

スリ・ランカ人口情報プロジェクト 計画打合せ調査団報告書

平成2年1月
(1990年)

国際協力事業団
医療協力部

医 薬

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スリ・ランカ人口情報プロジェクト

計画打合せ調査団報告書

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平成2年1月
(1990年)

国際協力事業団
医療協力部



序

文

我が国のスリ・ランカ国に対する人口家族計画プロジェクト協力は、1987年9月4日に締結されたR/D（討議議事録）に基づき開始され現在に至っている。

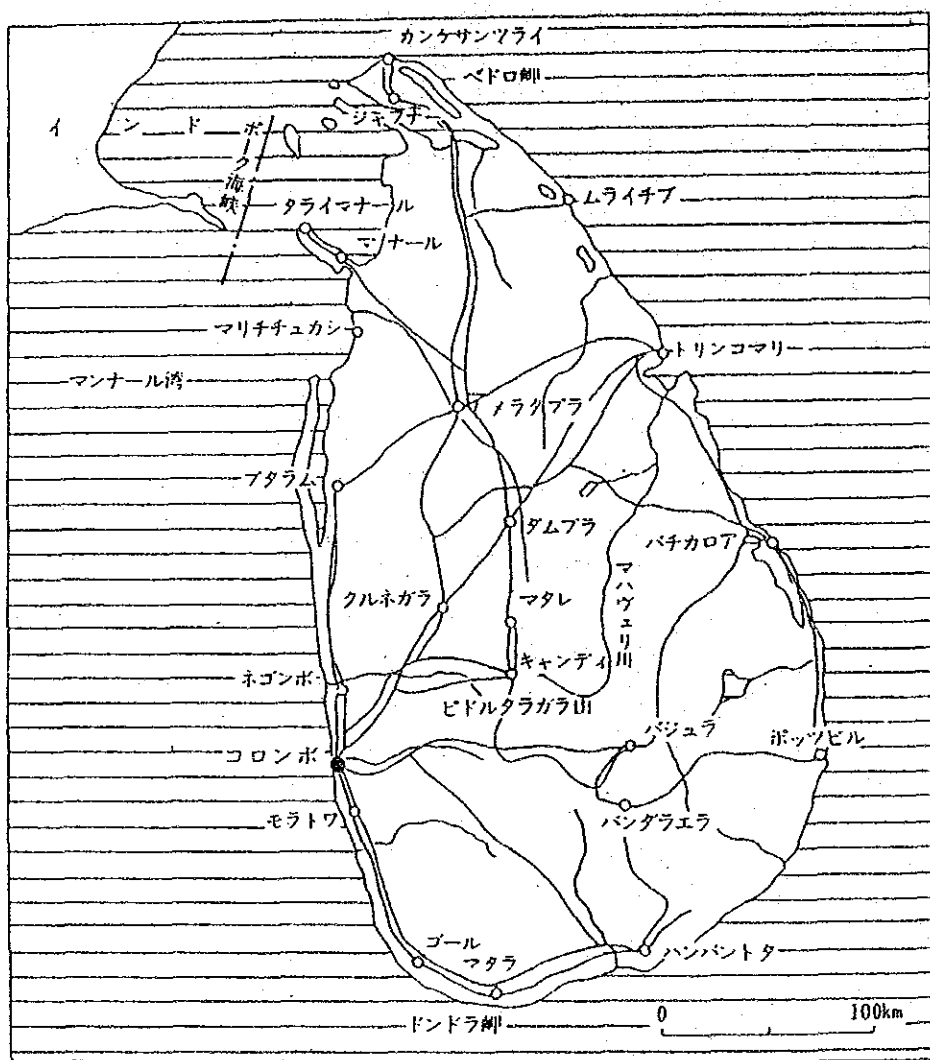
今般、実施状況の把握及び今後の協力の年次計画策定のため、計画打ち合せ調査団を1988年4月18日から4月28日までの間派遣したが、本報告書はその結果をとりまとめたものである。ここに、本調査団の団員ならびに調査団の派遣にご協力いただいた関係各位に対し、深甚なる謝意を表すると共に、今後の本件プロジェクトの実施運営にあたり、一層のご協力をお願いする次第である。

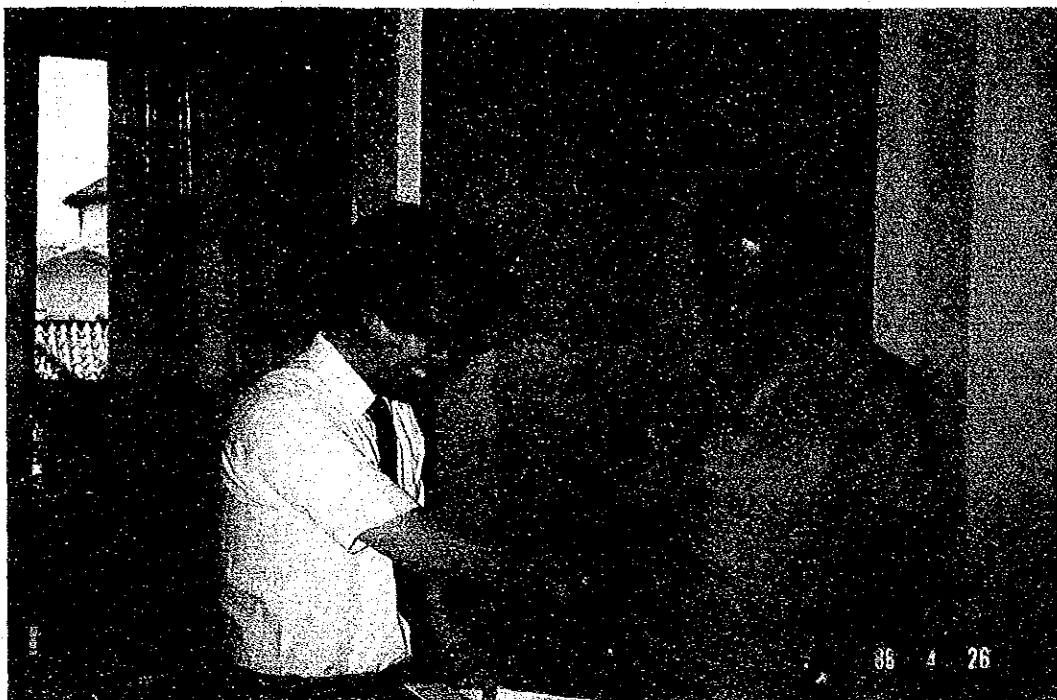
1990年1月

国際協力事業団

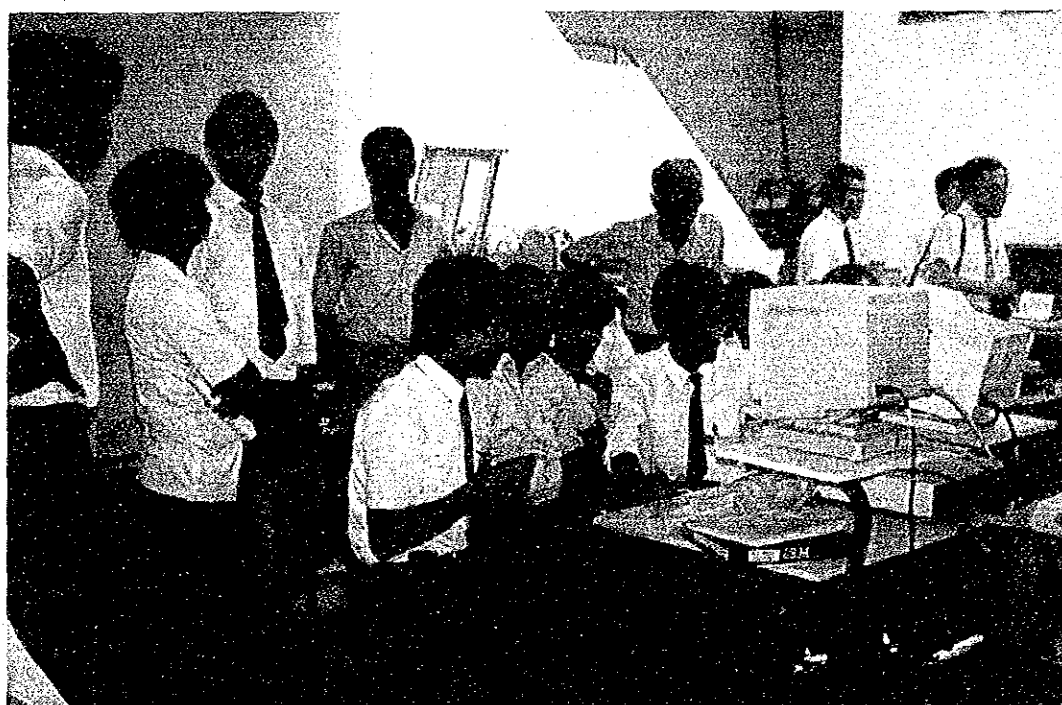
理事 西野 世界

スリ・ランカ民主社会主義共和国





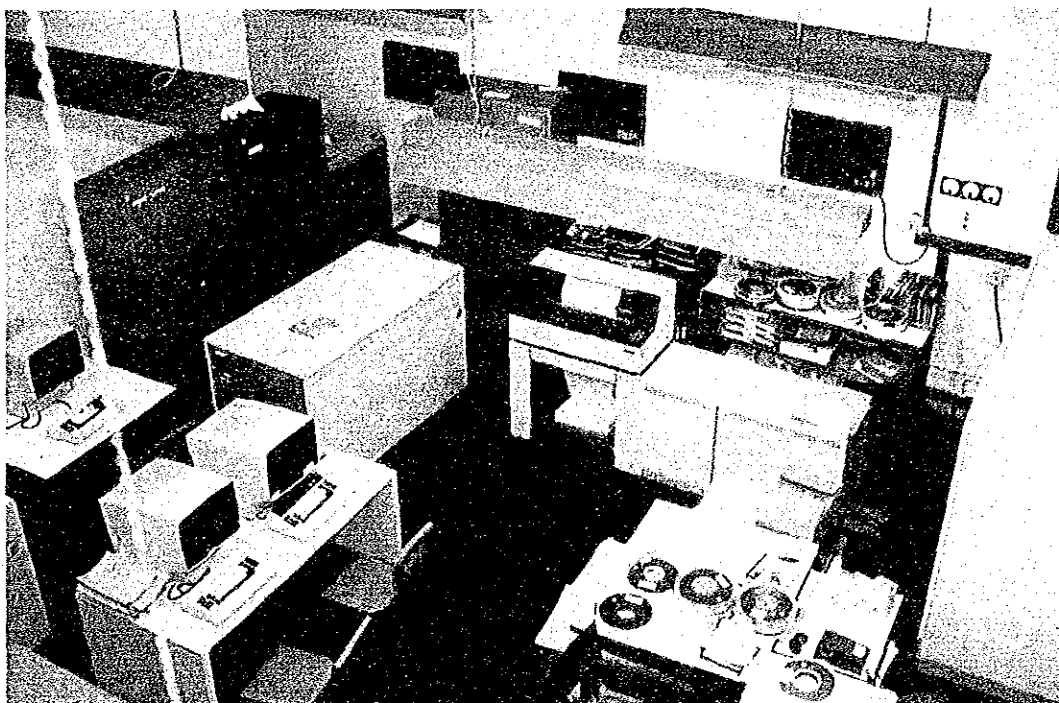
ミニッツ調印を終えて（大友団長・コラーレ統計局長）



統計局にて（研修風景）



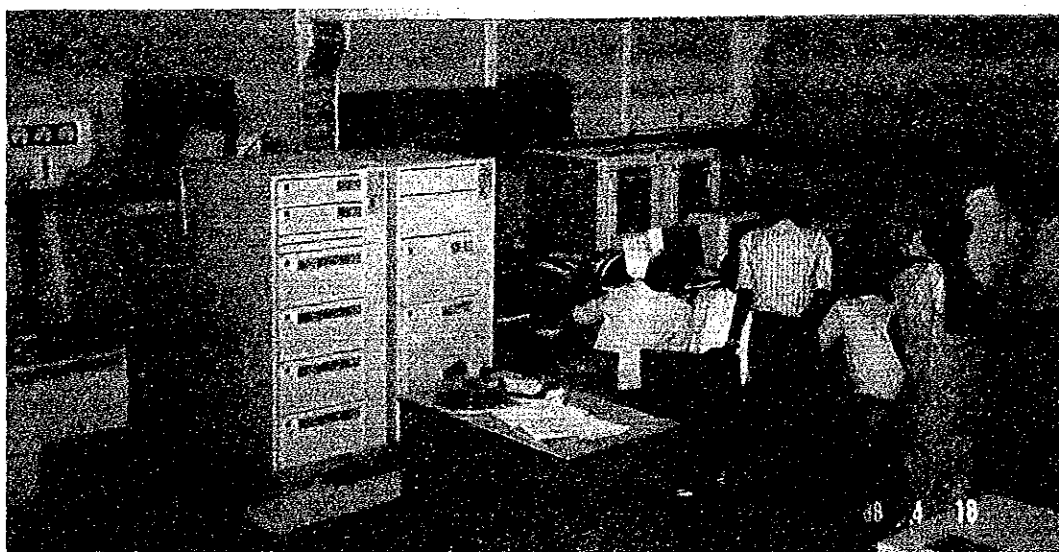
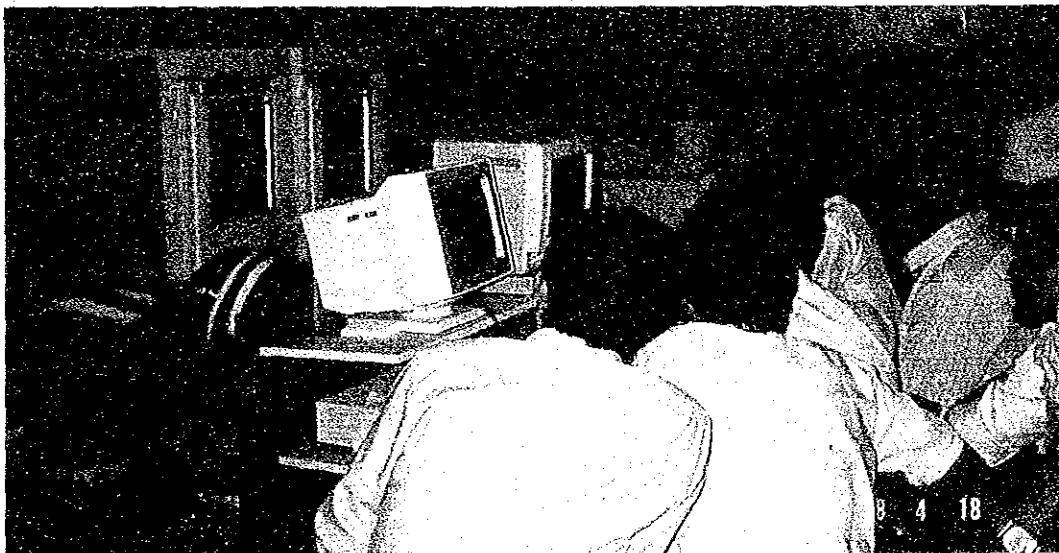
統 計 局 本 部



統計局本部（国連で供与したコンピューター）



KEGALLE市 GOVERNMENT AGENCY (G.A.)内



統計局本部 (中・下)

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I-1 総 括

昭和 63 年 4 月 18 日から 28 日までの間、スリ・ランカ人口情報プロジェクトの実施に関する計画打ち合せのため大友篤を団長とし長岡省悟、岡本政人、大倉理を団員とする調査団は、カウンターパートであるスリ・ランカ計画実施省統計局 (Department of Census and Statistics, Ministry of Plan Implementation, 以下、DCS と略称する。) を訪問し、昭和 63 年度以降のプロジェクトの実施計画をコラーレ局長以下、DCS 幹部と協議した。

その主要な協議事項は、以下のとおりである。

- (1) DCS に構築する人口統計データバンクに組込むべきデータベースとその内容
- (2) 人口統計データバンクの運営のためのコンピュータ・システム (機材とソフトウェア)
- (3) 人口統計データバンクの構築のための地方支局の体制強化
- (4) DCS 及び地方支局のコンピュータ要員の研修の方法と日程

また、これらの協議をおこなうとともに、一部の地方支局における業務状況の視察をおこなった。

これらの協議の結果調査団は、大要 DCS 側とつぎのような合意を得た。

- (1) 人口統計データバンクは、集落 (Village) レベルのデータベースを基礎にしたものとする。
- (2) そのデータは、人口センサスのデータを主体とし人口動態統計、医療・保健統計、その他の社会経済的統計とする。
- (3) 人口統計データバンクのためのコンピュータ・システムを強化するために、データ入力のための端末機器、マイクロ・コンピュータ、ページ・プリンター、デジタイザーなどの機材を増設する。
- (4) 人口統計データバンクのデータの内容を拡充し、その精度を向上させるために、標本調査方式による 2 種類の人口調査を実施する。
- (5) 人口統計データバンクにデータを迅速に供給し、かつそれを有効に活用するために全国 25 の行政地区のうち 18 地区にパソ・コンを設置するとともに、その運用にあたる統計職員の研修をおこなう。
- (6) 上記の計画の円滑な実施のためには、コンピュータ部門ばかりでなく人口学または人口統計部門の専門家の派遣が必要である。

これらの合意事項に基づき、ミニッツを作成しあわせて、中堅技術者養成対策事業について Record of Discussions (R/D) の改正を行なった。

作成した。

I-2 調査団派遣の経緯と目的

スリ・ランカの人口家族計画は、計画実施省（Ministry of plan Implementation）にて計画され、保健省及びNGO（家族計画協会等）によって実施されている。スリ・ランカにおいては、1960年代より母子保健等の改善を通じ人口増加率は低下しているものの、その水準は先進国に比べれば依然と高い。そこで同省では家族計画の実施の促進をはかるばかりでなく、人口のさまざまな局面に関連する情報を各行政機関に迅速に提供することによって、人口に関する行政の立案や実施をより組織的に実施すべく、人口情報の整備に関する技術協力を日本に要請した。これに対し、昭和61年9月コンタクトミッション、62年3月事前調査団、同年9月実施協議調査団を派遣し、コンピュータの有効利用を中心にした人口統計データバンクを構築し、人口センサス・人口動態統計・保健医療統計などの改善を図ることを目的とする「スリ・ランカ人口情報プロジェクト」に関するR/Dを締結した。

なお、今回当調査団の調査内容は、次の通りである。

(1) 人口データ・ベースの作成のための内容検討

既在の人口統計資料を幅広く利用可能なデータ・ベースとするため、モデル・エリアを設定し（18地区）、パソコン利用による中央と地方を結んだデータ・ベース作成、整備の作業実験を行なう。

(2) 中堅技術者養成のためのコンピュータ研修の日程の検討

人口統計データ・ベース作成の実務に携わる地方事務所の中堅職員に対し、パソコン利用法等につき研修を行なうための日程の調整、計画をつくる。（R/Dの改正を行なう。）

(3) 人口調査の実施のための内容の検討

モデル・エリアにおいて、人口統計に有効と考えられる新項目を盛り込んだ人口調査を行ない、併せて既在データの信頼性を検証する。

(4) コンピュータ・システムの内容の検討

(5) 人口統計データ・バンクの利用に関する調査

Ⅱ 調査団の構成及び面会リスト

団長	大友 篤 (宇都宮大学教授)	総括及び人口学
団員	長岡 省悟 (厚生省大臣官房統計情報部 情報企画課課長補佐)	人口統計
団員	岡本 政人 (総務庁統計センター管理部 管理課課長補佐)	コンピューター
団員	大倉 理 (国際協力事業団医療協力部)	業務調整

(面談者氏名等)

Mr. R. B. M. Korale	Director, Department of Census & Statistics
Mr. S. Sangarapillai	Deputy Director (3)
Mr. R. Vithana	Data Processing Manager
Mrs. Soma de Silva	Act : DD, DC&S
Mrs. S. Vidyaratna	A.D. (Division 9)
Mr. H. R. Gunasekera	A.D. (Division 2)
Mr. K. D. Siripala	A.D. (Printing Division)
Mr. R. Balakrishnan	A.D. (Division 2)
Mr. A. M. U. Dissanayake	A.D. (Division 3)
Mr. W. S. M. Fernando	Advisor

III-1 調査日程

スリ・ランカ人口情報プロジェクト計画打合せ調査団

1988年4月16日～1988年4月28日

月 日	時 間	調 査 内 容
4. 16 (土)	12:00 →	成田 (発) BKK経由
4. 17 (日)	← 14:00 —	Colombo (着)
	17:00～20:00	専門家との日程打合せ
4. 18 (月)	09:00～10:30	JICA事務所にて調査日程打合せ
	10:30～11:30	大使館表敬
	14:00～15:00	外国援助局表敬
	15:00～16:00	DCSにて調査日程打合せ
	16:00～17:00	DCS. Data Processing Div (プロジェクト専門家事務所及び 供与機材の設置場所視察)
	18:00～21:00	専門家との協議
4. 19 (火)	09:30～12:00	DCSとの協議、ミニッツ原案の検討
	13:00～16:00	〃 〃
	16:00～17:30	Mr. Marikkar, Secotary of Ministry of Plan Implementation表敬
	17:30～21:00	専門家とのミニッツ原案の検討及び作成
4. 20 (水)	09:30～12:00	DCSとの協議、ミニッツ原案の検討
	13:30～16:00	専門家との協議、ミニッツ原案の検討
	16:00～18:30	DCSとの協議、ミニッツ原案の検討
4. 21 (木)	09:30～12:00	専門家 (ミニッツの一部修正) 間協議
	12:00～13:30	
	14:00～14:30	大使館ミニッツ案検討
	15:00～15:30	JICA 〃
	16:00～17:30	DCSとの協議
	19:00～21:00	DCSとの打合せ懇談会
4. 22 (金)	08:00 →	Colombo (発)
	← 10:30 →	KEGALLE. G. A訪問 DCS分局
	← 12:30 →	KEGALLE市 DCS分局との協議
	← 17:00 —	SIGIRIYA (泊)

月 日	時 間	調 査 内 容
4. 23 (土)	— 09:00 —	SIGIRIYA (発)
	— 13:30 —	POLONNARUWA, G. A訪問 (1:00以後)
	— 16:00 —	POLONNARUWA (泊) DCS分局長との協議
4. 24 (日)	— 08:00 —	POLONNARUWA (発)
	— 12:00 —	
	— 17:00 —	COLOMBO (着)
	19:00～22:00	DCS・JICAとの協議
4. 25 (月)	09:30～10:30	JICA事務所にてミニッツ最終打合せ
	10:30～11:30	大使館 //
	11:30～12:00	DCS //
	12:00～13:30	
	13:30～17:00	ミニッツ作成
	19:00～21:00	大使館・JICA担当者との協議
4. 26 (火)	09:30～10:30	DCSにてミニッツ署名
	10:30～11:30	JICAへ帰国報告
	11:30～12:00	大使館へ //
	12:00～13:30	
	13:30～17:00	資料整理
	19:00～22:00	
4. 27 (水)		CIB発 バンコク経由
4. 28 (木)		成田着

III-2 打合せの概要

4月18日

JICA 事務所と大使館を表敬訪問した後、外国援助局を訪れ、局次長のアマラセカラ女史に人口情報プロジェクトの実施計画の打合せをDCSとおこなう旨を伝えた。その後DCSを訪れ、コラーレ長官ほか幹部と会い計画打合せの日程を協議した。

さらに夕刻から、松下、西岡専門家及び水田調整員から、着任後の業務の進行状況についてつぎのような報告を受けた。

- (1) 昭和62年度供与機材のコンピューター等は、すべて年度内に納入された。
- (2) コンピューターは、現在、業者によって設置中であり5月中には稼動が可能と思われる。
- (3) そのため、メイン・フレームと端末の使い方についての研修が職員に対して業者によっておこなわれている。
- (4) 人口統計データ・バンク構築のためのデータの利用可能性について年度末に訪れた小林短期専門家とともに調査したところ、人口センサスに関しては1971年と1981年についてオリジナル・データがテープで利用できる。しかし、人口動態統計に関しては、コーディングのための職員不足と内務省登録局を経由するため現在は、1983年までのものしか利用することができない。

4月19日

午前中、DCSに構築する人口統計データ・バンクの内容について、日本人専門家と協議した。それに引きつづき、計画実施省次官マリカール氏を表敬訪問した。

午後、DCS側より人口統計データバンクの構築につき具体的な方針を聴取した。その大要は、以下のとおりである。

- (1) 人口政策や地域開発計画などのデータとして従来、不備であった集落(village)レベルを基礎にした人口統計データ・バンクを構築する。
- (2) この人口統計データ・バンクの主要なベータ・ベースとなる人口センサスのデータは、1948年、1953年、1971年及び1981年のものとする。
- (3) 人口統計データ・バンクのデータ入力及び1991年に実施予定の人口センサスのために、36台のコンピューターの端末機が必要となる。
- (4) また、あわせて、全国25の行政地区別の人口データ集(population information handbook)を作成する。
- (5) 人口統計データ・バンクを迅速に構築し、かつそれを有効に活用するために全国25の行政地区のすべてにJICAの援助によりパソ・コンを配置する。
- (6) DCSのコンピューター要員に対してばかりでなく、全国の各行政地区のパソ・コンの運用にあたる統計職員に対しても研修をおこなう。

(7) 人口動態統計は、統計精度の点で問題があるため、その精度の検証をおこなうとともに、人口センサス・データの内容の不備を補うため、特定の標本数による集落調査を実施する。

これに対して、JICA側は、(1)全国約 25,000 にのぼる集落 (village) を対象とする場合、データの入力だけのためにDCSに今後設置する必要のある端末は 16 台で十分であること(2)全国 25 の行政地区のすべてにパソコンを配置することは、現在、政情不安な地区もあり現実的でないこと、また、(3)この方針に基づきプロジェクトを実施するためには、コンピューターの専門家の増員ばかりでなく、人口学または人口統計の専門家の増員が必要であることなどを指摘した。

その結果、DCS側もこれに同意し、とくに行政地区に設置するパソコンは、主として政情不安な地区を除く 18 地区とし、昭和 63 年度に 7 地区に設置しその利用に関するテストをおこない、その成果に基づき、昭和 64 年度に渡り 11 地区に設置することで合意をみた。

4月20日

午前、前日の合意事項に基づき、JICA側がミニッツの原案作成をおこなった。また、中堅技術者養成対策事業の実施についてR/Dの改正(案)を作成した。夕刻、DCR側にR/D改正原案及びミニッツ原案の説明をおこなった。

4月21日

午前、DCS側とミニッツ(案)及びR/D改正(案)につき協議した。

4月22日

KEGALLE市Government Agent (GA) 視察

職 員 数 16人

ジョイセフ(日本家族計画国際協力財団)より、約2週間前に韓国製のパソコンが導入された(UPS、本体、プリンター)。事務所の一角に間仕切りを設け、エアコンディショニングをおこなっている。庁内で開発したプログラムは無く、ユーティリティー(提供プログラム)を使用してパソコンを動かしている。

面 会 人 GA (県知事) Mr. Ranashinger

GAの現状

① コンピュータ施設

IRDPによる供与、韓国製PC 1台、2週間前に導入、型式名 KEYPRO、主なソフトはDbaseⅢ、Lotus 1-2-3、Wordstar

② コンピュータの利用

報告書作成、給与計算、会計管理、年間計画管理、地方年鑑作成等

③ コンピュータ従事者

3名 (プログラマーはなし)

④ プログラムの開発

自己開発はなし、すべて供与によるもの

⑤ 研修方法

地域計画長が自らトレーニングしている

訪 問 先 KEGALLE市DCS分局

面 会 人 分局長 Mr. Aski

分局の現状

① コンピュータ施設

なし

② コンピュータ経験者

1名 (研修を受けたのみ)

③ 職 員 数

6名 (分局内のみ)

④ コンピュータ導入計画

なし

⑤ コンピュータの利用方法

当DISTRICTの出版物作成と統計整備

⑥ 中技のトレーニングの派遣

問題なし

⑦ コンピュータの設置スペース

なし

4月23日

訪 問 先 POLONNARUWA市 DCS分局

面 会 人 分局長 Mr. Guwnaya

分局の現状

① コンピュータ施設

なし

② コンピュータ経験者

1名

③ 職 員 数

6名(分局のみ)

④ コンピュータの導入計画

なし

⑤ コンピュータの利用

当Districtの出版物作成、統計整備

⑥ コンピュータ設置スペース

なし

⑦ 年 間 予 算

4～5 PS

POLONNARUWA市Gvernment Agent (G. A.)

職 員 数 G. A. に5人 各A. G. A.(6か所)に6人 計41人

コンピュータは現在なく、導入計画もない。コンピュータ経験のある職員はいない。

事務室に1マイルを1インチの地図があり、隣室には航空地図、その他統計グラフが展示されている。

ビレッジ(集落)単位のデータ・ベースについて必要性を認識し理解を示された。

面 会 人 G.A.(県知事) Mr. Jayashiger

GAの現状

① コンピュータ施設

なし

② コンピュータ経験者

なし

③ コンピュータ導入計画

なし

④ コンピュータ設置スペース

あり

⑤ コンピュータの利用

恩給、給与計算、統計整備

4月24日

GAMPAHA G. A. 視察

建物は工事中であり、5月には竣工の見込み。

(1) 訪 問 先 GANPAHA市DCS分局

現地視察のみ

(2) 訪 問 先 GANPAHA市G. A.

到着時刻 午後4時15分、現地視察のみ

4月25日

R/Dの改正(案)及びミニッツ(案)の説明をJICA事務所及び大使館に対して行ないし承を得た。

4月26日

R/Dの改正及びミニッツに調印した。

Ⅳ 調 査 報 告

1. コンピューター関係

1) 1988年度機材供与計画概要

集落レベルの人口情報データベースを整備し、有効に利用できるようにするために、以下のようなコンピュータ・システムの増強が必要である。

- (1) 磁気ディスクの増設
- (2) データ入力用端末の増設
- (3) Personal Computer (PC) の増強
- (4) 統計解析用ソフトウェア及びハードウェア (デジタイザ、プロッター等)
- (5) 地理情報システム用ソフトウェア及びハードウェア (デジタイザ、プロッター等)
- (6) UPS の増強
- (7) 8 インチ及び5 インチディスク装置の導入

また、人口情報データベースを利用して、報告書を作成するために、レーザープリンター、ワープロソフトウェアの機材が必要である。

- (8) 地方 (ディストリクト) における人口情報の収集及び利用を促進するために、PC 及び通信システムの機材を漸次配置していく必要がある。

以上機材供与にかかる費用は、約 7,000 万円となる。なお、所定の成果を得るためには、今年度中に供与することが望ましい。

2) PC の地方配置に係る職員研修

地方のDCS分局には、コンピュータ経験者が少なく、PCを扱える職員を養成するための研修を行う必要がある。

3) コンピュータ分野の長期専門家の増員

DCSにおいて、システム設計、プログラム作成に関する標準的手法、基準等が確立されておらず、人口情報データベース・システム構築にあたって、職員に対する情報処理技法の教育を十分に行っていく必要がある。また、地方の職員に対する研修のサポートも行っていく必要があり、コンピュータの長期専門家を2名にする必要がある。

4) 運営管理規準の作成と導入

現 状 …… ① オペレーションフローの書き方に統一性がない。

② データレイアウトがない。符号表のみ。

③ プログラム名に年号を入れていない。

④ ファイル名・プログラム名ののせ方に基準がない。

⑤ JCL用、プログラム用ライブラリーの区別がない。

- 導入の理由 …… ① 仕事の効率を上げる。
 ② 仕事に統一性を持たせて、把握を容易にする。
 ③ プログラムやファイルの紛失を防ぐ。

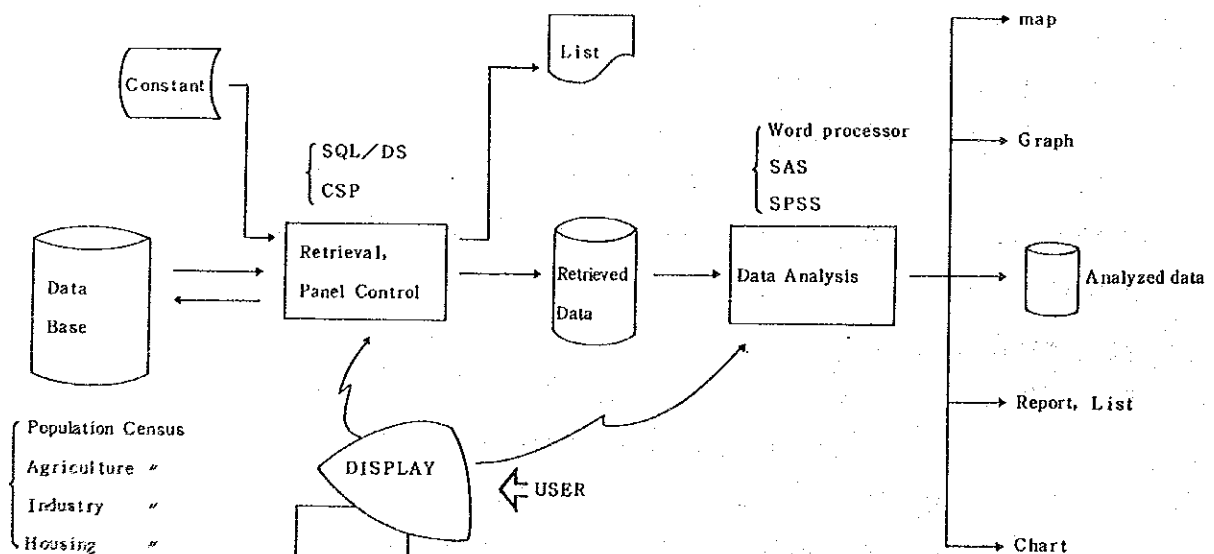
5) 機能別集計システムの導入

- 現 状 …… ① 機能別集計の概念がない。
 ② 各々の調査の集計方法に共通した基本的な流れがない。
 ③ エラー処理、サマリーのユーティリティがない。

- 導入の理由 …… ① 集計体系を明確にする。
 ② 集計の効率を上げる。
 ③ ユーティリティの導入の必要性

※ UPS (Uninterrupted Power Swpply)
 JCL (Job Control Largage)

Basic configuration (DB/A. Prototype)



2. 保健・医療事情

1) スリランカはインド洋に浮かぶ人口1,610万人の島国で、面積は65,610 *km*²と北海道よりやや小さい。人種構成は、多数民族のシンハリ人 (Sinhalese, 大部分が仏教徒) とタミール人 (Tamils, ヒンズー教徒) 他少数民族からなり、特にシンハリ人とタミール人の民族紛争は、過去1500年以上にもわたって続いてきたが、1983年以降再び激化している。スリランカ政府は、昨年8月に調印した印「ス」平和協定をテコに隣国インドの協力を得ながら本問題を解決しようと努力している。

人 口	1,610万人 (1986年)	面 積	65,610 <i>km</i> ²
人 口 密 度	246 / <i>km</i> ²		
粗 出 生 率	22.3 %	粗 死 亡 率	6.0 %
人口増加率	1.8 % (1986年)	乳児死亡率	23.1 % (1984年)

人種構成 (1981年)

Sinhalese	74.0 %
Sri Lanka Tamils	12.6 %
Indian Tamils	5.5
Moors	7.1
Others	0.8 %

宗教別構成 (1981年)

仏 教	69.3 %
ヒンズー教	15.5
回 教	7.6
キリスト教	7.5
そ の 他	0.1 %

識 字 率 85.4 % (5歳以上)

経済成長率 4.3 % (1986年)

1人当りGNP 9,918ルピー (354ドル、1986年)

国際収支 (対GDP比%, 1986年)

輸出 18.9 %、輸入 30.6 %、経常収支赤字 16.4 %

政府財政 (対GDP比%, 1986年)

歳入 23.4 %、歳出 37.6 %、財政赤字 14.3 %

2) 疾病構造 [下記(1)、(2)は病院統計 (保健省年報の病院統計 (1986) に基づく。]

(1) 入院患者の構成 (入院統計)

原因不明の症状・徴候等	(9.2 %)	呼吸器系の疾患*	(7.9 %)
外 傷	(7.5 %)	腸管感染症	(6.3 %)
マラリア	(5.7 %)	消化器系疾患	(3.6 %)
皮膚疾患	(3.6 %)	ウイルス疾患	(3.0 %)
神経・筋疾患	(2.9 %)	その他の外傷	(2.3 %)

* : 上気道疾患、肺炎、気管支肺炎を除く

(2) 死亡退院者の死因 (死亡統計)

虚血性心疾患	(9.5 %)	原因不明の症状・徴候等	(7.9 %)
栄養失調	(6.1 %)	消化器系疾患	(6.1 %)
脳血管疾患	(5.8 %)	農薬中毒	(5.4 %)
肺炎・気管支肺炎	(4.8 %)	肺循環疾患及びその他の心疾患	(4.4 %)
悪性	(4.1 %)	腸管感染症	(4.1 %)

(3) 感染症問題

(イ) ウイルス疾患

デング熱、日本脳炎 (1987年には約700名の患者が発生し169名が死亡した。) 肝炎、狂犬病、腸管感染症 (ロタウイルス等)、AIDS (現在までに4例、うち2例は外国人)

(ロ) 細菌疾患

腸管感染症

(ハ) その他

マラリア (毎年恒常的に患者が発生しており、1986年には40万人以上の患者があった。)
フィラリア、腸管寄生虫症

(ニ) 予防接種

WHOのEPIプロジェクトに基づき全国で、BCG・三種混合・ポリオ・麻疹の強制接種を行っている。接種率は高く、対象疾患 (結核・百日咳・ジフテリア・破傷風・ポリオ・麻疹) は確実に減少しつつある。

3) 医療制度

(1) 病院数 (注①)	490 (1病院当りの人口	32,220)
医師数 (注②)	3,108 (医師1人当りの人口	5,096)
伝統医	12,277 (伝統医1人当りの人口	1,290)
看護婦数	8,091	

政府の保健・医療予算20億3,100万ルピー (約100億円、総予算の3%)

注) ① Maternity Homeを含む

② Assistant Medical Practitioners (AMPS)を含む

③ 上記のデータは、1985年の数字

(2) 医療マンパワー

(イ) 医師 (国立病院勤務医 + 民間開業医)

国立病院医師も勤務時間外は、自宅等で診療を行なえる。

医学部 (5年制) 5校 (国立4校、私立1校、入学定員合計約500名)

インターン (1年)

卒後専門教育 (3~5年)

中堅医師の流失と農村の医師不足及び将来の医師過剰が問題。

(ロ) 看護婦

看護学校（３年制） 10 校（すべて国立、この他一部の民間病院でも独自養成している）

中近東（給与が非常に良い）へ出稼ぎへ行くものが多く、看護婦は不足気味。

(ハ) その他の医療従事者

２年制の養成施設（国立）がある。

(3) 医療施設

(イ) 国立病院

全国ネットワーク（別表参照）

医療費は無料。但し、施設は貧弱で衛生状態も悪い。大病院に患者が集中している。（中小

国立医療機関の under-utilization と大病院の over-utilization）

(ロ) 民間病院

都市に集中、規模は小さい。オープン・システムをとっており、民間開業医等の患者を受入れていている。

(ハ) 薬局

当国は原則的に医薬分業制をとっている。

(4) 伝統医療

インドを起源とする Ayurveda Medicine（アユルベエダ。伝統処方に基づく生薬を用いる）で、農村部に強い影響を持つ。

(5) 保健・医療行政

(イ) 保健省

公衆衛生・医療行政

国立医療施設の管理・運営（但し、下記の省に属するものを除く）

(ロ) 伝統医学省（組織上は保健省の下にある政府機関）

伝統医療の振興及び伝統医療を行なう国立医療施設の管理・運営

(ハ) 女性問題・教育病院省（1983 年に保健省からわかれ、新設された。）

教育病院（大学病院）の管理・運営

注) 保健大臣

Dr. R. アタバト

伝統医学大臣

W. J. M. ロクバンダラ

女性問題・教育病院大臣

Mrs. S. ラナシンハ

V 資 料

1. ミニッツ
2. 対処方針
3. スリ・ラスカの人口分布図
4. 組 織 図
5. CHAPTER1 ORGANIEATION OF THE CENSUS
6. CHAPTER2 ADMINISTRATIVE DIVISIONS OF SRI LANKA
7. STATISTICAL DATA PROCESSING AND THE POPULATION
DATA BASE OF SRI LANKA

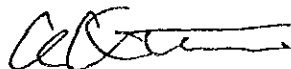
MINUTES OF DISCUSSIONS BETWEEN
THE PROGRAMME REVISION TEAM
AND
THE IMPLEMENTATION AGENCY
CONCERNED OF THE GOVERNMENT OF THE
DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
ON THE PROJECT FOR POPULATION INFORMATION

The Programme Revision Team (hereinafter referred to as "the Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and the Implementation Agency concerned of the Government of the Democratic Socialist Republic of Sri Lanka (hereinafter referred to as "Sri Lanka") have signed the Record of Discussions (hereinafter referred to as "R/D"), for the purpose of materializing the Population Information Project in Sri Lanka.

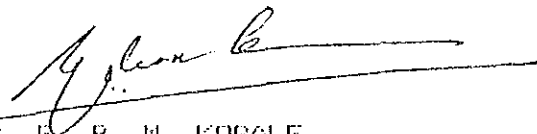
The understandings reached between both sides are recorded in the document attached in order to clarify certain specific matters concerning the implementation schedule of the Project.

Both sides agreed that the Project activities shall be based on "The Tentative Implementation Schedule of the Project (1) and the Tentative Implementation Schedule of the Project (2)". These schedules are formulated tentatively on the assumption that the necessary budget will be secured by both sides, and are subject to changes within the scope of R/D, if necessity arises during the course of the implementation of the Project.

Colombo, April 26, 1988



DR. ATSUSHI OTOMO
LEADER, THE PROGRAMME REVISION
TEAM, JAPAN INTERNATIONAL CO-
OPERATION AGENCY



MR. R. B. M. KORALE
DIRECTOR, DEPARTMENT OF
CENSUS AND STATISTICS,
MINISTRY OF PLAN IMPLEMENTATION,
COLOMBO, SRI LANKA

TENTATIVE IMPLEMENTATION SCHEDULE OF THE PROJECT (1)

ITEMS	YEAR	1987	1988	1989	1990
YEARLY TARGET					
1. Compiling of population census data base	12				6
a. Designing	12		6		
b. Data Collection		4	9		
c. Data Input		7		12	3
d. Processing		7			6
e. Evaluation and correction		6			
2. Compilation of vital statistics data base			6		7
a. Designing			6	8	
b. Data Collection			9		3
c. Data Input			1		3
d. Processing				4	5
e. Evaluation and correction					4
3. Statistical data base related to population	12				11
4. Improvement of population statistics systems		4			3
a. Improvement of population census system		4			3
Field survey (A)			9	12	
b. Improvement of vital statistics system		4			3
Field survey (B)			9	12	
5. Development and use of the statistical data bank of population		4			11
a. Experiment in the form of a network system		4			11
b. Development and use of techniques of national and regional population projections			1		11
c. Development and use of techniques of derivative estimations of data on population, health and medical care			1		11
DISPATCH OF EXPERTS	(LONG TERM)				
1. Computer expert			2		11
2. Demographer			3		11
3. Coordinator			1		11
(SHORT TERM)					
1. Computer experts			6	8	3
2. Demographers			3	10	12
3. Statisticians			10	12	7
TRAINING IN JAPAN	1. Computer programming 2. Demography 3. Other related fields mutually agreed upon as necessary		2 pers.	2 pers.	2 pers.
TRAINING IN SRI LANKA	1. Training for DCS Staff 2. Training for local statistical personnel a) beginners course b) advanced course		2		11
			3		3

NOTE

Compilations of data base of Population Census, vital statistics and other statistics related to population, described in the above Table shall cover about 25,000 villages (including urban portions) as well as 268 AGN divisions and 25 administrative districts.

A 400

TENTATIVE IMPLEMENTATION SCHEDULE OF THE PROJECT (2)

PROVISION OF EQUIPMENT AND MATERIAL

(Computer)	<u>1987/88</u>	<u>1988/89</u>	<u>1989/90</u>
1. Computer Unit	1 set	-	-
2. Operating System and other software	2 sets	1 set	-
3. DISK control unit	3 sets	1 set	-
4. DISK drive	5 sets	3 sets	
5. Tape controller	1 set	-	-
6. Tape drive	2 sets	-	-
7. Line printer	1 set	-	-
8. Page printer	-	1 set	-
9. Data entry terminal	4 sets	16 sets	-
10. Uninterrupted power supply	1 set	1 set	-
11. Micro-computer and software	6 sets	16 sets	16 sets
12. Plotter	-	1 set	-
13. Digitizer	-	1 set	-
14. Image scanner	-	-	1 set
15. Diskette Reader	-	6 sets	-
(Other equipment and material)			
16. Vehicle	1 set	-	-
17. Air-conditioner	5 sets	10 sets	10 sets
18. Copier	3 sets	-	-
19. Materials necessary for computing	1 set	1 set	1 set
20. Materials necessary for copier	1 set	1 set	1 set
21. Video system	-	1 set	-
22. OHP	-	1 set	-

Recognising the need for and desirous of achieving village level coverage through the statistical data bank on population at the earliest, the Implementation Agency felt that the number of Japanese long term experts in computer programming and population statistics be increased by one each.

When JICA recognises the necessity of the increase of the number of experts mentioned above, Section 2 of the Minutes signed on 4th September, 1987 shall be amended as follows:

Each Japanese long term expert shall be allocated to his counterparts of DCS, who will be one or more persons each for computer programming, demography and statistics, and one person for coordination.

for all

AMENDMENT OF THE RECORD OF DISCUSSIONS
ON
THE POPULATION INFORMATION PROJECT

The Programme Revision Team of the Japan International Cooperation Agency (JICA) headed by Dr. Atsushi Otomo, Professor of Utsunomiya University, has been despatched from April 16 to April 29, 1988 to the Department of Census and Statistics, Ministry of Plan Implementation, Colombo, Sri Lanka.

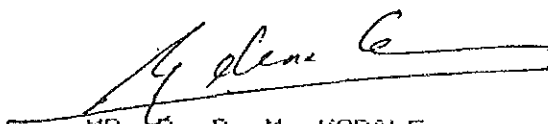
The team had a series of discussions with the Sri Lankan Implementation Agency concerning the Annual Work Plan of 1988 of the project, based upon the Record of Discussions, signed on November 9, 1987.

As a result of the discussions both parties agreed to recommend to their respective Governments to amend the Record of Discussions as referred to in the document attached hereto.

Colombo, April 26, 1988



DR. ATSUSHI OTOMO
LEADER, THE PROGRAMME REVISION
TEAM, JAPAN INTERNATIONAL CO-
OPERATION AGENCY



MR. R. B. M. KORALE
DIRECTOR, DEPARTMENT OF
CENSUS AND STATISTICS,
MINISTRY OF PLAN IMPLEMEN-
TATION, COLOMBO, SRI LANKA

THE ATTACHED DOCUMENT

Item IV of the attached document of the Record of Discussions shall be amended as follows:

- (1) The title "TRAINING OF SRI LANKAN PERSONNEL IN JAPAN" shall be revised to "TRAINING OF SRI LANKAN PERSONNEL".
- (2) The following paragraph shall be added:
3. In-country training will be provided to the middle level staff working for the project through training programmes conducted in 1988 through 1990.

Title of the annex IV of the Record of Discussions shall be revised to "TRAINING IN JAPAN AND IN SRI LANKA".

all

IMPLEMENTATION OF FIELD SURVEYS

object : Update and upgrade village-level database.

Survey A : Village survey for preparation of village-level database

Selection of 7 model districts

Surveying approximately 200 households in each model district comprising a total of 1,400 households.

Population information (age, sex, relationships, last in-migration, socio-economic characteristics)

Survey B : Updating village-level population and household data

Follow-up of Labour Force and Socio-Economic Survey 1985-86. A sample of 2,500 households to be taken from 250 random sample census blocks.

Population information (age, sex, relationships, demographic events between 1985/86 and 88/89, socio-economic characteristics)

Village household information (changes in the number of households, in- and out-migrants, births, deaths, and marriages).

1988 PURCHASE PLAN OF EQUIPMENT AND MATERIALS

NO. CORRESPONDING TO MINUTES	ITEM	QTY	REMARKS
2.	(Computer) Operating system SAS Print-out form Processor Other software	1 1 1 1	for statistical analysis and graphics
3.	Disk control unit	1	
4.	Disk drives	3	
8.	Page printer	1	
9.	Data entry terminals	16	
10.	Uninterrupted power supply	1	for upgrade of battery to 30 KVA
11.	Micro-computer and software P. C. Page printer Diskette drives Data entry display Emulator Local area network Un-interrupted power supply Telecommunication adaptor Telecommunication modem Sinhalese word processor Software for statistical analysis Software for mapping Other software	 16 1 12 7 12 1 7 1 2 1 1 1 1	9 in DCS, 7 in districts report printing 5 and 8 inch diskettes in districts for use of PC as mainframe terminal for data transmission between PCS in districts for report in Sinhalese

12.	Plotter	1	for plotting demographic map
13.	Digitizer	1	for input and edit of demographic base map
15.	Diskette drives	6	5 and 8 inch diskettes
	(Other equipment and materials)		
17.	Air-- conditioners		
19.	Materials necessary for computing	1	continuous stationary, tape reel, printer ribbon, etc.
20.	Materials necessary for copier	1	toner, paper, etc
21.	Video system	1	
22.	OHP	1	

TRAINING SCHEDULE FOR LOCAL PERSONNEL FOR APRIL 1988 & MARCH 1990

< Objectives > Training of Middle Level Officers in Electronic data processing.

< Programmes >

(1) Basic training course for Junior Staff

Trainer	Durations	Hatches / year			Number of Persons		
		88/89	89/90	Total	88/89	89/90	Total
PC Agent	1 month	9	4	13	36	14	50
D C S	1 month	9	4	13	36	14	50

(2) Advanced Training Course for Senior Staff

Trainer	Durations	Hatches / year			Number of Persons		
		88/89	89/90	Total	88/89	89/90	Total
PC Agent	1 month	6	3	9	12	6	18
D C S	2 months	6	3	9	12	6	18

Training Schedule for Local Training for 1988 - 1990

Estimate of Training Cost

objective - Training of middle level officers in Electronic Data Processing.

(1) Basic Training Course for Junior Staff

(a) Training by PC Agent

(i) Daily Subsistence Allowance Rs. 100/= - Rs. 150,000/=

for 50 officers

(ii) Travelling Allowance Rs. 200/= for - Rs. 20,000/=

2 visits for 50 officers

Total Cost - Rs. 170,000/=

(US \$ 5,670)

(b) Training at the DCS Training Division

(i) Daily Subsistence Allowance Rs. 100/= - Rs. 150,000/=

for 50 officers

(ii) Travelling Allowance Rs. 200/= for - Rs. 20,000/=

2 visits for 50 officers

(iii) Payment to Resource Persons Rs. 60/= - Rs. 52,000/=

per hour for 3 hours per day

(iv) Cost of Training Software, Computer - Rs. 100,000/=

Materials and Stationery, etc

Total Cost - Rs. 322,000/=

(US \$ 10,730)

(2) Advanced Training Course for Senior Staff

(a) Training by PC Agent

(i) Daily Subsistence Allowance Rs. 100/= - Rs. 54,000/=

per day for 18 officers

(ii) Travelling Allowance Rs. 200/= for - Rs. 7,200/=

2 visits for 18 officers

Total Cost Rs. 61,200/=

(US \$ 2,040)

(b) Training at DCS Training Division

(i) Daily Subsistence Allowance	Rs. 100/=	—	Rs. 108,000/=
per day for 18 officers for 2 months			
(ii) Travelling Allowance	Rs. 200/= for	—	Rs. 15,000/=
4 visits for 18 officers			
(iii) Payments to Resource Persons	RS. 60/=	—	Rs. 72,000/=
per hour for 3 hours per day			
(iv) Training Software, Manuals, Computer		—	Rs. 100,000/=
Materials and Stationery			
		—	Rs. 295,000/=

(US \$ 9,830)

(3) Systems and hardware Manuals	—	Rs. 300,000/=
		(US \$ 10,000)

(4) Miscellaneous	—	Rs. 51,800/=
		(US \$ 1,730)

Total Cost of Training — Approximately Rs. 1,200,000/=

(US \$ 40,000)

2. 対 処 方 針

調 査 項 目	現 状	対 処 方 針
63 年度計画立案	R/Dにそった協力を実施中	R/Dに基づく協力期間内に完結させるべく63年度計画を検討する。 どのような状態をもって完結とみなすか、その基本的な考え方を明確にして協力内容を検討する。
63 年度機材供与計画	62年度においては、計画にそった機材調達が行なわれた。	1)上記に基づき協力内容を協議した上で、63年度供与する機材について検討する。 2)協力期間が短かいので、機材供与を迅速に行なう。 3) 63 年度機材リストの作成を助成する。
専門家派遣計画	長期専門家派遣 人口学 63. 3. 1～64. 3. 2 コンピュータ・プログラミング 63. 2. 1～64. 1. 31 調整員 63. 1. 19～64. 1. 18 短期専門家 人口学 63. 3. 15～63. 3. 31	1)人口学分野を強化することが必要 2)人口学分野は多額の調査費が必要となるが、何をどこ迄実施するかを協議し、年間計画を策定する。 3)必要経費を算出する。 4)ローカル・コストの負担可能額の調査（「ス」国側の本プロジェクトに対する予算額について） 5) 63 年度短期専門家派遣計画、人口学、コンピュータ各 1 名の派遣時期を検討する。
研修員受入計画	63 年度受入計画 高 級 1 名 一 般 1 名	「ス」国側と充分協議を行なう。

調 査 項 目	現 状	対 処 方 針
人口動態統計	スリ・ランカでは出生届、死亡届は強制的であるが、婚姻届は任意となっている。 ——届出後の集計及び人口動態など地方においては集計処理能力が殆んどない。少数の行政地区にのみミニ・コンピュータが設置されているだけである。また、統計として公表されるまでに時間がかかりすぎる。しかし、同データは家族計画を実施し評価する上で欠かせない情報資料となるので今後の対応を検討する必要がある。	人口動態統計は医療統計や保健統計などの基礎データとなるため公表の遅れは障害となるので地方行政事務所の統計部門へのミニ・コンピュータの配置をどうするか検討する必要がある。
地方行政地区（カルタラ）におけるコンピュータによる人口データの整理の状況	カルタラはコンピュータを利用している数少ない地方行政地区である。人口データをグラフに作成することにより年金受給者の登録や世帯の登録など人口動態統計の整理や改善につながるよう業務に利用している。	コンピュータの設置は必然的に人口情報の整備や拡充をはかる上で重要なことは分かっているが「ス」国側の予算の都合で「ス」国全体にコンピュータを設置することは現時点では出来ない状態である。ついては、コンピュータの設置をどうするか今後の対処方針を検討する必要がある。 検討事項は、 1)地方行政地区への機材供与の可能性或は必要性 2)地方行政地区からのC/Pの受入れの可能性及び必要性 3)地方行政地区への中技実施の必要性 4)全地域への協力拡大が不可能な状況にある現在、モデル・エリアの設定の可能性を協議する。 5)プロジェクトの性格上、終了時に評価がし易いようにモデル・エリアを設定することが最善の方法と思われるので、その件についての検討をする。
モデル・エリアの設定	未 定	カルタラの状況を調査し参考とする。

調 査 項 目	現 状	対 処 方 針
人口データ (DCSにおける 人口統計データ・ バンクの内容が 不明)	人口データの種類の存在が不明 リストの不備 本件データの利用が不明 今後、需要が予想される機関名が 不明	左記に関し以下の点を調査する。 各データについて 1)作成年次 2)表章地域 3)所在源 4)利用形態 ① 報告書 ② 磁気テープ ③ 原票 5)上記を調査し結果をリストにする。 6)政府機関における人口データの主な利用先を 調査する。 7)今後の需要先を調査する。 データ整備状況によっては需要先が増加する 可能性あり、その場合の機関名を助言する。 上記の調査後、具体的な作業を策定し、作業の 準備を行ない、可能な限り、早急に作業を開始 するよう協議し助言を行う。
基本的人口統計デ ータ・ベース 人口分析・人口統 計	ベータ・ベースのシステム構築状 況が不明 コンピュータを利用した、統計分 析は無経験である。 人口情報の整備と拡充にとって、 欠かせない人口データ分析や人口 推計の為のソフト・ウェアの作成 が可能な要員が不在	左記を調査し、パソコンを利用するシステムを 助言する。 新機種を導入や整備の拡充などと共に要員に対 する技術研修を行なうよう指導する。 1)現在派遣中の人口学及びコンピュータ・プロ グラミング長期専門家の技術移転(業務量) の可能範囲の調査 2)短期専門家派遣の時期、特に今後必要となる 資料、機材の検討 3)中堅技術者養成対策を考慮する必要があるか 検討する。 —問題点— 勤務時間の制約(9:00～12:00, 13:00～ 16:00) 2.DCS要員の数及び能力 地方行政地区については ①要員の数及び能力 ②ローカル・コスト ③保有機材(コンピュータ)の数

調 査 項 目	現 状	対 処 方 針
1988年度の ANNUAL WORK PLAN の作成	1.活動計画 上記の通り 2.専門家 長期 - 3名、短期 - 2名 3.研修員受入 2名 4.機材供与	ANNUAL WORK PLAN

1988 Construction Plan of Date Base (DB) (draft)

(1) Basic Line

This project's construction plan of DB is not to construct a large scale data base from first, but to construct a prototype (small scale Data Base) in this year, for the time being. After that expand the function of software and the quantity of data from next year, gradually.

The aim of this line is to start running the DB immediately. And, through this run, get hold of the demand of inside and outside of DCS accurately. Then introduce it this DB system. During this period, we will consider the final large scale DB at the same time.

By the way, we separate DB system into 2 types because of each characteristic. One is for this project, which will be talked after this mainly. Another is for the integrated study. I will talk about these in detail later. For convenience, that is DB/A, this is DB/B herein.

(2) DB construction plan (DB/A)

In this project, the constructing DB is not simply to arrange the data, to input it into DB and make it easy to retrieve, but also put emphasis on analyzing the retrieved data.

Concretely, as show Basic Configuration Chart on another page, we will connect DB support program. (software of retrieval and panel control) with Data Analysis program. And then make it possible to transact Retrieval and Analysis continuously.

1. Basic configuration of DB

- a) Data all kinds of Census data
- b) DB support program SQL/DS, CSP
- c) Data Analysis program SAS, SPSS

2. Content of data

- a) Data layout cell or summary record with record ident (printing data)
- b) Kinds of data and Time series
 - Population Census 1971, 1981
 - Agriculture " 1973, 1982
 - Housing " 1971, 1981
 - Industry " 1983,
- c) Areas Whole countries, Each district

3. Retrieval method of data

- a) Access by the survey and the table
- b) Access by the classification of data

4. Method of Data Analysis

Analyze the retrieved data at the same mode by using SAS and SPSS. Consider the output way according to the needs of inside and outside DCS, and connect with Plotter as well. Also introduce word Processing program, and make it easy to complete the report successively.

(3) DB for integrated study (DB/B)

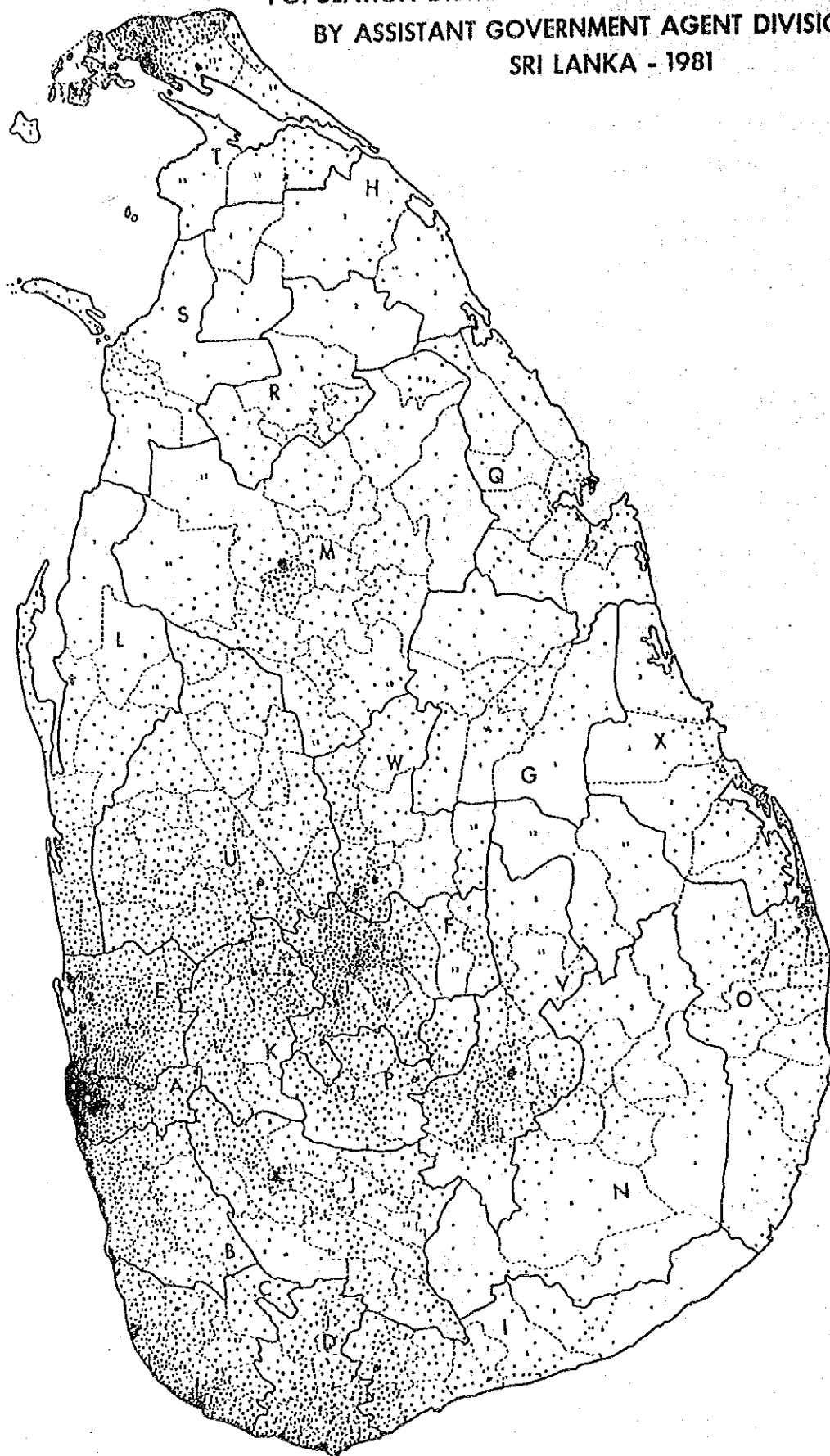
The aim of DB/B is to cover the part which DB/A cannot cover, and develop higher level technique. Concretely, retrieve Individual data mainly, and provide for the integrated study and checking the result of each tabulation.

Individual data is very important and useful information, but it takes a long time to retrieve because of a great number of data. So it is not suitable for DB/A. And to open Individual data is illegal in Sri Lanka. Then DB/B will provide us with a good opportunity to develop the new software of analysis.

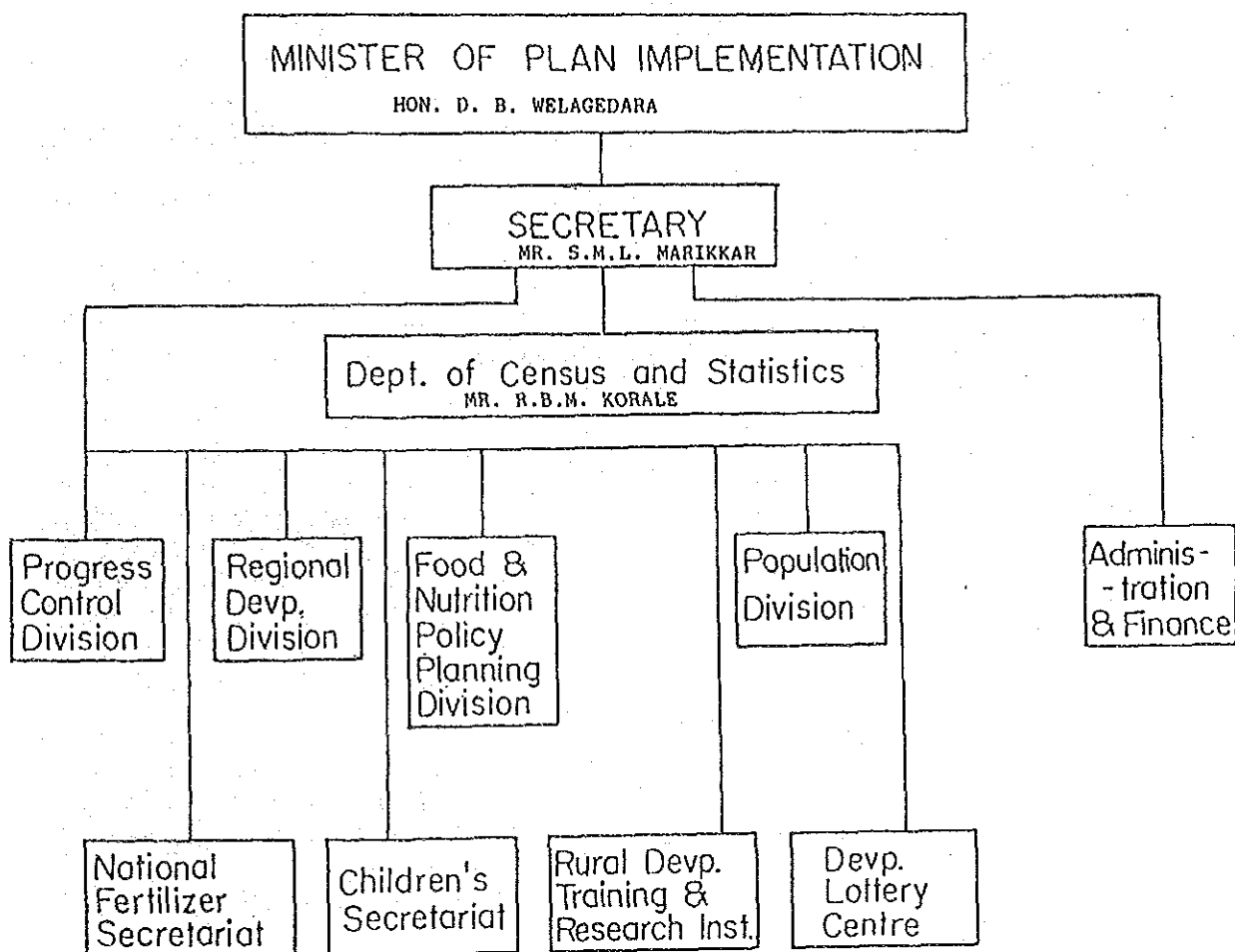
- ※ SQL/DS (IBM社が開発したデータベース用のソフト名)
- CSP (SQL/DS用のプログラム言語)
- SAS (統計解析システム)
- SPSS (社会科学のための統計プログラム)

POPULATION DISTRIBUTION

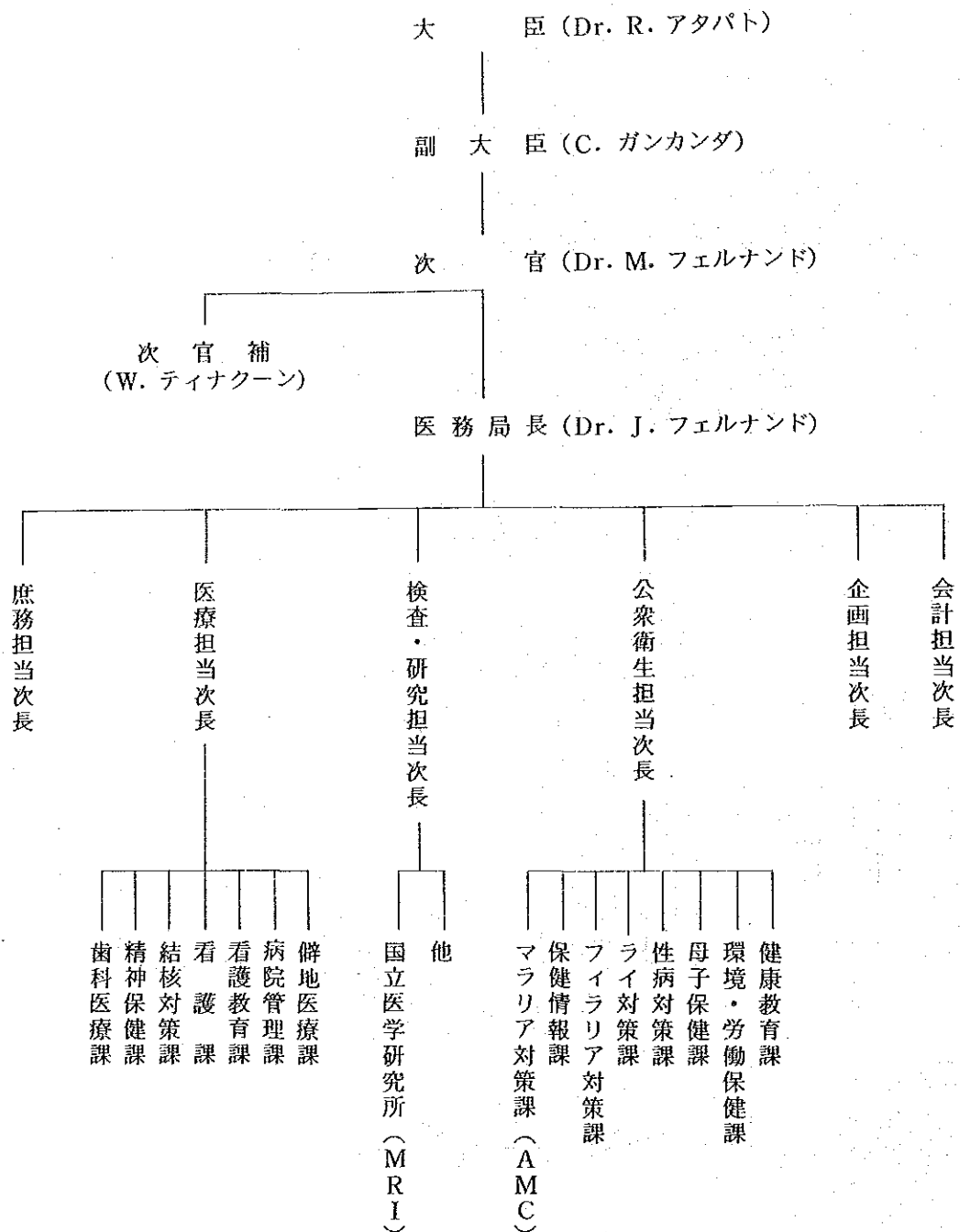
BY ASSISTANT GOVERNMENT AGENT DIVISIONS,
SRI LANKA - 1981



FUNCTIONAL STRUCTURE OF THE MINISTRY OF PLAN IMPLEMENTATION



保健省の組織図



CHAPTER 1

ORGANIZATION OF THE CENSUS

Through a process of evolution over a period exceeding one hundred years, organising a census has become a firmly established procedure in Sri Lanka. A census organisation can be described as an integrated net work of various facets of two types of procedures: technical and administrative. The responsibility for the census, in all its aspects, lies with the Department of Census and Statistics of the Ministry of Plan Implementation.

Technical procedures are developed and implemented by the census staff of the Head Office. The field operations are decentralised at district and local body level, and responsibilities and authority are assigned to the district administrative heads and the heads of local bodies as described in the following sections.

A. LEGAL SANCTION FOR CONDUCTING A CENSUS

The Census Ordinance of 1868, framed on the lines of the English Law covering censuses, provided the legal sanction for the first census taken in 1871. This Ordinance was amended in 1880 and repealed in 1900. In its place, a new Ordinance was drafted by the then Census Superintendent, P. Arunachalam on the lines of the Indian Census Act and was passed by the legislature. The new law made the census taking procedure more flexible so that the Government could decide the optimal scope and the best procedures to be adopted at each census. An important omission in the old law was supplied by making it the duty of each person occupying any land, house, enclosure, vessel or other place to allow a Census Officer "such access there to as he may require for the purpose of census and as having regard to the customs of the country may be reasonable and allow such letters marks or numbers, as may be necessary for the census, to be painted or marked on such property"

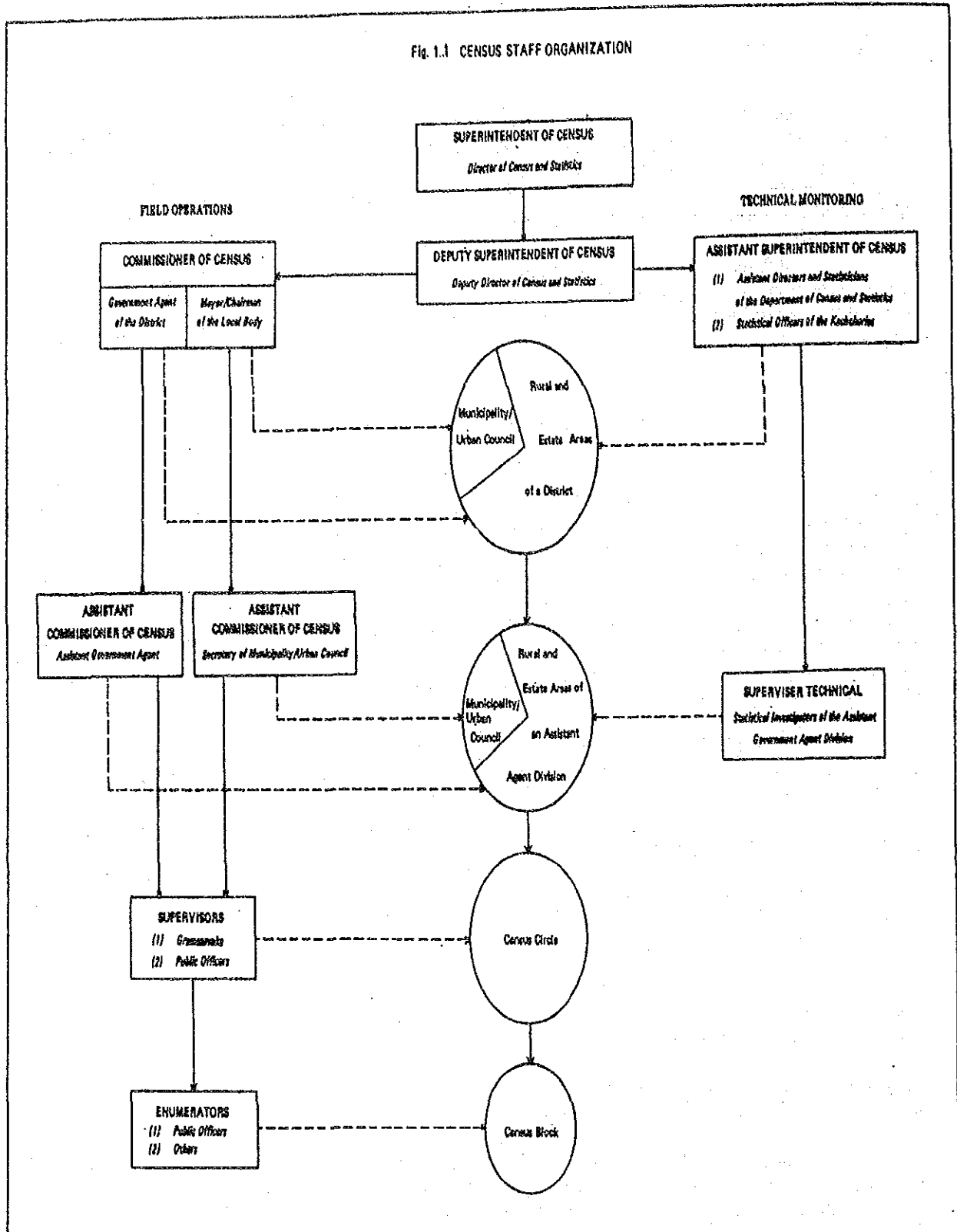
In the 1900 Census Ordinance, the term "Census Officer" was defined and he was declared to be a public servant within the meaning of the Penal Code. The officer in charge of each administrative district was given legal status as Census Commissioner of his district, and further the appointment of officers to supervise the enumerators was provided for. Legal sanction was also given for Census Officers to ask questions relating to the census schedule and persons of whom such questions were asked were required to answer such questions to the best of their knowledge and belief. The enumeration of military and naval forces and travellers by land and sea was provided for. Breach of census rules, abuse of power by a Census Officer, obstructing an officer in the discharge of his duties and similar acts and omissions were made punishable by the Census Ordinance.

Further, the Census Ordinance as it now stands states that it shall be lawful for the Minister "from time to time by order published in the gazette, to direct that a census be taken of the Population, Housing, Agriculture, Livestock, Trade, Labour, Industry or Commerce or such other matters as he may deem necessary for ascertaining the demographic, social, or economic conditions of the inhabitants of Sri Lanka". Thus, the Ordinance covers not only the census of population but also of Agriculture, Industry, Commerce, etc.

The Census Ordinance of 1900 substantially remained the basis for census taking in Sri Lanka throughout the years with minor amendments in 1945, 1955, and 1980. The main changes introduced by the amendments made in 1980, in preparation for the 1981 census of population and housing, are the following.

- (1) Director of Census and Statistics functions as the Superintendent of Census if an appointment was not made to this post.

Fig. 1.1 CENSUS STAFF ORGANIZATION



- (2) Punishments for various offences referred to in the Census Ordinance are enhanced to suit present day conditions.
- (3) Confidentiality of the information collected at the census is given legal sanctity.

The Census Ordinance of 1955 and the amendments made for the 1981 census are reproduced in Appendices B.1 and B.2.

B. CENSUS STAFF

Following, the directive of His Excellency, the President that a Census of Population and Housing be taken in the year 1981, the census staff was statutorily appointed by order published in Gazette Extraordinary. (see Appendices C1, C.2, C.3, C.4).

The Director of the Department of Census and Statistics was appointed the Superintendent of Census, and he was responsible for the entire census organisation. The superintendent was assisted by a Deputy Superintendent of Census who was the Deputy Director of the Department of Census and Statistics and Assistant Superintendents who were Assistant Directors and Statisticians and District Statistical Officers of the Department.

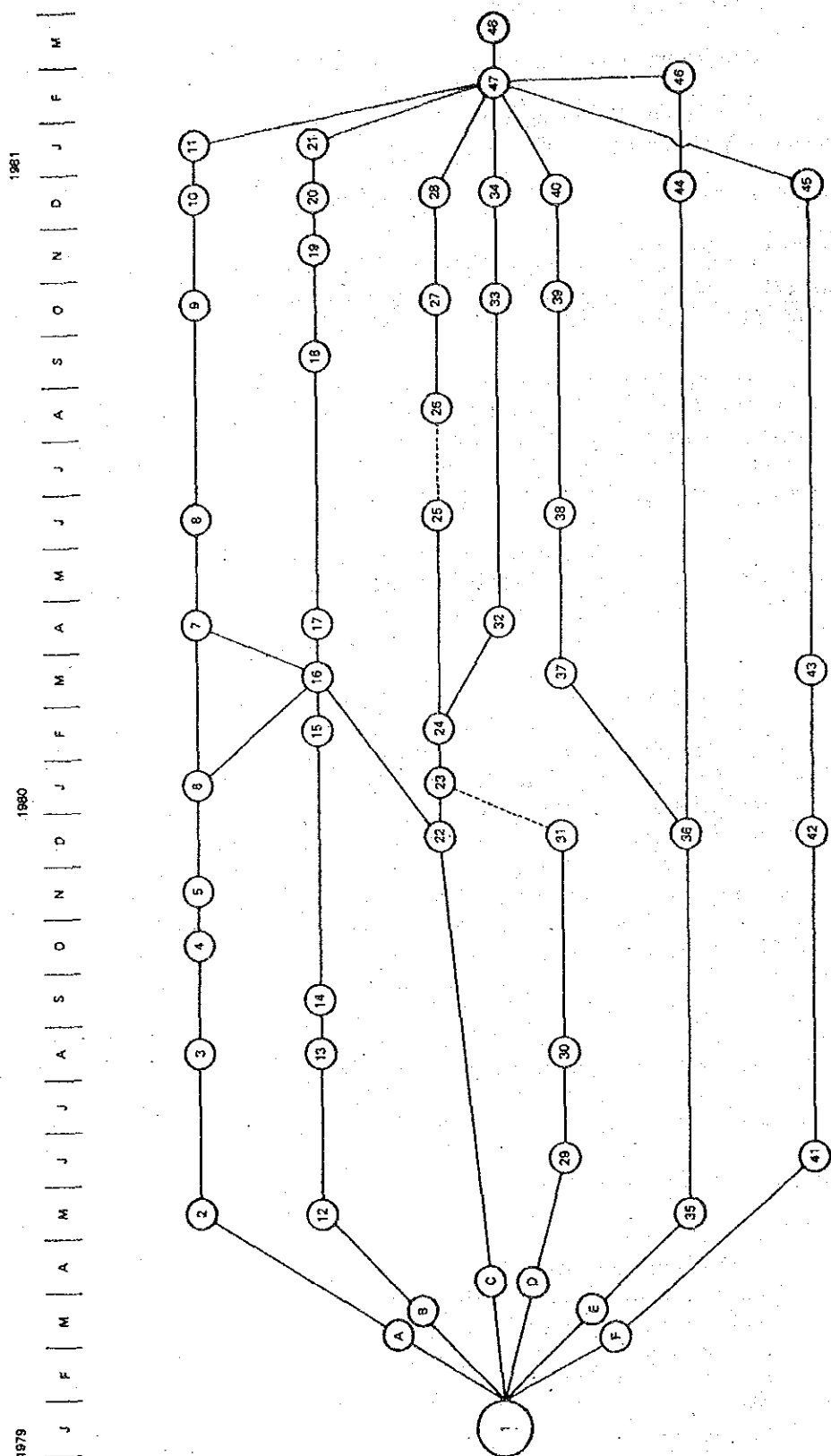
These officers except the district officers were in overall charge of specific major activities such as questionnaire and other forms design, preparation of manuals, sampling, printing, distribution of forms and other materials, tabulation programmes, data processing etc. The function of the district officers was to provide technical assistance in the taking of the census in districts.

Administrative responsibilities for taking of the census was decentralised and authority was vested with the government district administration and the local body administration. In each district, the Government Agent (GA), the administrative head of the district, was appointed as the Commissioner of Census for the district and Assistant Government Agents (AGA) were Assistant Commissioners for their respective AGA Divisions. These officers were the authorities for census taking in their areas except in the urban areas which are administered by local bodies. In urban areas, chairmen of local bodies were Commissioners and designated officers were Assistant Commissioners. One or more Supervisors were appointed for each ward. These administrative officers worked in collaboration with the Commissioners (Technical) and Assistant Superintendents who are the District Statistical Officers, and Statistical Investigators assigned to the AGA Divisions. In the rural areas of AGA Divisions, Grama Sevaka Niladharis were appointed as authorities under the designation of Supervisors. Within Grama Sevaka Divisions and wards, each census block was assigned to an enumerator recruited for the purpose of census enumeration. The enumerators were public officers of the area including school teachers. Thus, the Government Administrative machinery in districts was effectively utilised to administer the census field operations in conjunction with the technical monitoring provided by the Department's Field Staff.

The cadre of Census Staff was as follows:

Superintendent	1
Deputy Superintendent	2
Assistant Superintendent (Technical)	24
Assistant Superintendent	75
Commissioner	168
Assistant Commissioner	245
Supervisor	3400
Enumerator	63616
Total	67531

Fig. 1.2 ACTIVITY SCHEDULE FOR CENSUS OF POPULATION AND HOUSING, 1981
PRE-ENUMERATION PHASE



**PATH (A) QUESTIONNAIRE PREPARATION
PRINTING AND DESPATCH**

- (0, 1) - Appointment of Steering Committee
- (1, 2) - Preparation of Draft Questionnaire
- (2, 3) - Preparation of Format of Questionnaires
- (2, 3) - Preparation of Format of List of Blocks, F1 Forms etc.
- (3, 4) - Revision of Questionnaires on Users Suggestions and pre-tests
- (4, 5) - Finalisation of Questionnaires and Other Printing Material
- (5, 6) - Draft Instructions
- (5, 6) - Preparation of Documents for Pilot Census
- (6, 15) - Despatch of Schedules & Instructions for Pilot Census
- (6, 7) - Estimation of Schedules, Instruction Pamphlets etc.
- (8, 7) - Drafting of Publicity Material
- (7, 8) - Printing of Publicity Material
- (7, 8) - Printing of Material for Listing Operation
- (8, 9) - Printing of Schedules and Instructions
- (9, 10) - Despatch of Training Material
- (10, 11) - Despatch of Census material
- (11, 47) - Check and Despatch shortages

PATH (B) - CONSULTATION & CO-OPERATION

- (1, 12) - Preparation of Outline of Census & Despatch
- (12, 13) - Examination of Users Suggestions
- (13, 14) - Meeting with Users
- (14, 15) - Preparation of Conference Material
- (15, 16) - Pilot Census
- (16, 7) - Revision of Procedures on the basis of Pilot Census
- (16, 17) - First Conference with GAA
- (17, 18) - Conference with Boards, Corporations, Mayor/Chairman
- (18, 19) - Second Conference with GAA
- (19, 20) - Conference with PMG, GMR, Services, CTB
- (20, 21) - Final Conference with GAA
- (21, 47) - Conference with Police

PATH (C) - INFRA STRUCTURE AND ENUMERATION

- (1, 22) - Completion of Geocoding System
- (1, 22) - Revision of Legislation

- (1, 22) - Revision of Villages, List of Estate etc.
- (22, 15) - Administrative arrangements for Pilot Census
- (22, 23) - Assignment of areas to ASSC
- (23, 24) - Gazette Order for taking Census
- (24, 25) - Dummy
- (24, 32) - Appointment of Commissioners and Chief Supervisor
- (32, 33) - Identification of Special Institutions & Appointment of Enumerators
- (33, 34) - Appointment of Enumerators and Supervisors
- (34, 47) - Appointment of Outdoor and Relief Enumerators
- (24, 25) - List of Buildings
- (26, 27) - Demarcation of Census Blocks
- (27, 28) - Preparation of Data for Despatch of Schedules
- (28, 47) - Preparation for Outdoor Enumeration
- (47, 48) - Preliminary and Final Census
- (25, 26) - Dummy

PATH (D) - FINANCE AND BUDGET APPROVAL

- (1, 29) - Preparation of Census Budget
- (29, 30) - Cabinet Sanction and Treasury Approval
- (30, 31) - Approval of rates of payment
- (31, 23) - Dummy

PATH (E) - PUBLICITY AND TRAINING

- (1, 35) - Advance Publicity
- (35, 36) - Periodic Publicity
- (36, 44) - Sustained Publicity
- (44, 46) - Intensive Publicity
- (46, 47) - Final Publicity
- (36, 37) - Review of Department Field Staff
- (37, 38) - Training of SDO
- (38, 39) - Training of Chief Supervisors
- (39, 40) - Training of Supervisors
- (40, 47) - Training of Enumerators

PATH (F) - TABULATION

- (1, 41) - Preliminary Investigations
- (41, 42) - Preparation of Tabulation Programme
- (42, 43) - Systems Design
- (43, 45) - Writing Computer Programmes & Testing with Pilot Census Data
- (45, 47) - Final Testing of Programme

The heirachical structure of the staff organisation in relation to the geographical area of jurisdiction is illustrated in Figure 1.1.

C. PLANNING FOR THE CENSUS

Planning for the 1981 Census of Population and Housing commenced in early 1978 with the appointment of a Census Steering Committee chaired by the Director of Census and Statistics and the establishment of a Census Division within the Department. The Steering Committee was responsible for overall planning of census activities and monitoring their progress. During the initial stage, decisions were made on the scope and content of the census and the legal and administrative procedures.

Early in the planning stages, a publication outlining the scope and content of the proposed census was circulated among government institutions and non-government organisations interested in population, housing, and related matters inviting their comments and suggestions. The views of those who responded were taken into account in constructing the census schedule.

For detailed planning of various activities a master plan of action was drawn in order to:-

- (i) identify major pre-enumeration activities.
- (ii) estimate time periods within which such activities could be carried out.
- (iii) plan and marshall men and material for the Census.
- (iv) identify inter-relationships and inter-dependence between various activities and take cognizance of such relationships and dependency.
- (v) serve as a management tool to monitor the progress of the census operation.

This master plan is charted in Figure 1.2.

D. REVISION OF LISTS OF ADMINISTRATIVE SUB-DIVISIONS OF THE COUNTRY

One of the first operational activities of the census was the revision of the lists of administrative sub-divisions of the country. The largest administrative sub-division is the district of which there were 24 at the time of the census. Each district is further divided into AGA divisions. Each AGA division in turn consists of a number of Grama Sevaka (GS) divisions. The GS division is the smallest territorial unit for administrative purposes and a Grama Sevaka Niladhari (village officer) is in-charge of each such division.

Each GS division consists of one or more villages. Cities and towns, although located within AGA divisions are administered separately by local bodies. The extent and boundaries of these administrative sub-divisions have changed since the previous census and necessary revisions were done on the basis of gazette notifications which announce the changes of boundaries, creation of new divisions and enlargement of existing divisions, etc. This revision infact has been a continuous operation since the 1971 census. Approximately six months before the census, on a request by the Department of Census and Statistics, the Home Ministry suspended further changes in administrative boundaries until after the census. The list of villages, gramasevaka divisions, AGA divisions, wards, urban and municipal councils were prepared as at the time of this suspension to serve as a master frame in the demarcation of census blocks and in the enumeration process.

E. PRE-LISTING

The first major field operation of the census was the pre-listing at which enumeration areas designated as "Census Blocks" were delineated, and all housing units, living quarters other than housing units and non-housing units, were listed. Census blocks were formed within villages in rural areas or wards in urban areas so that non census block cut across the boundaries of a village or a ward or any other administrative division. The operational procedure used for delimiting census blocks are as follows. A pre-listing officer, who is assigned a ward (in urban areas) or a GS division (in rural areas), lists all the building units on pre-listing form 'F1' (See appendix D for specimen) starting from a convenient point and proceeding along roads, paths, lanes, or natural boundaries according to instructions. On listing a reasonable number of units and reaching a point at which a convenient demarcation can be made, the block of units is delineated as a census block. Starting with the next unit, a new block is similarly constructed. A block in urban areas could consist of about 100 units and a block in rural areas about 60 - 80 units. The listed units are serially numbered and this number known as the "Census Unit Number", is written on a Census Label and affixed at a prominent place of the unit such as the front door frame. Details of listing procedure can be seen in the Instruction Pamphlet IP 1 reproduced in Appendix E.

One pre-listing officer was assigned to each GS Division or ward except when the area concerned was exceptionally populous or extensive in area and required an additional officer. The pre-listing officer of a GS Division was usually the Gramsevaka, and of a ward an employee, usually a field officer, of the local authority to which it belongs. The listing process was supervised by a senior member of the technical staff of the Department of Census and Statistics under the auspices of the district and local government administration.

On the pre-listing form all buildings are listed and identified as belonging to one of 3 categories, namely housing units, living quarters other than housing units and non-housing units. For each listed unit the following particulars were entered on the listing form: the exact location of unit; a description of the unit as house, boutique, temple etc. name of chief occupant, number of persons usually spending the night in the unit; any industrial trade or business activity; the presence of an agricultural operator, and number of disabled persons if any. The collection of pre-listing forms served as the frame for the censuses of agriculture and industry and they form the sampling frame for all intercensal sample surveys.

The enumerator of a Census Block was provided with a copy of the pre-listing form of the block which he updated and used for the purposes of enumeration.

F. SAMPLING

Early in the planning stages a decision was made to employ sampling at various phases of the census. Sampling was used to canvass information on migration and housing. The sample consisted of all urban areas and a 1 in 10 systematic sample of census blocks in all rural areas. The urban sector was considered far too heterogeneous in the relevant characteristics to yield accurate results from a simple and practically feasible sampling design and therefore sampling was restricted to rural areas only.

In the data preparation stage, sampling was used to verify the accuracy of editing and coding. Finally, sampling was also employed for releasing advanced information. A ten percent sample of census schedules were first processed and the results were published in a series of preliminary releases.

Table 1.1 THE TOPICS INCLUDED IN THE POPULATION SCHEDULE AT THE CENSUSES IN SRI LANKA OF 1871 - 1971

The Topics included in the population schedule	1871	1881	1891	1901	1911	1921	1931	1946	1953	1963	1971	1981
<u>DEMOGRAPHIC AND PERSONAL CHARACTERISTICS</u>												
Name	X	X	X	X	X	X	X	XS	X	X	X	X
Relationship to head of family or household	X	X	X	-	-	-	-	X	X	X	X	X
Sex	X	X	X	X	X	X	X	X	X	X	X	X
Date of Birth	-	-	-	-	-	-	-	-	-	X	X	X
Age	X	X	X	X	X	X	X	X	X	X	X	X
Marital Status	X	-	-	X	X	X	X	X	XS	X	X	X
Ethnic group or nationality	X	X	X	X	X	X	X	X	X	X	X	X
Religion	X	X	X	X	X	X	X	X	X	X	X	X
Citizenship	-	-	-	-	-	-	-	-	X	X	X	X
<u>EDUCATIONAL CHARACTERISTICS</u>												
Abrility to speak Sinhala or Tamil	-	-	-	-	-	-	-	X	X	X	-	-
Abrility to speak English	-	-	-	-	X	X	X	X	X	X	-	-
Literacy	-	X	X	X	X	X	X	X	X	X	X	-
Literacy in English	-	-	-	X	X	X	X	X	X	X	-	-
Literacy in Tamil, Sinhala, English	-	-	-	-	-	-	-	-	-	-	-	X
Educational attainment	-	-	-	-	-	-	-	-	XS	X	X	X
School Attendance	-	-	-	-	-	-	-	-	-	-	X	X
<u>ECONOMIC CHARACTERISTICS</u>												
Type of activity	-	-	-	-	-	-	-	-	-	X	X	X
Principal occupation	X	X	X	X	X	X	X	X	XS	X	X	X
Subsidiary Occupation	-	-	-	X	X	X	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	X	X	X	X	X
Employment Status	-	-	-	-	-	-	-	X	X	X	X	X
Salary or wages (Income)	-	-	-	-	-	-	-	X	XS	-	-	-
Dependency (means of subsistence of earner on whom dependent)	-	-	-	X	X	X	X	X	X	-	-	-
Period for which unemployed	-	-	-	-	-	-	-	-	XS	-	X	-
Whether Sought work	-	-	-	-	-	-	-	-	-	-	-	X
Period of search for work	-	-	-	-	-	-	-	-	-	-	-	X
Reasons for not seeking work	-	-	-	-	-	-	-	-	-	-	-	X

Table 1.1. (Contd). THE TOPICS INCLUDED IN THE POPULATION SCHEDULE AT THE CENSUSES IN SRI LANKA OF 1871 - 1971

The topics included in the population schedule	1871	1881	1891	1901	1911	1921	1931	1946	1953	1963	1971	1981
<u>MIGRATION AND RESIDENCE INFORMATION</u>												
Place of Birth	X	-	X	X	X	X	X	X	X	X	XS	XS
Place of usual Residence	-	-	-	-	-	-	-	-	-	-	XS	XS
Duration of stay of rural residence	-	-	-	-	-	-	-	-	-	-	XS	XS
Place of Previous residence	-	-	-	-	-	-	-	-	-	-	XS	XS
Length of residence in Ceylon	-	-	-	-	-	-	-	X	X	-	-	-
<u>MARRIAGE AND FERTILITY</u>												
Date of marriage	-	-	-	-	-	-	-	X	XS	-	-	-
If previously married date of first marriage	-	-	-	-	-	-	-	X	XS	-	-	-
Age at first marriage	-	-	-	-	-	-	-	-	-	-	XS	-
Duration of first marriage	-	-	-	-	-	-	-	-	-	-	XS	-
If married more than once duration of subsequent marriages	-	-	-	-	-	-	-	-	-	-	XS	-
Age at birth of first child	-	-	-	-	-	-	-	X	XS	-	-	-
Number of children ever born	-	-	-	-	-	-	-	X	XS	-	XS	-
Number of children living	-	-	-	-	-	-	-	-	-	-	XS	-
Date of last live birth within past five years	-	-	-	-	-	-	-	-	-	-	XS	-
<u>OTHER TOPICS</u>												
Infirmity	X	X	X	X	X	X	-	X	X	X	-	X
Orphanhood	-	-	-	-	-	-	-	X	X	-	-	-
Distance from rural residence to place of work or school	-	-	-	-	-	-	-	-	-	-	-	X
Principal mode of travel to place of work or school	-	-	-	-	-	-	-	-	-	-	-	X

Note: X denotes that the information was canvassed from all persons

XS denotes that the information was canvassed from a sample only

- denotes that the information was not canvassed.

(1) At the 1931 census, detailed information was canvassed only within the Colombo Municipality only.

In the rest of the country only a head count was taken.

In the final tier, the trainers and supervisors trained the 67,000 strong army of enumerators in their respective AGA divisions. The training classes were held, as far as possible in locations within GS divisions or urban areas assigned to the enumerators attending the classes. The main emphasis of training was on the updating of listing forms, procedures of enumeration, and instructions for filling in the census schedules. The training was based on a Manual titled "A Guide to Training of Enumerators" which was designed to be used verbatim so that training would be standardized. The enumerators were provided with an Instruction Manual for Enumerators. (see Appendix G).

Special instruction classes were held for Special Enumerators, and the Outdoor Enumerators. In addition to training the enumerators, to ensure correct returns of census schedules, the householders were issued with a pamphlet titled "Notes for the Guidance of Chief Occupants and Persons in Charge of Institutions".

I. ENUMERATION PROCEDURES

In Sri Lanka censuses, the method of enumeration has traditionally been "de-facto": persons were enumerated at the place they were actually found on the census night. Enumeration is usually carried out in two phases - the preliminary census and the final census.

In 1981, the preliminary census was carried out during the period 1.3.81 to 10.3.81. During this period, the enumerators updated the lists of housing units and other building units in their respective blocks, and filled in a census schedule for each unit in respect of all persons likely to be in the unit on the final census night.

On the final census night of 17 March 1981, between 6 p.m. and 12 midnight the enumerators visited all units and verified the entries made in the census schedules filled in during the preliminary census. Persons entered in a schedule of a particular dwelling place but not found there at the time of the enumerator's visit were deleted from the schedule. On the other hand, any person not recorded on the schedule but present in the unit was enumerated on the schedule for that unit.

Special arrangements were made to enumerate people staying outdoors on the final census night. For this purpose, out door enumerators were posted in all public places, like airports, railway stations, bus stands, police stations etc. Persons in institutions were enumerated by a person holding a managerial or similar position in the institution. Special procedures were also adopted to enumerate the estate population. The Superintendents of estates filled in the census schedules with respect to all residents of their respective estates.

On completion of enumeration, enumerators prepared summary statements giving total numbers of population by broad age groups and returned them to their Supervisors. The Supervisors after verification of schedules prepared summary statements for census circles and returned them to the Assistant Commissioners who in turn forwarded all returns and summaries for respective areas to the commissioners. Commissioners forwarded the census schedules in respect of the districts and urban areas to the Head Quarters in Colombo.

J. PUBLICITY

The importance of a national publicity programme well in advance of the census date was recognised at the early stages of planning. Several months before the full census enumeration began in March 1981, an islandwide publicity programme was launched and the programme was progressively strengthened as the census date approached. This publicity campaign was extensive in coverage and intensive in approach than any previous such census publicity campaign. The programme was designed with two main objectives. One was to make the public aware of the census

taking and its benefits to the country and the people. The second objective was to enlist the co-operation of the residents during the preliminary and the final enumerations by staying indoors at their usual residences and by providing the information required. The President of Sri Lanka made two appeals to the public. One appeal was to assist the census officers in their difficult task by promptly and accurately furnishing the information required by the census officers during the preliminary census. The other appeal was for the people to stay indoors for the final census count on 17th March 1981 between 6.00 p.m. and 12 midnight.

Media of newspapers, radio, television and cinema were utilized to relay short announcements and detailed informative messages about the census. Especially, the press and the radio played a major role in the census publicity campaign. The national papers carried a series of news items and articles drawing attention to the important events of the census proceedings. Special press advertisements and spot announcements on the radio were made to keep the public aware of the census dates. Apart from the frequent messages broadcast over the radio, there were a number of radio discussions directed towards educating the public on the need for and the benefits resulting from a census.

The medium of cinema was used to draw public attention to the census. Slides were shown in most of the cinema halls giving information on preliminary census dates and the date and time of the final census count. The short film titled "Census and you" which was an epitome of the census history, census taking, tabulation activities, the users and uses of census data was a very effective piece of publicity.

Among the other components of the publicity programme a special feature was the issue of a Commemorative Stamp and a first day cover, facimilae of which are shown in Appendix K. Posters with simple and appealing messages displayed at public places and in the public transportation system, drew constant attention of the public to the on coming event.

When the final enumeration was completed, a "missed persons" campaign was conducted, urging persons to notify the local census office if they were not enumerated on the final census night.

The visible impact of the publicity programme was articulated by the Superintendent of Census in a press release, which stated that "Mixed with a sense of relief is a feeling of gratitude to the people of Sri Lanka whose good sense, good citizenship and splendid co-operation were amply shown at dusk on the 17th of March when an unusual silence fell through-out the country. It should be a matter of pride to every one that such high level of co-operation was achieved by persuasion and not by compulsion".

K. DATA PROCESSING

Processing of all census schedules was carried out in the head office. In order to make available advanced tabulations to data users as early as possible, a 10 percent sample was first processed. Data processing consisted of two major phases.

1. Manual Editing and Coding
2. Computer processing.

Manual editing was confined to the following few simple checks.

1. Ensuring that area identification codes were inserted.
2. Ensuring that age was recorded and if not imputing an age.
3. Ensuring that district of birth and district of previous residence have been coded by the enumerator.

Coding was required only in respect of three questions, namely educational attainment, occupation and industry. A staff of 50 census coders recruited and trained for the purpose were assigned to complete the coding of census schedules under the supervision of senior Statistical Officers and the direction of a Senior Statistician of the Department. Initial coding was verified on a 100 percent basis, but when the error rate reached marginal levels, verification was restricted to a 10 percent sample and later to a 1 percent sample.

A series of edit checks were carried out on the computer and records containing errors were printed out for manual corrections. Error records were corrected under standard instructions sometimes by checking against original schedules. Corrected records were re-entered and passed through the edit checks and error records were printed out once again for manual correction. The process was repeated until the error rate was less than 2.5 percent.

L DISSEMINATION OF CENSUS DATA

Keeping up with tradition, on the 3rd day after the final census the Department of Census and Statistics released the total provisional population enumerated in the country and in each of the 24 administrative districts. The early release of these provisional figures was made possible through a system of aggregation of population counts from census blocks, in steps through villages, G.S. Divisions/wards, A.G.A. Divisions/M.C./U.C./T.Cs: up to districts. Each enumerator prepared a summary for his census block. The census block summaries giving total population by sex and broad age groups were aggregated to census circle level by supervisors and passed on to the Grama Sevaka for aggregation to the Grama Sevaka Division. This process of cumulation was continued up the hierarchy of levels until a district summary was prepared at the Kachcheri under the supervision of the Census Commissioner. These were relayed to the Head Office where aggregation was completed for the whole country.

The first publication of census was released 3 months after the census. Population classified by major ethnic and religious groups and also by two categories of age, under 18 years and 18 years and over, were released as a handy booklet titled "Preliminary Release No. 1". This publication was extensively used and was in great demand in the subsequent years. The other census publications and available data are listed below.

1. Population Tables based on 10 percent Sample - Preliminary Release No. 2

This publication carried inflated 10 percent sample tables showing age, sex, marital status, education, literacy, school attendance and educational attainment for the whole country and for the districts and a few additional tables on place of birth and usual residence for the whole country.

2. Housing Tables based on a 10 percent Sample - Preliminary Release No. 3

This publication carried all the tabulations on housing characteristics from the 10% Sample. All tables were given for the whole country and some for districts.

3. Economically Active Population - Preliminary Release No. 4

Tables based on 10 percent sample. This contained inflated 10 percent sample tabulations relating to activity, employment status, occupation and industry for the whole country and also for districts where possible.

4. Statistics on Physically Disabled Persons

This publication gave tabulations of characteristics of the disabled persons.

5. District Reports

A volume of 24 parts, this series carried detailed tabulations based on 100 percent data, except those related to migration, for each district. Figures in these reports superseded those given in Preliminary Releases Nos. 1, 2, 3 & 4.

6. Basic Population Data for Small Areas

Population classified by broad age groups, ethnic group, literacy, major occupation group, are given for AGA Divisions and urban areas. Other information for these and smaller areas are available for users in computer printouts, and on computer tape.

7. All Island Population Tables

Tables based on 100 percent processing of census data for Sri Lanka on all population topics except migration are included in this report.

8. Migration

This publication carries census tabulations related to place of usual residence, previous residence and place of birth for all twenty-four districts.

9. Housing

This report carries final tables on all housing topics at national and district level.

M. UNITED NATIONS ASSISTANCE TO THE CENSUS

The United Nations fund for population activities generously assisted the implementation of the 1981 census of population and housing in Sri Lanka. A major component of assistance was the provision of an IBM 4331 Computer system. (An account of equipment received is given in Appendix L.

The assistance programme also provided cartographic equipment to set up a cartography unit within the census division of the Department. The unit could not be developed early enough for the preparation of census enumeration maps since it was a heavy undertaking requiring installation of heavy equipment, long term technical training of the staff and building up experience. The unit, however, gradually established itself and is serving a wide range of departmental activities and has prepared all the maps and figures for this publication.

Yet, another major UNFPA contribution is the provision of several fellowships to senior technical staff in order to better equip them to implement the various stages of the census.

Finally, the UNFPA financed a two day workshop on the findings of the 1981 census as presented in a draft version of the General Report. Senior Officers from Government and non-government organisations concerned with population participated at this work-shop, which could be considered a successful venture in data dissemination and exchange of views on census data.