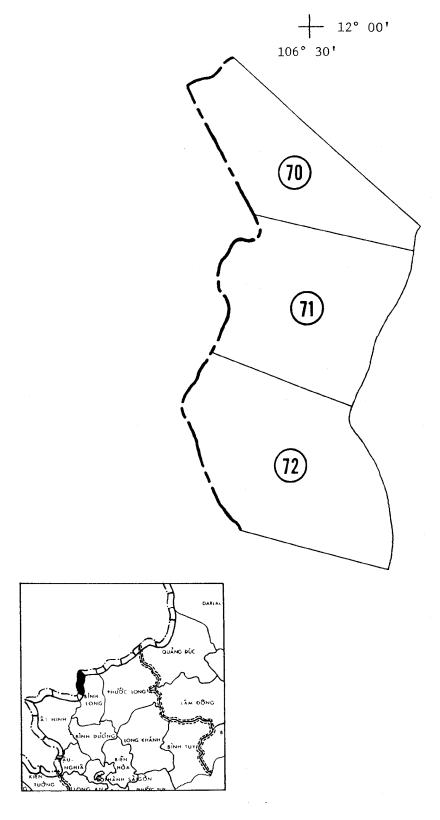


Fig. 67—Configuration and location of Sectors 70-72

· g en

#### SUMMARY OF CHARACTERISTICS OF SECTORS 70 - 72

SECTOR NO: 70	MAP REF	: .	6232	I	6332 IV	,,	,	<del></del>
TOTAL AREA (SQ KM):								
TOPOGRAPHIC CLASS:	Flat		Е	LEVATION	(M) MAX:	200	MIN: SL	
VEGETATION-TYPE: 1		6 7	8 9					
FOOT TRAFFICABILITY (%					POOR		UITED	
WET/DRY SEASO	ON: 0 /	0	76 / 7	6	0 /20	24	. / 4	
MOVEMENT ROUTES: CROSSING BORDER/ENTER								
POPULATION: 0	PER SQ KM: 0	TRIB	ES:	Uninha	abited		POP:C	)
		_	(000		4222 T V			•
SECTOR NO: 71								
TOTAL AREA (SQ KM):	124	BOR	DER IN	WATERWA	Y (%):	83		·
TOPOGRAPHIC CLASS:	Flat	<del></del>		ELEVATIO	N (M) MAX	: 200	_ MIN:	
VEGETATION-TYPE: 1 %: 44	2 3 4				11 12	13 14	15	
FOOT TRAFFICABILITY (	(%): <u>G</u> SON: < 1	00D 1/< 1	<u>FAI</u> 53 / 5	<u>ER</u> 53	<u>POOR</u> 0 /46	<u>UN</u> 46	SUITED 5 / 0	
MOVEMENT ROUTES:		TRACKS, TI	RAILS	ROADS	LARGE	WATERWAYS	SMALL WA	TERWAYS
CROSSING BORDER/ENTER	R SECTOR:	5 /17		0/2	0	/ 0	0 / 1	3
POPULATION: 400	PER SQ KM: 3	TRI	BES:	Cambo	dians	<del></del>	POP: 40	)
SECTOR NO: 72  TOTAL AREA (SQ KM):_				N WATERW	AY (%):	100		
TOPOGRAPHIC CLASS:	Flat			ELEVATI	ON (M) MA	x: <u>100</u>	MIN: SI	
VEGETATION-TYPE: 1	2 3 4	5 6	7 8	9 10	11 12	13 14	. 15	
%: 72		1 19 4	+	2	1		1	
FOOT TRAFFICABILITY WET/DRY SEA	(147 -	GOOD 0 /2		<u>IR</u> / 24	<u>POOR</u> 1 / 74		NSUITED 74/ 0	
MOVEMENT ROUTES: CROSSING BORDER/ENTE		TRACKS, 6		ROADS		waterways	SMALL W	ATERWAYS
POPULATION: 500							POP:50	00
PUPULATION: 500	FER DU NOT: 4		~~~·					

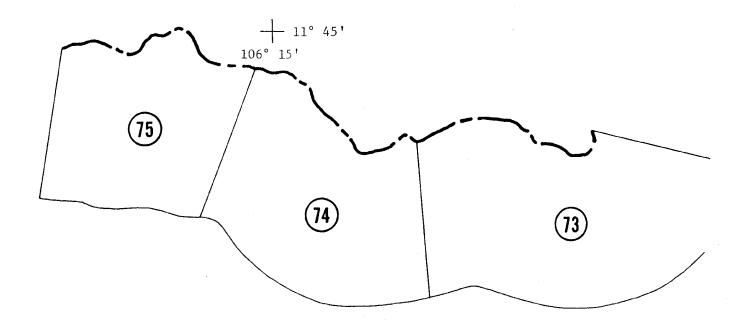
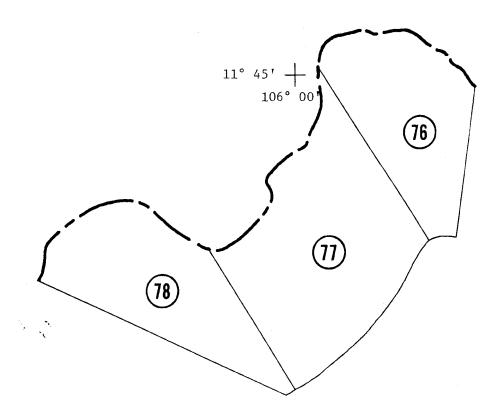




Fig. 68—Configuration and location of Sectors 73-75

## SUMMARY OF CHARACTERISTICS OF SECTORS 73 - 75

SECTOR NO: 73 MAP I	REF:	6232	<u>! II ,                                 </u>	332 III	·	······································
TOTAL AREA (SQ KM): 189	I	BORDER II	N WATERWAY	(%):_12_	····	
TOPOGRAPHIC CLASS: Flat	<del> </del>		ELEVATION	(M) MAX:_	100	MIN: SL
VEGETATION-TYPE: 1 2 3 4 %: 83	5 6 1 12		9 10	11 12	13 14	15 1
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	GOOD	<u>FA]</u>		<u>POOR</u> < 1 /83		JITED
						SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:						1 /4
POPULATION: 0 PER SQ KM: 0						
SECTOR NO: 74 MAP	DFF.	6232	· TT	6232 TTT		
TOTAL AREA (SQ KM): 176						
TOPOGRAPHIC CLASS: Flat						
VEGETATION-TYPE: 1 2 3 4 %: 57 16			9 10 4		13 14	1
FOOT TRAFFICABILITY (%):	GOOD	FA	IR	POOR	UNS	UITED
WET/DRY SEASON:	0 / 4	14 /	13	3 /67	83	/ 16
MOVEMENT ROUTES:						
CROSSING BORDER/ENTER SECTOR:					_	0 / 4
POPULATION: 0 PER SQ KM: 0	Т	RIBES:	Uninha	ibited		POP: 0
			) TU			
SECTOR NO: 75 MAP	REF:				_,	
TOTAL AREA (SQ KM): 143		BORDER :		Y (%): 0		
TOPOGRAPHIC CLASS: Flat		·	. ELEVATIO	ON (M) MAX:	100	MIN: SL
VEGETATION-TYPE: 1 2 3 4	5 6	7 8	9 10	11 12	13 14	15
%: 40	16	9	19	7		9
FOOT TRAFFICABILITY (%):	GOOD	<u>F</u> .		POOR		SUITED
WET/DRY SEASON:	0 /19	49	/ 32	3 / 49		8 / 0
MOVEMENT ROUTES:		TRAILS			ATERWAYS	SMALL WATERWAYS 0 /1
CROSSING BORDER/ENTER SECTOR:	10		0 /2	0 /	U	,
POPULATION: 0 PER SQ KM: 0		TRIBES:_	Uninh	abited		POP: 0



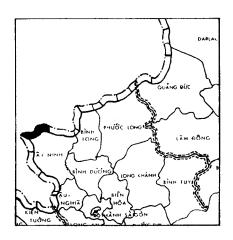


Fig. 69—Configuration and location of Sectors 76-78

# SUMMARY OF CHARACTERISTICS OF SECTORS 76 - 78

SECTOR NO: 76 MAI	REF:	62	32 111	_,	·········'		
TOTAL AREA (SQ KM): 96		BORDER	IN WATER	RWAY (%)	:_0		
TOPOGRAPHIC CLASS: Flat			_ ELEVAI	CION (M)	MAX: 10	00	MIN: SL
VEGETATION-TYPE: 1 2 3 4	5 6	7 8	9 10	11	12 13	14	15
%: 78	3	3	14	4	1		1
FOOT TRAFFICABILITY (%):	GOOD		FAIR	<u>P0</u>	OR	UNSU	ITED
WET/DRY SEASON:	0 / 14	2	1 / 7	0 /	79	79 /	0
MOVEMENT ROUTES:	TRACKS	, TRAIL	S ROAI	OS LA	RGE WATE	RWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	5	/16	Θ /:	2	0/0		1 / 3
POPULATION: 0 PER SQ KM: 0		TRIBES:	Uni	nhabited	1		POP: 0
SECTOR NO: MAP I TOTAL AREA (SQ KM): 164							
TOPOGRAPHIC CLASS: Flat							
VEGETATION-TYPE: 1 2 3 4							
%: 89			, 9 1		12 13	24	
			FAIR		)OR	UNS	UITED
WET/DRY SEASON:							
							SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:							
POPULATION: 0 PER SQ KM:	)	TRIBES	. Un	inhabit	ed		POP: 0
SECTOR NO: 78 MAP	REF:	<u>_6</u>	132 II				,,
TOTAL AREA (SQ KM): 102		BORDE	R IN WATE	ERWAY (%	):_0		
TOPOGRAPHIC CLASS: Flat			ELEVA	ATION (M	) MAX: 50	0	MIN: SL
VEGETATION-TYPE: 1 2 3 4	5 6	7	<del></del> 89:	10 11	12 1:	3 14	15
%: 79	8				2		10
FOOT TRAFFICABILITY (%):				•	OOD	TIME	SUITED
	GOOD		FAIR	<u> </u>	<u>oor</u>	ONG	OLIED
WET/DRY SEASON:			<u>FAIR</u> O /12		/ 88	_	/0
WET/DRY SEASON: MOVEMENT ROUTES:	0 / 0	1	0 /12	2	/ 88	88	· · · · · · · · · · · · · · · · · · ·
	0 / 0	1 S, TRAI	0 /12 LS ROA	2 ADS 1	/ 88	88 ERWAYS	/0

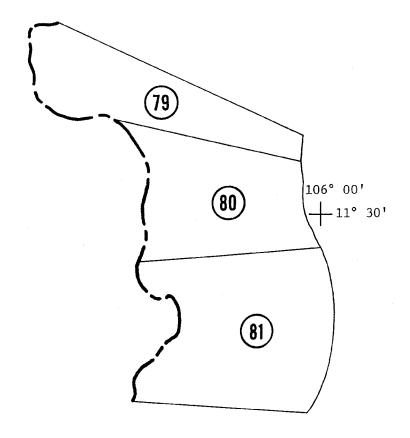
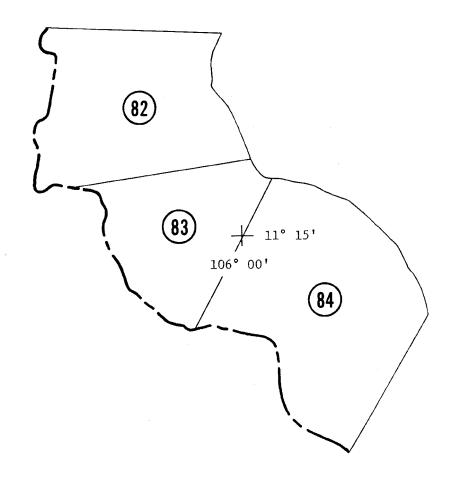




Fig. 70—Configuration and location of Sectors 79-81

# SUMMARY OF CHARACTERISTICS OF SECTORS 79 - 81

SECTOR NO: 79 MAP	REF:	6132	! II,_	,		,,
TOTAL AREA (SQ KM): 74		BORDER I	N WATERWAY	(%): 100		
TOPOGRAPHIC CLASS: Flat			ELEVATION	(M) MAX:	50	MIN: SL
VEGETATION-TYPE: 1 2 3 %: 86	4 5 6	7 8 7		11 12 I	13 14	15 3
FOOT TRAFFICABILITY (%): WET/DRY SEASON:		<u>FA</u> 10 /		<u>POOR</u> < 1 / 89		JITED 'O
MOVEMENT ROUTES:	TRACKS	TRAILS	ROADS	LARGE WAT	<u>rerways</u>	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	5 /	11	2 / 2	0 / 0		0 /2
POPULATION: 0 PER SQ KM:	01	TRIBES:	Uninhal	oited		POP: 0
SECTOR NO: 80 MA  TOTAL AREA (SQ KM): 87						
TOPOGRAPHIC CLASS: Flat						
VEGETATION-TYPE: 1 2 3 %: 87	4 5 6					
FOOT TRAFFICABILITY (%):	GOOD	<u>F</u>		<u>POOR</u>		
WET/DRY SEASON:						
MOVEMENT ROUTES: CROSSING BORDER/ENTER SECTOR:	TRACKS	/2/	1 / 2	O /	0	1 / 3
POPULATION: 0 PER SQ KM	0	MD T DEC.	Uninh	ahited		POP: 0
POPULATION: 0 PER SQ KM	:	TRIBUS.				
SECTOR NO: 81	MAP REF:	61	31 I ,		_,	,,
TOTAL AREA (SQ KM): 128		BORDER	IN WATERW	AY (%): <u>80</u>		
TOPOGRAPHIC CLASS: Flat			_ ELEVATI	ON (M) MAX	50	MIN: SL
VEGETATION-TYPE: 1 2 3 %: 66	4 5 6	7 8	9 10	11 12 6	13 14	15 11
FOOT TRAFFICABILITY (%):	GOOD	;	FAIR	POOR	<u>ur</u>	NSUITED
WET/DRY SEASON:	0/ 0	;	17/ 23	6 / 77	7	77 / 0
MOVEMENT ROUTES:				IARGE 1		
CROSSING BORDER/ENTER SECTOR:		6 / 42	3 /2	1	/ 2	1 / 1
POPHRATION: 0 PER SQ K	M: 0	TRIBES:	Unin	habited		POP:0



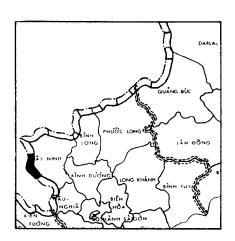
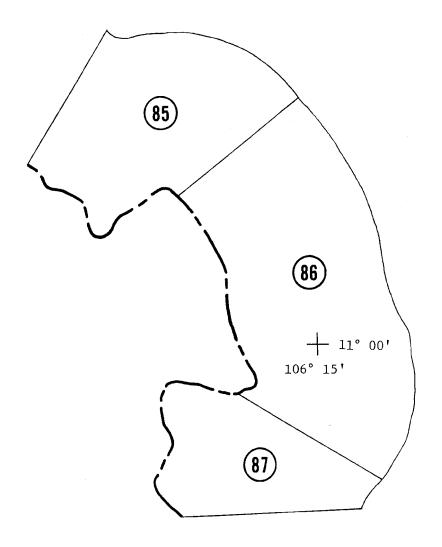


Fig. 71—Configuration and location of Sectors 82-84

## SUMMARY OF CHARACTERISTICS OF SECTORS 82 - 84

SECTOR NO: 82	MAP REF:	6131	<u>+</u> ,	,-	·,	
TOTAL AREA (SQ KM): 126		BORDER IN	WATERWAY	(%): 0		
TOPOGRAPHIC CLASS: Flat, sub	ject to inur	dation I	ELEVATION	(M) MAX: 50	MIN:	SL
VEGETATION-TYPE: 1 2 3	4 5 6	7 8	9 10 1	1 12 13	14 15	
%: 21	8	13		24	34	
FOOT TRAFFICABILITY (%):	GOOD	FAI	<u>R</u>	POOR	UNSUITED	
WET/DRY SEASON:	0/0	22 /	45	24/55	54/0	
MOVEMENT ROUTES:					MAYS SMALL	
CROSSING BORDER/ENTER SECTOR:						/ 0
POPULATION: 0 PER SQ K	4: <u>0</u>	TRIBES:	Uninhab	ited	POP:	0
SECTOR NO: 83  TOTAL AREA (SQ KM): 91						
TOPOGRAPHIC CLASS: Flat, sub						
VEGETATION-TYPE: 1 2 3					14 15 40	
%; 20			. 1		UNSUITED	
FOOT TRAFFICABILITY (%):	<u>GOOD</u> 0 / 1	<u>FA</u>		<u>POOR</u> 17 / 61		
WET/DRY SEASON:					RWAYS SMALI	. WATERWAYS
MOVEMENT ROUTES:  CROSSING BORDER/ENTER SECTOR						0 / 4
						4100
POPULATION: 4100 PER SQ I	KM: 45	IKIBES: _ C	anibodrans	, ethnic vie	<u>ctramese</u>	
SECTOR NO: 84	MAP REF:	_613	<u> </u>	6231 III ,	6231 IV,	
TOTAL AREA (SQ KM): 174		BORDER :	IN WATERWA	y (%): 0		
TOPOGRAPHIC CLASS: Flat, su	ibiect to in	undation	ELEVATIO	N (M) MAX: 5	0 MIN:	SL
			- 9 10	11 12 13		
<b>VEGETATION-TYPE:</b> 1 2 3 %: 37		4		30	18	
FOOT TRAFFICABILITY (%):	GOOD	F.	•	POOR	UNSUITED	
WET/DRY SEASON:	0 /10	_	/ 34	<del></del>	56 / 0	
MOVEMENT ROUTES:	TRAC	KS, TRAILS			ERWAYS SMAT	LL WATERWAYS
CROSSING BORDER/ENTER SECTOR		l / 25	1 / 1			0 /15
PODITIATION O PER SO		TRIBES:	Uninh	abited	POP	:0



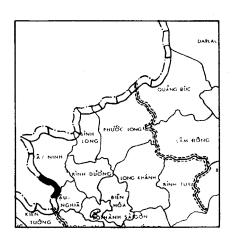
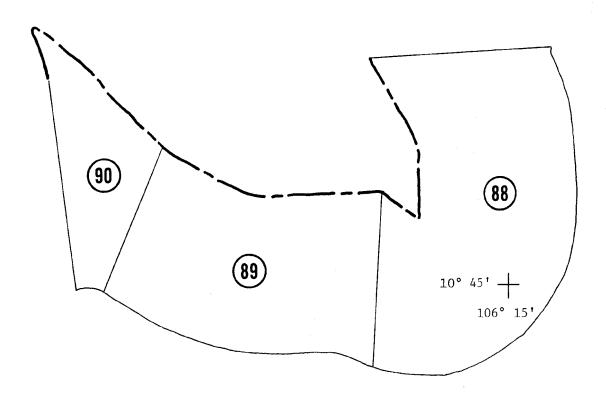


Fig. 72—Configuration and location of Sectors 85 - 87

#### SUMMARY OF CHARACTERISTICS OF SECTORS 85 - 87

SECTOR NO: 85	MAP REF:	6231 III ,	,	,,	
TOTAL AREA (SQ KM): 157		BORDER IN WATERWA	Y (%): 0		
TOPOGRAPHIC CLASS: Flat, sub	ject to inunda	ation ELEVATIO	N (M) MAX: 5	O MIN	SL
VEGETATION-TYPE: 1 2 3 %: 4	4 5 6	7 8 9 10 2 2	11 12 13 3 78	3 14 15 11	
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	GOOD 3 / 4	<u>FAIR</u> 4 / 80	<u>POOR</u>	UNSUITED	
MOVEMENT ROUTES:		TRAILS ROADS			I WATEDWAVE
CROSSING BORDER/ENTER SECTOR:					2 / 4
POPULATION: 18,090 PER SQ K	M: 115 T	RIBES: Cambodians	, ethnic Vie	tnamese POP:	18,090
SECTOR NO: 86	MAP REF;	6230 I,	6230 IV ,	6231 II ,	6231 III
TOTAL AREA (SQ KM): 250		BORDER IN WATERWA	Y (%): <u>0</u>		
TOPOGRAPHIC CLASS: Flat, sub	ject to inund	lation ELEVATIO	ON (M) MAX:	50 MIN	:SL
VEGETATION-TYPE: 1 2 3	4 5 6	7 8 9 10	11 12 1	3 14 15	
%:	3		3 62	32	
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITED	
WET/DRY SEASON:	3 / 3	3 / 65	62 / 32	32/0	
MOVEMENT ROUTES:	TRACKS	TRAILS ROADS	LARGE WAT	ERWAYS SMA	LL WATERWAYS
CROSSING BORDER/ENTER SECTOR	: 2 /	3 / 7	0/4		4 / 11
POPULATION: 52,563 PER SQ 1	KM: 203	RIBES: Cambodians	, ethnic Vie	tnamese POP	: 52,563
a Does not include 840 VC.					
2002 1102 21102000 0 10 100					
SECTOR NO: 87	MAP REF:	6230 I,	6230 IV,	,	·
TOTAL AREA (SQ KM): 91		BORDER IN WATERWA	AY (%): 0		
TOPOGRAPHIC CLASS: Flat, sul	ject to inun	lation ELEVATI	on (m) max: 5	O MIN	N: SL
VEGETATION-TYPE: 1 2 3	4 5 6	7 8 9 10	11 12 1	13 14 15	
%:			2 26	72	
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITE	<u> </u>
WET/DRY SEASON:	0 / 0	0 / 29	29 / 71	71 / 0	
MOVEMENT ROUTES:	TRACKS	, TRAILS ROADS	LARGE WAT	rerways sm	ALL WATERWAYS
CROSSING BORDER/ENTER SECTOR	.: 0	/ 11 0 / 1	0 / 0	•	7 / 9
POPULATION: 0 PER SQ	KM: 0	TRIBES: Unin	nabited	PO:	P: 0



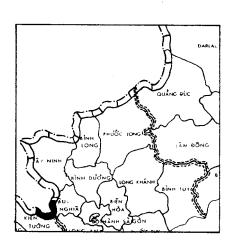
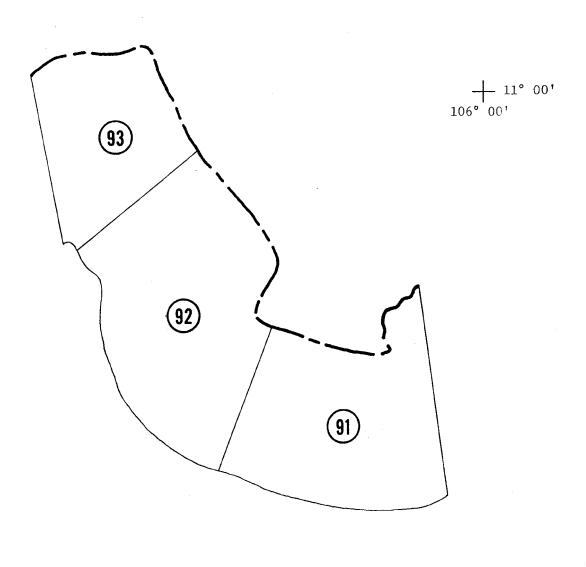


Fig. 73—Configuration and location of Sectors  $88\,-\,90$ 

### SUMMARY OF CHARACTERISTICS OF SECTORS 88 - 90

SECTOR NO: 88	MAP REF:	6230 I	, 6230 III	6230 I	
TOTAL AREA (SQ KM): 267		BORDER IN WATE	RWAY (%): 0		
TOPOGRAPHIC CLASS: Flat, s	ubject to inunda	tion ELEVA	TION (M) MAX: 5	0	IIN: SL
VEGETATION-TYPE: 1 2	3 4 5 6	7 8 9 10	11 12	13 14 15	ı
%:			8	92	
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUIT	ED
WET/DRY SEASON:	0 /0	0 / 8	8 / 92	92 / 0	ı
MOVEMENT ROUTES:	TRACKS,	TRAILS ROA			
CROSSING BORDER/ENTER SEC	ror: 1 /	18 0 /	0 0 /	4	9 / 46
POPULATION: 0 PER	SQ KM: 0 T	RIBES: Uni	nhabited		POP: 0
SECTOR NO: 89  TOTAL AREA (SQ KM): 197					
TOPOGRAPHIC CLASS: Flat,					
VEGETATION-TYPE: 1 2 %:	3 4 5 6	,	.0 11 12 31 7		55
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	GOOD 0 / 31	<u>FAIR</u> 37 / 13		<u>UNSUI</u> 56 /:	
MOVEMENT ROUTES:					SMALL WATERWAYS
CROSSING BORDER/ENTER SEC	CTOR: 1	/ 0 0	0 0/	2	10 / 30
POPULATION: 0 PER	sq KM: 0	TRIBES: Un	inhabited		POP: 0
SECTOR NO: 90	MAP REF:	6130 I	, 6230 IV	,	,
TOTAL AREA (SQ KM): 8	0	BORDER IN WAT	ERWAY (%): 2	6	
TOPOGRAPHIC CLASS: Flat					MIN: SL
VEGETATION-TYPE: 1 2		7 8 9		13 14	
%:	-		9 29		62
FOOT TRAFFICABILITY (%)	GOOD	FAIR	POOR		ITED
WET/DRY SEASON	0 / 9	9 / 29			
MOVEMENT ROUTES:		S, TRAILS R		WATERWAYS	SMALL WATERWAYS 2 / 12
CROSSING BORDER/ENTER SI		/ 0 0			
POPULATION: 535 PEI	R SQ KM: 7	TRIBES: Cambo	dians, ethnic	Vietnamese	POP: 535



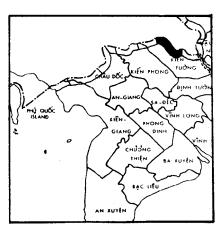
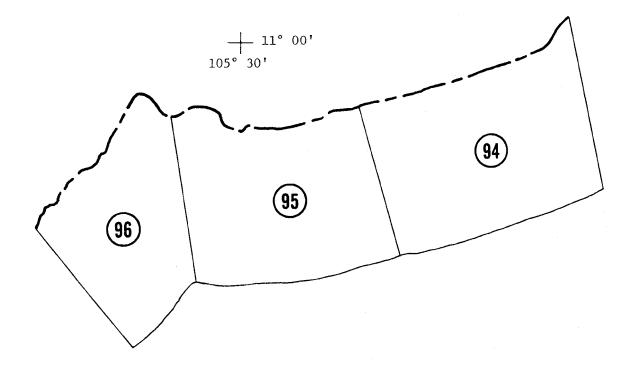


Fig. 74—Configuration and location of Sectors 91-93

## SUMMARY OF CHARACTERISTICS OF SECTORS 91 - 93

SECTOR NO: 91	MAP REF:	6130 I	,,	, , , , , , , , , , , , , , , , , , , ,
TOTAL AREA (SQ KM): 202		BORDER IN WATER	WAY (%): 48	
TOPOGRAPHIC CLASS: Flat,	subject to inund	lation ELEVAT	ION (M) MAX: 50	MIN: SL
VEGETATION-TYPE: 1 2	3 4 5 6	7 8 9 10	11 12 13	14 15
%:	2	2	1 55	40
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITED
WET/DRY SEASON:	1 / 2	2 / 57	57 / 41	41/0
				WAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SECT	OR: 0 /	0 1 / :	3 2 / 2	2 / 19
POPULATION: 15,323 PER S	Q KM: 76 T	RIBES: Cambodía	ns, ethnic Vietn	namese POP: 15,323
SECTOR NO: 92	MAP REF:	6130 I	,,,	,,,,,,,,,,,,,
TOTAL AREA (SQ KM): 193		BORDER IN WATER	WAY (%): 0	
TOPOGRAPHIC CLASS: Flat,	subject to inun	ndation ELEVAT	ION (M) MAX: 50	MIN: SL
VEGETATION-TYPE: 1 2	3 4 5 6	7 8 9 10	11 12 13	14 15
%:			1 22 73	
FOOT TRAFFICABILITY (%):	<del></del>		POOR	UNSUITED
WET/DRY SEASON:	0 / 3	5 / 24	21 /73	74/ 0
				WAYS SMALL WATERWAYS
CROSSING BORDER/ENTER SEC				2 / 18
POPULATION: 6503 PER	SQ KM: 34 1	TRIBES: Cambodia	ns, ethnic Vietr	namese POP: 6503
			(100 <del></del>	
SECTOR NO: 93	MAP REF:			<u>, , , , , , , , , , , , , , , , , , , </u>
TOTAL AREA (SQ KM): 109		BORDER IN WATE	RWAY (%): 0	
TOPOGRAPHIC CLASS: Flat,	subject to inun	dation ELEVA	TION (M) MAX: 5	50 MIN: SL
VEGETATION-TYPE: 1 2	3 4 5 6	7 8 9 1	0 11 12 13	14 15
%:			2 69 <b>2</b> 8	3 1
FOOT TRAFFICABILITY (%):	GOOD	<u>FAIR</u>	POOR	UNSUITED
WET/DRY SEASON:	0 / 2	2 / 11		87 / 1
MOVEMENT ROUTES:	<del></del> _		DS LARGE WATE	
CROSSING BORDER/ENTER SEC	CTOR: 4		0 3/1	4 / 14
POPULATION: 0 PER	SQ KM: 0	TRIBES: Uni	nhabited	POP: 0



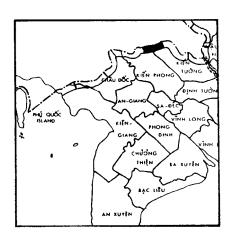
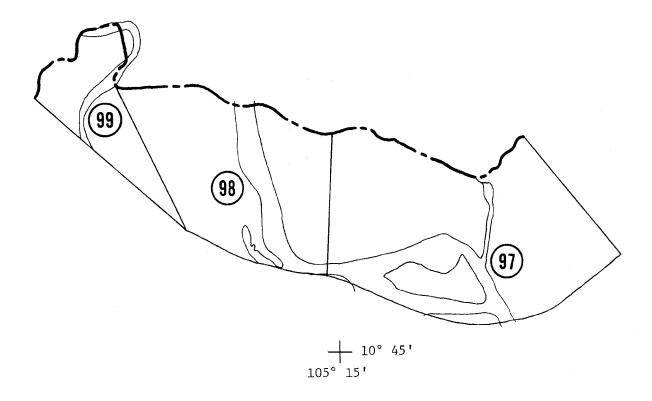


Fig. 75—Configuration and location of Sectors 94-96

## SUMMARY OF CHARACTERISTICS OF SECTORS 94 - 96

SECTOR NO: 94 MAP REF: 6130 IV ,_	······································	·
TOTAL AREA (SQ KM): 180 BORDER IN WATERWAY	Y (%): 100	· · · · · · · · · · · · · · · · ·
TOPOGRAPHIC CLASS: Flat, subject to inundation ELEVATION	M (M) MAX: 50	MIN: SL
VEGETATION-TYPE: 1 2 3 4 5 6 7 8 9 10	11 12 13 14	15
%: 3	95	2
FOOT TRAFFICABILITY (%): GOOD FAIR	POOR UNSU	ITED
WET/DRY SEASON: 0 /0 0 /98	5 / 0 95 /	2
MOVEMENT ROUTES: TRACKS, TRAILS ROADS	LARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR: 24 / 11 1 /0		
POPULATION: 0 PER SQ KM: 0 TRIBES: Uninhab	oited	POP: 0
SECTOR NO: 95 MAP REF: 6030 I	6130 IV ,	,,
TOTAL AREA (SQ KM): 159 BORDER IN WATERWAY	Y (%): 100	
TOPOGRAPHIC CLASS: Flat, subject to inundation ELEVATIO	N (M) MAX: 50	MIN: SL
VEGETATION-TYPE: 1 2 3 4 5 6 7 8 9 10	11 12 13 14	15
%:	84 1	15
FOOT TRAFFICABILITY (%): GOOD FAIR	POOR UNSI	JITED
WET/DRY SEASON: 0 /0 0/ 84	6 / 0 94 /	/ 16
MOVEMENT ROUTES: TRACKS, TRAILS ROADS		
CROSSING BORDER/ENTER SECTOR: 16/30 2/0		
POPULATION: 4857 <sup>a</sup> PER SQ KM: 31 TRIBES: Cambodians	s, ethnic Vietnamese	POP: 4857
aDoes not include 492 VC.		
boes not include 452 (or		
SECTOR NO: 96 MAP REF: 6030 I ,	,,	,
TOTAL AREA (SQ KM): 111 BORDER IN WATERWA	Ay (%): 100	
TOPOGRAPHIC CLASS: Flat, subject to inundation ELEVATION	ON (M) MAX: 50	MIN: SL
VEGETATION-TYPE: 1 2 3 4 5 6 7 8 9 10	11 12 13 14	15
<b>%:</b>	92	8
FOOT TRAFFICABILITY (%): GOOD FAIR	POOR UNS	UITED
WET/DRY SEASON: 0 / 0 0 / 92	7 / 0 93	/ 8
MOVEMENT ROUTES: TRACKS, TRAILS ROADS	LARGE WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR: 6 / 26 0 /0	2 / 0	8 / 27
POPULATION: 6056 PER SQ KM: 55 TRIBES: Cambodians	, ethnic Vietnamese	POP: 6056ª

a Does not include 596 VC



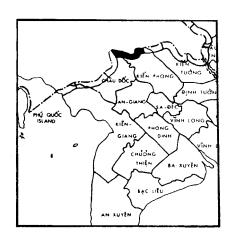


Fig. 76—Configuration and location of Sectors 97-99

## SUMMARY OF CHARACTERISTICS OF SECTORS 97 - 99

SECTOR NO: 97	MAP REF:	6030 I,	,,	
TOTAL AREA (SQ KM):	195	BORDER IN WATERWA	Y (%): 67	
TOPOGRAPHIC CLASS: F1	at, subject to inu	ndation ELEVATIO	N (M) MAX: 50	MIN: SL
VEGETATION-TYPE: 1 %:	2 3 4 5 6 5	7 8 9 10	11 12 13 14 63	15 Water 17 15
FOOT TRAFFICABILITY (%	· ———	<u>FAIR</u> 0 / 63		NSUITED 7 /32
MOVEMENT ROUTES: CROSSING BORDER/ENTER			LARGE WATERWAYS 1 / 2	SMALL WATERWAYS
POPULATION: 56,175 P	ER SQ KM: 288	TRIBES: Cambodians	s, ethnic Vietnames	se POP: 56,175
SECTOR NO: 98	MAP REF:	6030 IV ,		,
TOTAL AREA (SQ KM): 1	41	BORDER IN WATERWA	AY (%): 8	
TOPOGRAPHIC CLASS: Fla	t, subject to inun	dation ELEVATION	ON (M) MAX: 50	MIN: SL
VEGETATION-TYPE: 1 %:	2 3 4 5 6		11 12 13 14 41 1	15 Water 38 13
FOOT TRAFFICABILITY (%		<u>FAIR</u> 0 / 39		INSUITED 66 / 54
MOVEMENT ROUTES: CROSSING BORDER/ENTER	*	s, TRAILS         ROADS           4/14         2/2	LARGE WATERWAYS	SMALL WATERWAYS 6 / 8
POPULATION: 32,780	PER SQ KM: 232	TRIBES: Cambodian	s, ethnic Vietname	se POP: 32,780
			4	
SECTOR NO: 99	MAP REF:	6030 IV	,	,,
TOTAL AREA (SQ KM):	54	BORDER IN WATER	JAY (%):72	
TOPOGRAPHIC CLASS: F1:	at, subject to inu	ndation ELEVAT	ION (M) MAX: 50	MIN: SL
VEGETATION-TYPE: 1 %:	2 3 4 5 6	5 7 8 9 10 2	11 12 13 1 63	4 15 Water 17 8
FOOT TRAFFICABILITY (	(%): GOOD	FAIR	POOR	UNSUITED
WET/DRY SEAS		0 /63	63 / 12	37 / 25
MOVEMENT ROUTES: CROSSING BORDER/ENTER	<del></del>	ROADS 1/0		SMALL WATERWAYS 4 / 14
POPULATION: 17,836	PER SQ KM: 330	TRIBES: Cambodia	ns, ethnic Vietnam	ese POP: 17,836

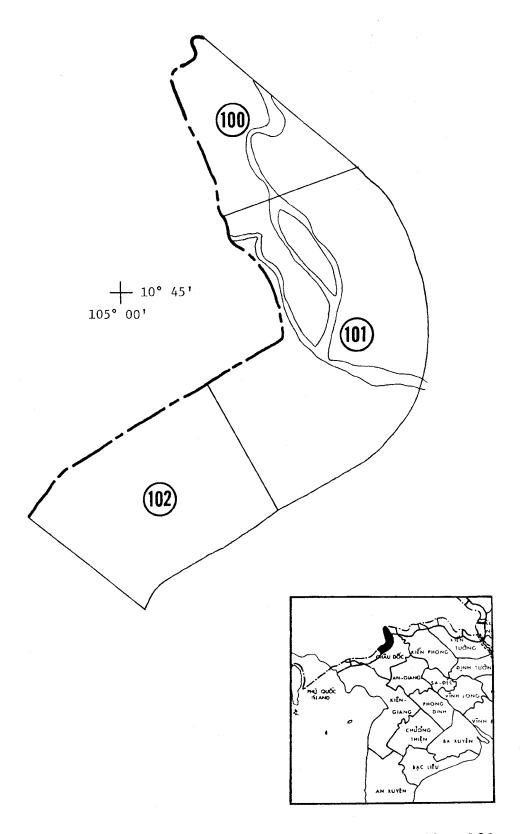
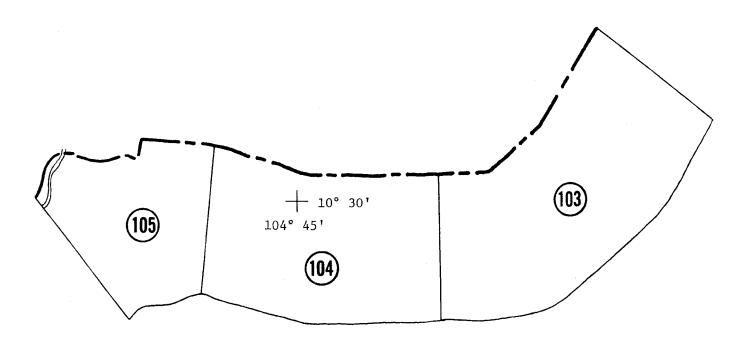


Fig. 77—Configuration and location of Sectors 100-102

### SUMMARY OF CHARACTERISTICS OF SECTORS 100 - 102

SECTOR NO: 100 MAP	REF:	6030 IV ,		,	
TOTAL AREA (SQ KM): 80	BOR	DER IN WATERWA	Y (%): 8		
TOPOGRAPHIC CLASS: Flat, subje	ct to inunda	tion ELEVATIO	N (M) MAX: 5	MIN:	SL
VEGETATION-TYPE: 1 2 3 4 %:	5 6 7 8	8 9 10	11 12 13 86	14 15 W	ater 3
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	<u>GOOD</u> 0 / 0	<u>FAIR</u> 0 / 86	<u>POOR</u> 82 / 8	UNSUITED 18 / 6	
MOVEMENT ROUTES:	TRACKS, TR	AILS ROADS	LARGE WATE	RWAYS SMAL	L WATERWAYS
CROSSING BORDER/ENTER SECTOR:	2 / 11	0 / 1	2 / 4	1	5 / <b>2</b> 5
POPULATION: 20,128 PER SQ KM: 2	252 TRIB	ES: Cambodians	, ethnic Vie	namese pop:	20,128
SECTOR NO: 101 MAP		6030 III ,			
TOTAL AREA (SQ KM): 243					
TOPOGRAPHIC CLASS: Flat, sub					
VEGETATION-TYPE: 1 2 3 4 %:	5 6 7 5	8 9 10 1	11 12 13 82	3 14 15 1 2	Water 10
FOOT TRAFFICABILITY (%): WET/DRY SEASON:	GOOD 0 / 0	<u>FAIR</u> 2/84	<u>POOR</u> 86/4	UNSUITED 12/12	
MOVEMENT ROUTES: CROSSING BORDER/ENTER SECTOR:	TRACKS, TR		LARGE WAT	ERWAYS SMA	LL WATERWAYS 40 / 58
POPULATION: 105,275 PER SQ KM:_	433 TRI	BES: <u>Cambodían</u>	s, ethnic Vi	etnamese POP	: 105,275
SECTOR NO: 102 MAI	P REF:		6030 III ,	,	
TOTAL AREA (SQ KM): 141	BO	RDER IN WATERW	MAY (%): 0		
TOPOGRAPHIC CLASS: Flat, sub	ject to inunc	lation ELEVATI	ON (M) MAX:_	200 MIN	:_SL
VEGETATION-TYPE: 1 2 3	4 5 6 7	8 9 10	11 12	13 14 15	
%:	8 3	6	58	25	
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSUITE	<u> </u>
WET/DRY SEASON:	6/6	11/68	58/0	25 / 26	
MOVEMENT ROUTES:	TRACKS, I				ALL WATERWAY
CROSSING BORDER/ENTER SECTOR:					19 / 41
POPULATION: 27,904 PER SQ KM:	198 TRI	BES: Cambodia	ns, ethnic Vi	etnamese PO	P: 27,904



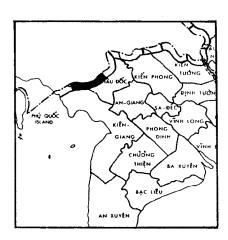
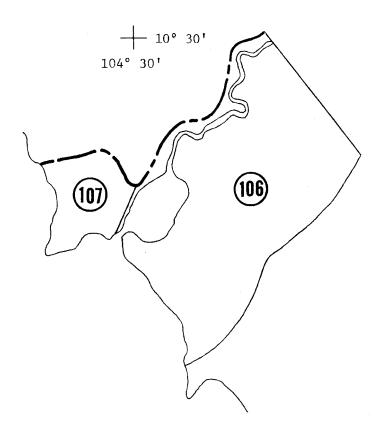


Fig. 78—Configuration and location of Sectors 103-105

### SUMMARY OF CHARACTERISTICS OF SECTORS 103 - 105

SECTOR NO: 103 MAP	REF:	5929 I	, 5930 II	.,	,,
TOTAL AREA (SQ KM): 222	ВО	RDER IN WATE	RWAY (%): 0		
TOPOGRAPHIC CLASS: Flat, subj	ect to inun	dation ELEVAT	TION (M) MAX:	600	MIN: S.L
VEGETATION-TYPE: 1 2 3 4	5 6 7	8 9 10	) 11 12	13 14 1	15
%: 6	5 5	7	60	1	.7
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNSU	ITED
WET/DRY SEASON:	4 / 5	12/70	61 / 2	23 /	23
MOVEMENT ROUTES: CROSSING BORDER/ENTER SECTOR:					SMALL WATERWAYS 4/27
POPULATION: 30,734 PER SQ KM:					
POPULATION: 30,734 PER SQ KM:	136 181	BES: Camboura	ins, ethnic v	Ternamese	101
SECTOR NO: 104 MAE	) RFF.	5929 T	. 5929 <b>I</b> V	, 5930 II	, 5930 III
TOTAL AREA (SQ KM): 167	RC	RDER IN WATE	RWAY (%): 0		
TOTAL AREA (SQ KM): 107		FIEW	TTON (M) MAX:	50	MIN: SL
TOPOGRAPHIC CLASS: Flat, subj				13 14	
VEGETATION-TYPE: 1 2 3 4	5 6 7	789			82
	COOD	FAIR		UNSU	JITED
FOOT TRAFFICABILITY (%): WET/DRY SEASON:		0 / 11			
MOVEMENT ROUTES:			ADS LARGE V	VATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	9 / 2	• 0	/0 0	/ 0	4/57
POPULATION: 4,895 PER SQ KM:	29 TR	IBES: Cambod	ians, ethnic	Vietnamese	POP: 4,895
- <del></del>					
SECTOR NO: 105 M	AP REF:	5929 IV	, 5930 III	<u> </u>	,
TOTAL AREA (SQ KM): 102	E	ORDER IN WAT	ERWAY (%):	32	
TOPOGRAPHIC CLASS: Flat, sub					MIN: SL
VEGETATION-TYPE: 1 2 3	4 5 6	7 8 9	10 11 12	13 14	15
%:			17	8	75
FOOT TRAFFICABILITY (%):	GOOD	FAIR	POOR	UNS	SUITED
WET/DRY SEASON:	0 / 0	0 / 17	17/8	83	/ 75
MOVEMENT ROUTES:	TRACKS,	TRAILS R		WATERWAYS	SMALL WATERWAYS
CROSSING BORDER/ENTER SECTOR:	13 /	•		/ 1	4 / 32
POPULATION: 259 PER SQ KM	: <u>3</u> T	RIBES: Cambo	dians, ethnic	Vietnames	e POP: 259



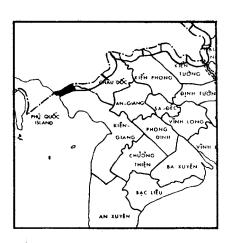


Fig. 79—Configuration and location of Sectors 106 and 107

# SUMMARY OF CHARACTERISTICS OF SECTORS 106 AND 107

SECTOR NO: 106 MAP RE	F: 5929 IV ,,
TOTAL AREA (SQ KM): 202	BORDER IN WATERWAY (%): 0
TOPOGRAPHIC CLASS: Flat, subjec	t to inundation ELEVATION (M) MAX: 200 MIN: SL
VEGETATION-TYPE: 1 2 3 4 %: 2	5 6 7 8 9 10 11 12 13 14 15 Water 8 26 57 7
, ,	GOOD         FAIR         POOR         UNSUITED           0 / 0         1 / 8         8 / 26         91 / 66
MOVEMENT ROUTES: CROSSING BORDER/ENTER SECTOR:	TRACKS, TRAILS         ROADS         LARGE WATERWAYS         SMALL WATERWAYS           9 / 2         0 / 1         0 / 2         15 / 34
	TRIBES: Cambodians, ethnic Vietnamese POP: 8,264
SECTOR NO: 107 MAP	P REF:
	ct to inundation ELEVATION (M) MAX: 200 MIN: SL
VEGETATION-TYPE:         1         2         3         4           %:         13	5 6 7 8 9 10 11 12 13 14 15 3 37 7 40
FOOT TRAFFICABILITY (%):	GOOD FAIR POOR UNSUITED
WET/DRY SEASON:	0 / 0 3 / 37 37 / 9 60 / 54
	TRACKS, TRAILS ROADS LARGE WATERWAYS SMALL WATERWAYS 0 / 0 1 / 0 0 / 0 2 / 0
POPULATION: 7,958 PER SQ KM: 2	TRIBES: Cambodians, ethnic Vietnamese POP: 7,958
<sup>a</sup> Not available. Data was abstra	cted from Map Series L7011, 1:50,000.

 $<sup>^{\</sup>mathrm{b}}8$  km border length. 17 km consisting of access coastline.

#### Appendix B

#### CLIMATOLOGY ALONG THE LAND BORDER OF SOUTH VIETNAM

This appendix presents a general picture of climatological conditions along the land border of South Vietnam. \* Major climatological factors of this area are the monsoon seasons, the intermonsoon months, and the topography of the land.

The two great monsoons of Southeast Asia, and of South Vietnam in particular, are driven principally by annually varying high- and low-pressure systems in East Asia (China) and Australia. These macroscale pressure changes follow the sun, whose warmth modifies the winter highs into thermally induced summer lows, resulting in a 180-deg shift of monsoonal wind flow. During the southwest, or "wet" monsoon of summer, air flows into the low-pressure area over East Asia, bringing moist tropical, maritime, and equatorial air across the South Vietnamese border. The Annam Range, \*\* however, shelters the downwind portions of the border between Laos and South Vietnam and along the eastern DMZ, putting these areas in a rain shadow, thereby making them relatively dry during this wet season.

In winter, the "dry" northeast monsoon airflow from China covers peninsular Southeast Asia with dry polar continental air moving out of the Siberian high that develops over East Asia during the winter southward toward the low which becomes established over Australia. Though

<sup>\*</sup>The data presented here are drawn from Ref. 7, which also includes a bibliography of studies of climatological conditions in Southeast Asia.

<sup>\*\*</sup>The mountain range running the length of the northern two-thirds of South Vietnam.

the northeast monsoon is related to South Vietnam's "dry" period, passage of the polar continental air mass over the Gulf of Tonkin and the South China Sea adds moisture to the lower levels. This moisture is dropped on the upwind eastern portion of the DMZ and on the area between the east coast of South Vietnam and the east slopes of the Annam Range, making this one of the wettest times of the year at these locations.

Table 11 shows the average rainfall in each sector of the border zone for each season of the year.

#### The Southwest Monsoon

Along 97 percent of the land border of South Vietnam, the greatest annual precipitation is recorded during the southwest monsoon, which lasts approximately from May to September. The average precipitation along the Cambodian border during the summer months (June through August) ranges from 5 to 10 in. per month from the Mekong River northward to the southern tip of the Annam Range (12°N), and from 20 to 30 in. per month along the mountainous section in the north. Through Laos, the Annam Range extends well into the southern panhandle, giving the area the highest average annual precipitation west of the South Vietnamese border. Along the DMZ, the annual rainfall decreases dramatically near the coast, where the eastern 35 km have only 1 to 5 in. per month during the summer, due to the blocking effect of the mountains and the resulting rainshadow.

### The Northeast Monsoon

South Vietnam, Laos, and Cambodia are comparatively dry during the northeast monsoon, which lasts, roughly, from November to March. Most of the land border has 1 in. or less of precipitation per month during the winter (December through February). The rainiest portions of the border are just north of the Gulf of Thailand, where the average rainfall is 1 to 5 in. per month, and over the eastern portion

Table 11

AVERAGE SEASONAL RAINFALL ALONG THE BORDER OF SOUTH VIETNAM

Sector   (Dec - Feb) a   (Mar - May) a, b   (June - Aug) b   (Sept - Nov) b   Sector   (Dec - Feb) a	Winter Spring ec - Feb) <sup>a</sup> (Mar - May)	20 - 30 20 - 30	Fall (Sept - Nov) <sup>b</sup> 10 - 20 10 - 20 10 - 20 10 - 20
Sectors 1 - 23	Sector           25 - 0.5         5 - 10           25 - 0.5         5 - 10           25 - 0.5         5 - 10           25 - 0.5         5 - 10           25 - 0.5         5 - 10           25 - 0.5         5 - 10           25 - 0.5         5 - 10           25 - 0.5         5 - 10           25 - 0.5         5 - 10	20 - 30 20 - 30	10 - 20 10 - 20 10 - 20 10 - 20
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	25 - 0.5 25 - 0.5	20 - 30 20 - 30 20 - 30 20 - 30 20 - 30 20 - 30 20 - 30	10 - 20 10 - 20 10 - 20
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	25 - 0.5 25 - 0.5 5 - 10 25 - 0.5 5 - 10 25 - 0.5 5 - 10 25 - 0.5 5 - 10	20 - 30 20 - 30 20 - 30 20 - 30 20 - 30 20 - 30	10 - 20 10 - 20 10 - 20
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	25 - 0.5 5 - 10 25 - 0.5 5 - 10 25 - 0.5 5 - 10 25 - 0.5 5 - 10	20 - 30 20 - 30 20 - 30	10 ~ 20
5 1 - 5 1 - 5 5 - 10 10 - 20 59 0.2 6 0.5 - 1 1 - 5 10 - 20 10 - 20 60 0.2 7 0.5 - 1 1 - 5 10 - 20 10 - 20 61 0.2	25 - 0.5 25 - 0.5 25 - 0.5 25 - 0.5 5 - 10 5 - 10	20 - 30 20 - 30	
6 0.5 - 1 1 - 5 10 - 20 10 - 20 60 0.2 7 0.5 - 1 1 - 5 10 - 20 10 - 20 61 0.2	25 - 0.5 25 - 0.5 5 - 10	20 - 30	10 - 20
7 $0.5 - 1$ $1 - 5$ $10 - 20$ $10 - 20$ $61$ $0.2$	***		10 - 20
	.23 - 0.5	10 - 20 10 - 20	10 - 20 10 - 20
0 10 20 10 20	25 - 0.5 5 - 10	10 - 20	10 - 20
10 1 - 5 1 - 5 10 - 20 10 - 20		tors 64 - 93	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	25 - 0.5 5 - 10	10 - 20	10 - 20
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	25 - 0.5 5 - 10	10 - 20	10 - 20 10 - 20
14 1 - 5 1 - 5 5 - 10 10 - 20 66 0.2	25 - 0.5 5 - 10 25 - 0.5 5 - 10	10 - 20 10 - 20	10 - 20
13   13   68   0.2	25 - 0.5	10 - 20	5 - 10
	.25 - 0.5 1 - 5	10 - 20	5 - 10 5 - 10
18 1 - 5 1 - 5 5 - 10 20 - 30 70 0	).5 - 1	10 - 20 10 - 20	5 - 10
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.5 - 1 1 - 5	10 - 20	10 - 20 10 - 20
21 1 - 5   1 - 5   5 - 10   20 - 30	0.5 - 1 1 - 5	10 - 20 10 - 20	10 - 20
	0.5 - 1 1 - 5 0.5 - 1 1 - 5	5 - 10	5 - 10
76 0.	0.5 - 1 1 - 5	5 - 10 5 - 10	5 - 10 5 - 10
	0.5 - 1	5 - 10	5 - 10
25 1 - 5 1 - 5 10 - 20 10 - 20 79 0	0.5 - 1 1 - 5	5 - 10	5 - 10
	0.5 - 1 1 - 5	5 - 10 5 - 10	5 - 10 10 - 20
28 1 - 5 1 - 5 10 - 20 10 - 20 82 0	0.5 - 1 1 - 5	5 - 10	10 - 20
	0.5 - 1 1 - 5	5 - 10	10 - 20
	0.5 - 1 1 - 5	5 - 10 5 - 10	10 - 20 10 - 20
32 0.5 - 1 1 - 5 10 - 20 10 - 20 85 0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	10 - 20	10 - 20
	0.5 - 1 1 - 5	10 - 20 10 - 20	10 - 20 10 - 20
25 0 25 0 5 1 - 5 10 - 20 5 - 10	0.5 - 1 $1 - 5$ $0.5 - 1$ $1 - 5$	10 - 20	10 - 20
36 0.25 - 0.5 1 - 5 10 - 20 5 - 10 90 0	0.5 - 1 1 - 5	5 - 10	10 - 20 10 - 20
37	1 - 5 1 - 5 1 - 5	5 - 10 5 - 10	10 - 20
39 $0.25 - 0.5$ $1 - 5$ $10 - 20$ $5 - 10$ $\frac{92}{93}$	1 - 5	5 - 10	10 - 20
40 0.25 - 0.5 1 - 5 10 - 20 5 - 10 41 0.25 - 0.5 1 - 5 10 - 20 10 - 20	Se	ctors 94 - 107	<del></del>
42 0.25 - 0.5 1 - 5 10 - 20 10 - 20 94	1 - 5	5 - 10 5 - 10	10 - 20 5 - 10
Sectors 43 - 63 95	1 - 5 1 - 5 1 - 5	5 - 10	5 - 10
43 0.25 - 0.5 1 - 5 10 - 20 10 - 20 97	1-5 1-5	5 - 10 5 - 10	5 - 10 5 - 10
15 20 30 10 30	0.5 - 1 1 - 5	5 - 10	5 - 10
46 0.25 - 0.5 1 - 5 20 - 30 10 - 20 99 0	$ \begin{array}{c cccc} 0.5 - 1 & & 1 - 5 \\ 0.5 - 1 & & 1 - 5 \end{array} $	5 - 10	5 - 10
47 0.25 - 0.5 1 - 5 20 = 30 10 - 20 101	1 - 5	5 <b>-</b> 10 5 - 10	5 - 10 5 - 10
48 0.25 - 0.5 1 - 5 20 - 30 10 - 20 102 49 0.25 - 0.5 1 - 5 20 - 30 10 - 20 103	1 - 5 1 - 5 1 - 5	10 - 20	5 - 10
50 0.25 - 0.5 1 - 5 20 - 30 10 - 20	1 - 5 1 - 5	10 - 20	5 - 10
51 0.25 - 0.5 1 - 5 20 - 30 10 - 20 105	1 - 5 5 - 10	10 - 20 10 - 20	5 - 10 5 - 10
52 0.25 - 0.5 5 - 10 20 - 30 10 - 20 107	1 - 5 5 - 10 1 - 5 5 - 10	10 - 20	5 - 10
54 0.25 - 0.5 5 - 10 20 - 30 10 - 20			

aNortheast monsoon occurs from December through March.

 $<sup>^{\</sup>mathrm{b}}\mathrm{Southwest}$  monsoon occurs from May through November.

of the DMZ, which has an average rainfall of 5 to 10 in. per month during the "dry" season. The rainfall in the 3 percent of the border terminating at the Gulf of Tonkin equals or exceeds, at this time, that during the southwest monsoon.

#### Between the Monsoons

April and October are generally the months during which the transition from one monsoon to the other occurs along the border. The spring transition, which is longer, is comparatively mild and can occur any time from mid-March to early May. It is heralded by an increase in rainshowers, with an occasional severe thunderstorm. The change from the full effects of the northeast monsoon to those of the southwest monsoon can, however, take place in as short a time as two days. Severe thunderstorms may develop at any time of the year, though they are more pronounced during the spring transition, which also brings an end to the winter precipitation along the northern coast of South Vietnam.

The fall transition occurs in October over South Vietnam, Laos, and Cambodia; during this time the weather changes abruptly, with more violent storms occurring. Heavy showers are the major factor; however, many types of weather, including typhoons, occur to varying degrees. The northern part of the land border receives most of its precipitation in the fall (September through November), due to the transition. The coastal area of South Vietnam, north of 12°N, receives about 61 percent of its annual rainfall during this time, compared with about 14 percent in the summer and about 17 percent in the winter.

Figure 80 shows the precipitation patterns for the four seasons of the year in South Vietnam and the contiguous areas, based on the indicated rainfall readings at selected sites.

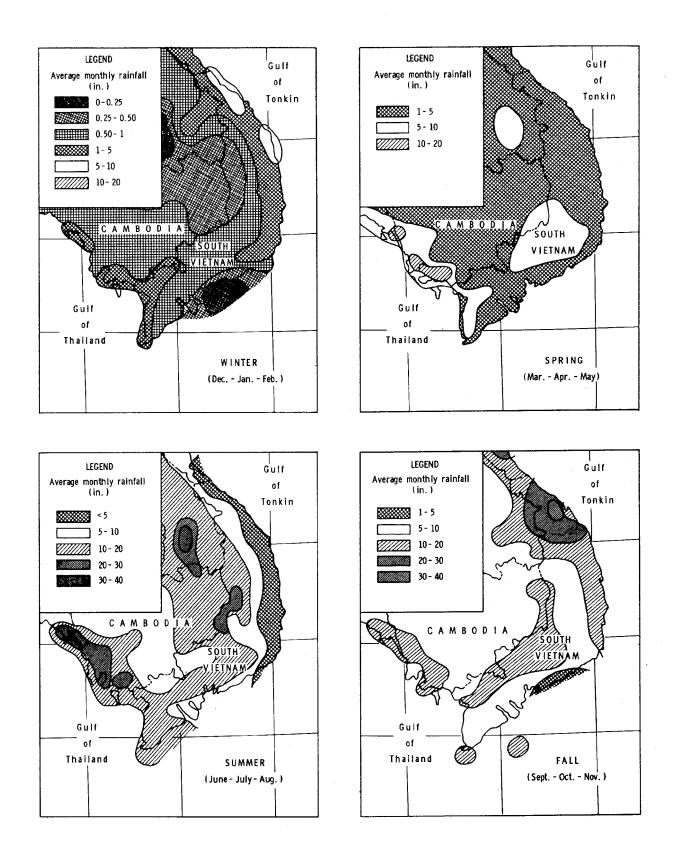


Fig. 80—Seasonal rainfall patterns

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