

第三章 今後の協力計画

第一節 専門家の派遣

専門家の派遣については、本プロジェクトが研究、教育プロジェクトであることから、リーダーとコーディネーターの他に、研究教育の指針作りを行なう教授・助教授を短期専門家として派遣し、実際に指導する専門家として助手クラスの長期派遣を行なうこととする。R/Dに明記されている6分野のうち常に2～3分野について対応することとし、5年間の協力の中で各分野2～3年間専門家を派遣することとする。

初年度長期派遣専門家については、調整員の他、作物学、育種学、植物病理学の三分野とする。他に2～3分野について教授クラスの派遣を行ない今後のプロジェクト研究内容を策定する。

リーダーの派遣は、候補者が昭和61年3月に退官予定であり、61年7月ごろの着任を予定するが、それまでの間は、対外的には調整員がリーダー代行を行なうこととし、研究的には、助手クラスの長期派遣にあわせ短期派遣を行ない研究の統括を行なう。

又、USAID専門家の着任が予定されている61年1月ごろにも可能な限り、日本からリーダー又は教授クラスの短期派遣を行ない、両援助国専門家グループの調整を行なうこととする。

2年度以降の専門家派遣予定については61年3月までに国内支援委員会等で決定し61年度派遣される計画打合せ調査団訪バ時にバ側とつめることになる。

第二節 研修員の受け入れ

初年度は、プロジェクト全体の運営、バ国農業研究開発における本プロジェクトのあり方、JICAのシステム、本件協力機関である九州大学の研究手法等についての意見交換、視察のため、プロジェクトヘッドであるDr. M. M. Rahman (D.G. BARI) 及び Dr. Khan (Director IPSA) を視察研修員として1～2週間受け入れることが望ましい。

2年目以降は、技術研修員として半年から1年間の研修を行なうこととし、毎年3名程度の受け入れを予定している。博士学位既得者については、共同研究的な高度な研修を行なうものとし、未取得者については将来論文博士の取得につながり得るような研修を行なうことも興味深いと考えられる。

研修員の受け入れについてはUSAIDも予定しており、候補者の選定にあたっては十分に日米バ関係者の間で協議を行なう必要がある。

第三節 機材の供与

車両、事務機器、農業機械、各種研究機器及び、オーディオビジュアル機材を供与することになるが、初年度は、車両、電子顕微鏡の他初年度専門家派遣分野の機材を中心に供与することとする。現地における電源は400V 3相及び230V単相であり、機材によって仕様をつめる必要がある他、電圧が不安定であること、停電がしばしばあることから、発電機の供与も効果的である。その他のエネルギー源としては天然ガスが豊富かつ安価で、安定的に供給されているので利用を図るのが望ましい。

書籍、雑誌の供与に関しては、USAIDからも多少の雑誌供与が予定されており、専門家着任後、すりあわせの上決定することとする。又2年以降の供与機材の細目については今回の調査団では決定を見なかったため、専門家着任次第バ側の協議し案を作成する必要がある。

輸入にあたっては、品目により50%~200%の関税が課せられることがあり、過去の当国に対するプロジェクトにおいては、予算がないため供与された機材が港で雨ざらしとなることが日常的に見られた。今回のプロジェクトにおいては、本報告書第二章第二節でもふれられている通り、機材の無税通関を強く要望し、教育機材については無税通関させるよう努力する旨農業省関係者より約束を得た。無税通関の推進及び課税分にかかる予算の手当等、バ側の努力によるところが大きいと考えられるが、日本側も輸送時に課税品と非課税品を別梱包にしたり、インボイスを事前に送付するなど、農業省と協力して、すみやかに機材がプロジェクトサイトに到着するよう努力が必要である。

第四節 計画打合せ調査団の派遣

IPSAが新設の組織であるため、組織の未整備、教官の不足のため、本調査団派遣時には具体的な研究課題を含めた暫定実施計画の策定には至らなかった。プロジェクトの効率的運営には実施計画の決定が不可欠であり、専門家が着任次第計画策定を開始すると同時に、61年度できるだけ早い時期に計画打合せのための調査団を派遣し、バ側と協議の上、決定する必要がある。

附 録

1. B A U 視察記
2. 実施設計調査以降の I P S A の動き
3. プロジェクト実施計画案 (バ国内部資料)
4. 機材無税輸入に関するバ国法規写し
5. Bangladesh in Map

1. BAU 視察記

BAU の視察は、7 月 3 日、宮島団長、岸川、坂田、宮下団員の 4 名で行われた。

BAU は、1961 年、USA の援助により発足した大学である。学部は獣医、畜産、農学、農業経済・農村社会、農業工学、水産の 6 学部を有し、さらに各学部に大学院の修士課程及び博士課程が設置されている。この中、IPSA の affiliation と直接関係がある農学部は、栽培学、土壌学、植物病理学、昆虫学、園芸学、作物学、遺伝及び畜種学、農芸化学、生化学、農業普及、さらに一般教養部門として、数学、物理学、化学、植物学、動物学の計 15 の Department で構成されている。

BAU 訪問に際し、当初予定されていた農学部の Teaching staff との meeting は時間の都合で行われず、また時間の制約もあってすべての Department の内容についての調査も出来なかった。ただ、面会に応じた植物病理学の Dr. Ashrat Ali Khan (Director, BAU Research system) の案内で、その研究室、昆虫学 (Dr. Bhuiyan N. Islam)、土壌学、遺伝及び畜種学の各研究室を歴訪した。学生は大学の閉鎖のため不在であった。

BAU の創立当初に獣医・畜産学部のみで出発したため、畜産学部が最も充実しているとか、さらには BAU の Vice Chancellor が水産学専攻なので水産学部の充実が大いに力を入れていると聞く。農学部では、前記 4 つの Department の各研究室を視察した限りにおいては (他の Department も同様であると推察されるが)、研究設備や機器類はきわめて貧弱であり、その使用、保守や更新に問題があるようで、それ故にまた研究機能はきわめて低いように見受けられた。遺伝及び畜種学研究室の staff の一人は、いわゆるバイオテクノロジーの研究に関心を持っているようであったが、現状ではそのような精密で高度な技術が要求される研究はきわめて困難か、不可能であると考えられる。これらは BAU 援助計画の不備の一端を示すものである。実際に BAU に対する USA の協力は数年間で中断され、現在はその組織的な援助は行われていない。このことから日本の IPSA 援助計画の実施に当っては、前者の徹を踏まないよう万全の対策をとることが肝要と考えられる。一方、BAU と IPSA との間の問題ではあるが、IPSA が日本の協力援助により有能な Teaching staff の養成、及び研究設備、機器類、施設等の充実が完成すれば、BAU のレベルをはるかに上廻ることは必至で、その時、両者の間に competition あるいは friction が生じないとも限らないと推察される。

次いで研究棟を出て、車でキャンパス内を一巡した。そこには、1200 エーカーに及ぶよく整備された広大な緑地帯が展開していた。日本の大学ではとうてい考えられないことである。約 700 エーカーが農学部の圃場になっていて、主として栽培学、園芸学、遺伝及び畜種学の 3 部門が管理しており、それぞれに field laboratory が建てられていた。研究室内の機材の不備とは対称的に、field research にはかなり期待が持てるということが出来

よう。また、水産学部が管理する施設も広々としてよく整備されていた。さらに放射線あるいは放射性同位元素利用の研究施設も設置されていた。

2. 実施設計調査（昭和60年1月）以降のIPSAの動き

IPSAの現地調査は、日程に記されているように2回行い、1) 前回の調査以後の双方の経過の説明、2) 今回の調査団の派遣目的の説明、3) 今後の協力スケジュールの打合せ、4) IPSAが希望する機材の聴取、5) IPSAの現有建物、機材の視察などがその内容であった。

IPSAでは、本年に入って、次のように教官の移動があった。

新任

Dept. of Horticulture

Dr. A. Rahman Choudhury

Associate Professor

M. Sc. (Ag.) (BAU, 1972); Ph. D. (U. K., 1981)

Dept. of Plant Pathology

Dr. Md. Ismail H. Mian

Assistant Professor

M. Sc. (Ag.) (BAU, 1982); Ph. D. (USA, 1982)

Dept. of Biometry

Mr. Khandakar Saifuddin Ahmed

Assistant Professor

M. Sc. (Statistics) (Chittagong University)

転出

Deptt. of Biometry

Mr. M. Altaf Hossain

Assistant Professor

転出先 Wheat Research Centre

在学中の学生の多くは、修士論文作成のための実験を終って、論文作成に入っていた。しかし、BAUでは7月1日解除の予定であった大学の閉鎖が延期され、このため、IPSAの修士課程に在学する学生の卒業試験と学位授与、並びに本年の新入学生の受入れがいつになるかは定かでないのが現況である。

IPSAに対する協力の内容、スケジュールについては、当方の計画が説明され、IPSA教官の同意を得た。ただし、専門家、とくに長期専門家について、その派遣決定に当たっては、専門領域、経歴を提示し、双方で協議を行うことを前提としてほしい旨の要望があった。

3. プロジェクト実施計画案 (バ国内部資料)

PRELIMINARY PROJECT PROFCRMA (PPP)

1. Project Title: Strengthening of Institute of Postgraduate Studies in Agriculture (IPSA). (Formerly, Bangladesh College of Agricultural Sciences, BCAS).

2. Proposed implementing authorities:

(a) Sponsoring Ministry/Division : Agriculture & Forest Division,
Ministry of Agriculture.

(b) Executing Agency : Institute of Postgraduate Studies
in Agriculture (IPSA), Bangladesh
Agricultural Research Institute
(BARI)

3. Estimated capital cost (in lakh taka)

(a) Total Taka : 1,411.00

(b) FEC-Taka 906.00
(Govt of Japan)

4. Annual recurring expenditure (in lakh taka)

Total	FEC	Local (taka)
157.80	78.80	79.00

Proposed mode of financing
(i.e. whether GOB or other
agencies or both will provide
local financing)

: Both GOB and Govt. of Japan

5. Implementing period : 5 (five) years beginning from July 1985.

6. How the proposed capital investment is proposed to be recovered
or be otherwise useful to the organization, sector or the economy:

The project being an academic institution, it is hard to assess directly the outcome in quantitative terms. However, it is envisaged that out turn of about 100 M.Sc.(Ag.)/Ph.D. graduates every year will be an important input for the agricultural organizations in general. These graduates will contribute greatly towards the agricultural production in the country.

7. Whether the project is included in:

(a) Five Year Plan : Yes in Second Five Year Plan as
Bangladesh College of Agricultural
Sciences (BCAS), Salna.

(b) ADP : Yes

8. Major items of work:	Cost in lakh Taka		
	Local	FEC	Total
1. Technical Assistance			
a. Land compensation (aquisition of pocket lands)	70.00	-	70.00
b. Farm infrastructure development	-	100.00	100.00
c. construction of peripheral drainage and internal road communication	20.00	-	20.00
d. Conversion of ground floor of class room building into five additional laboratories	-	10.00	10.00
e. Procurement of laboratory equipment, glass wares, chemicals, vehicles, office equipment and machinery	10.00	500.00	510.00
f. books and journals	10.00	50.00	60.00
g. salaries & contingencies etc.	270.00	194.00	464.00
h. Training	15.00	150.00	165.00
i. CDST	100.00	-	100.00
2. Grant Assistance:			
Construction of field laboratories, threshing floors, farm house, godown, central stores, garrage, staff housing, etc.	305.00	296.00	306.00

9. External Assistance
- (a) Expected project Aid : (in lakh Taka)
- Technical Assistance : 1,004.00
- Grant Assistance : 296.00
- (b) Expected Reimbursible Portion of Project Aid : 296.00
10. (a) Whether any preliminary/ exploratory discussion with any aid donor has taken place : Yes
- (b) If yes, with whom and with What results : With Govt. of Japan. Govt. Japan has Shown interest in assisting the form of Technical Assistance and Grant in Aid.
11. Whether any feasibility study conducted : Does not arise.
- If yes, please indicate the date of such study and the organisation/ firm which has done the study:
12. Whether any consultants have engaged for the project : No.
- But Japanese Govt. has been sending some terms/ missions to establish/ ascertain the technical aid need of IPSA.
- If Yes, please indicate the cost and man-months of such experts:
13. (a) Whether any cost has already been incurred for the scheme : Does not arise.
- (b) Please state source of financing for expenditure incurred : Does not arise
14. Whether existing manpower of the Executing agency will execute the project or additional manpower will be required. In case of additional manpower requirement, indicate details with cost. : No additional manpower has been requested. However, rearrangement in the staffing pattern will be needed (shown in annexure)
15. Reasons for non-submission of the usual PP now : Regular PP is still being prepared. But donor agency requires request immediately to process at their end.

16. Date by which formal PP will be submitted to the Planning Commission : Before March '85.
17. Brief description of the project indicating objectives, priority and links with sectoral and/or national plans and programmes

Project objectives:

To impart training to postgraduate students leading to MS and Ph D degrees through fundamental and applied research in the various disciplines of Agriculture, organize short courses for research scientists and extension personnel and conduct basic research to the extent required for backstopping applied research of various crop research institutes.

Justification:

Higher education in agriculture was initiated in Bangladesh with the establishment of the then Bengal Agricultural Institute (BAI) at Dhaka in 1938. Till 1961, BAI was the sole educational institution offering BS degree in Agriculture in Bangladesh. In view of increased demand for agricultural education, Bangladesh Agricultural University was established in Mymensingh in 1961. Major thrust of BAI and BAU has been undergraduate studies although provision for higher education leading to MS degrees had been created to cater to such needs. BAI started postgraduate studies in agriculture leading to M.Ag. in the early fifties while BAU started the postgraduate program with its own graduates in 1966. However, for various reasons, the program never gained confidence enough to attract students for degrees beyond M.Sc. Ag. Higher education leading to MS or PHD in the various fields of agriculture, therefore, stagnated.

There is a shortage of MS and PHD level trained manpower to implement the various agricultural research and educational programs of the country. Bangladesh is depending mostly on foreign donors for postgraduate studies/training in agriculture requiring substantial financial involvement. Moreover, commitments towards such support are also uncertain.

Agricultural production principles and problems are location specific. Higher training, particularly at postgraduate level in developed countries with dissimilar climate, crops, and management factors frequently turn out to be less than effective and without any direct bearing on Bangladesh problems. In country MS and PHD programs, therefore, can benefit us on both these counts. Complexities in agricultural production processes and rapid expansion of national agricultural research capabilities in Bangladesh during the past few years accentuated the need for such highly trained technical manpower.

The IPSA now offers graduate courses in seven departments viz. Agronomy, crop Botany, Entomology, Genetics and Plant Breeding, Horticulture, Plant Pathology and Soil Science. Similar programs are being planned for Agricultural Extension. A batch of 40 M. Sc. (Ag.) students in various fields of agriculture, Originally enrolled in BAI but later on transferred to IPSA, have just completed their final examinations. Regular classes of the second batch of 84 students for 1982-83 academic session started on September 17, 1984.

In addition to trained MS and PHD level students, IPSA will conduct fundamental research aiming at strengthening the applied research activities of BARI, BRRI and other similar organizations as feed-back mechanism. It will also conduct specialized training programs for research and extension personnel.

The Institute owns about 80 hectares of land for establishing experimental farm and residential, dormitory and other ancillary facilities. The land has been cleared from forest and it will take time and effort to build it into an experimental farm. However, till it is ready for experimentation, the facilities in BARI and BRRI can be utilized for the purpose of graduate students and faculty. The laboratory space is highly inadequate for changed situation. For running the graduate program effectively laboratory facilities need to be expended and well equipped. Likewise, greenhouse and glasshouse facilities for controlled environment studies will have to be created.

A technical assistance program was being considered by the Japan Government based on undergraduate requirements mainly. In view of the change in the emphasis and objectives of the project, it is now desirable that the entire project be reviewed and the requirements be modified and or extended as needed. The original project plan contains serious gaps and omissions

especially in view of new developments. It is therefore essential that necessary facilities in the form of expert services, physical facilities and manpower development are provided to enable the IPSA to serve its purpose fully.

It may be mentioned here that the Japanese Government has shown keen interest in providing IPSA with all necessary technical aid. Several high powered Japanese Missions visited IPSA during the past year and assessed the quality and quantum of assistance needed for the IPSA. A formal Record of discussion to this effect between the Governments of Bangladesh and Japan is expected to be signed towards the end of June, 1985.

The project should receive top priority. The project aims to produce quality manpower to strengthen agricultural research and education sector. Currently huge amounts of money is being spent for producing M.S. and Ph.D. level graduates from abroad which can be saved substantially if the IPSA is implemented fully. On the otherhand the research works conducted by the graduate students in IPSA will have direct bearing on the technology being generated in our agroecological and socio-economic context.

Annexure:

Departmentwise existing and projected academic staff for IPSA

Department	Agric	Extn	Agronomy	Crop	Det	Entomology	Genet & PB	Horticult	Plt Pathol	Soil Sc	Statistics	
											E	P
Professor	x	x	x	1	x	x	1	x	1	x	1	x
Assoc Professor	1	1	1	2	1	2	1	2	1	2	1	1
Asstt Professor	1	2	2	1	2	1	2	2	1	2	1	1
Lecturer	1	x	2	x	1	x	2	x	1	x	2	x

Department	Position	Agric Econ		Agric Engg		Total	
		E	P	E	P	E	P
Professor		x	x	x	x	x	6
Assoc Professor		1	x	1	x	11	15
Asstt Professor		1	x	1	x	11	15
Lecturer		1	x	1	x	14	xx

+ E = existing
 ++P = projected

Working Paper on IPSA

1. Name of the Project :
Strengthening of the Institute of Postgraduate Studies in Agriculture (IPSA) (formerly, Bangladesh College of Agricultural Sciences), Salna, Gazipur.
2. Proposed implementing Authorities :
 - (a) Sponsoring Ministry/Division : Agriculture and Forest Division,
Ministry of Agriculture
 - (b) Executing Agency : Institute of Postgraduate Studies in Agriculture (IPSA)
Bangladesh Agricultural Research Institute (BARI)
3. Implementation period : July 1985 to June 1990.
4. Objectives of the Project :
 - (i) to impart postgraduate studies leading to M.S. and Ph.D. degrees through research and class room Lectures in various disciplines in agriculture ;
 - (ii) to carry out research of fundamental nature in aiding applied research programs of agricultural research organizations of the country ; and
 - (iii) to organize in-service training courses for the research and extension personnel in order to improve their professional skill and efficiency.
5. Major items of works:
Construction of farm infrastructure, field laboratories, farm house, staff housing, conversion of class rooms into four laboratories, peripheral drainage, procurements, of equipment and development of experimental facilities.

6. Total cost of the project: Tk. 2200.00 lakh.

Items	Cost in lakh taka		Total
	local	FEC	
A. Technical Assistance (being negotiated with Govt. of Japan)			
1. Capital expenses:			
a. acquisition of pocket land, farm infrastructure development including irrigation facilities.	70.00	100.00	170.00
b. Construction works: Conversion of ground floor of class room building into four laboratories.	20.00	10.00	30.00
c. laboratory equipment, glass-wares, chemicals, machinery, office equipment, and vehicles.	10.00	500.00	510.00
d. CDST	100.00	-	100.00
sub total :	<u>200.00</u>	<u>610.00</u>	<u>810.00</u>
2. Operating cost			
a. salaries, TA/DA etc for employees, and expatriate scientists	180.00	194.00	374.00
b. Contingencies	150.00	-	150.00
c. books & journals	10.00	50.00	60.00
d. Oil, fuel, gas & electricity	40.00	-	40.00
e. Training	15.00	150.00	165.00
sub-total :	<u>395.00</u>	<u>394.00</u>	<u>789.00</u>
B. Grant Assistance (being negotiated with the Govt. of Japan)			
Establishment of field labs., construction of threshing floor, godown, construction of farm house, stores, staff housing and garrage.	305.00	296.00	601.00
Grand Total	900.00	1,300.00	2200.00

7. Consultancy: Total 258 man months

Field of specialization	No. of experts	Tenure (man months)	Terms	Year of beginning.
Team Leader	1	48	Long term	First yr.
Coordinator	1	54	Long term	First yr.
Agronomy (preferrably soil-plant water relationships)	1	24	3-6months 3 visits/yr.	First yr.
Plant Bredding	1	24	"	"
Plant Pathology	1	24	"	"
Horticulture	1	12	"	Third yr.
Soil Science	1	24	"	Third yr.
Entomology	1	12	"	"
Farm Development	1	6	Short term	One visit First yr.
Farm Machinery	1	3	Short term 2 visits	First yr. & Final yr.
Irrigation Engineering	1	3	1 visit	
Tissue culture	1	6	1 visit	
Farm Management	1	3	2 visits	
Plant Physiology	1	6	1 visit	
Plant taxonomy	1	3	1 visit	
Computer systems	1	6	2 visits	2nd yr. & fifth year.

8. Background of the Project:

Demand for higher education in agriculture has been increasing. Agril. research system in Bangladesh has been reorganized and expanded considerably in the past decade. However, objectives of these institutions can be achieved by the efficient utilization of research facilities so developed through the qualitative improvement of the researchers. Likewise the need for highly trained technical manpower in agricultural extension department can not be overemphasized. As the production technology improves, academic standard and professional efficiency of the extension personnel also need to be improved.

P.T.O.

But the pace of progress in agricultural education, particularly higher education, is slow and as a result, annual out-turn at the Postgraduate level is much lower compared to the actual requirements. Currently there is a shortage of M.S. and Ph.D. trained manpower to implement various agricultural research, education and extension programs of the country. Bangladesh is dependent mostly on foreign donors for postgraduate studies/training in agriculture requiring substantial financial involvement. However, commitments towards such support are also uncertain.

Previously it was assessed that the requirement of B.S. level graduates in agriculture has been about 500 per year and it was realized that the outturn of agricultural graduates (at BS level) should be increased by about 100 per year to meet this requirement. Against this background, the Bangladesh College of Agricultural Sciences (BCAS), Salna, was established in 1983 under Japanese Grant Assistance Program aiming to impart education both at undergraduate and postgraduate levels. With the establishment of second Agricultural College at Dumki, Patuakhali, and dwindling job opportunities for the B.S. level graduates on the one hand, and the increasing demand for M.S. and Ph.D. level trained manpower on the other, a joint meeting of BARC, BARI, BAU and Ministry of Agriculture was held wherein it was decided that the academic program of the BCAS be restricted to the postgraduate level only. With the change in objective, the BCAS was subsequently renamed as the Institute of Postgraduate Studies in Agriculture (IPSA). The organizational set up of IPSA has been approved by the Martial Law Committee and affiliation accorded by the BAU. Currently there are 84 students doing their M.Sc. (Ag) in various disciplines in agriculture.

In addition to imparting postgraduate courses (M.S. and Ph.D.), IPISA has been entrusted with conducting fundamental research aiming to strengthening applied research activities of BARI, BRRI and other similar organizations as feed back mechanism. IPISA is also conducting specialized training programs for research and extension personnel.

The former BCAS project was implemented based mainly on undergraduate requirements. In view of the change in emphasis and objective of the project, it is now imperative that the entire project be reviewed and modified in order to cater to the requirements of postgraduate teaching and fundamental research in agriculture. A Japanese Technical and Grant Assistance Program for the IPISA is being considered. Several Japanese Missions have already visited Bangladesh and studied the quantum of technical assistance needs for the IPISA in the form of expert services, laboratory physical facilities, manpower improvement and experimental farm development and related physical facilities for successful postgraduate experimentation and research.

4. 機材無税輸入に関するバ国法規写し

APPENDIX XII
MINISTRY OF FINANCE
(Customs)

NOTIFICATION

Islamabad, the 10th March, 1969

*S.R.O. 42(R)/69—In exercise of the powers conferred by section 23 of the Sea Customs Act, 1878 (VIII of 1878), and section 7 of the Sales Tax Act, 1951 (III of 1951), the Government is pleased to exempt such of the materials listed in Annexes 1 to 5 to this notification as are the products or manufactures of, and are imported from, a country signatory to the UNESCO Agreement from the whole of the Customs duties and Sales Tax leviable thereon, subject to the conditions laid down in the Annexes and to the further condition that the importer of any such material desiring to avail himself of this exemption makes a written application in that behalf to the Customs-Collector.

This notification supersedes the late Ministry of Finance (Revenue Division) notification Nos S.R.O. 996(K), dated the 2nd August, 1960 and S.R.O. 979(K), dated the 6th August, 1960.

(As adapted in Bangladesh.)

(ABID HUSAIN)
Joint Secretary

BOOKS, PUBLICATIONS AND DOCUMENTS

Annex I

- (i) Printed books
- (ii) Newspapers and periodicals.
- (iii) Books and documents produced by duplicating processes other than printing.
- (iv) Official government publications, that is, official, parliamentary and administrative documents published in their country of origin.
- (v) Travel posters and travel literature (pamphlets, guides, timetables, leaflets and similar publications), whether illustrated or not including those published by private commercial enterprises, whose purpose is to stimulate travel outside the country of importation.
- (vi) Publications whose purpose is to stimulate study outside the country of importation.
- (vii) Manuscripts, including typescripts.
- (viii) Catalogues of books and publications, being books and publications offered for sale by publishers or booksellers established outside the country of importation.
- (ix) Catalogues of films, recordings or other visual and auditory material of an educational, scientific or cultural character, being catalogues issued by or on behalf of the United Nations or any of its Specialized Agencies.
- (x) Music in manuscript or printed form, or reproduced by duplicating processes other than printing.
- (xi) Geographical, hydrographical or astronomical maps and charts.
- (xii) Architectural, industrial or engineering plans and designs, and reproductions thereof, intended for study in scientific establishment or educational institutions approved by the Ministry of Education if it is an established other than a University.

*As amended by :

- (1) S.R.O. 269(1)/70 dated the 5th November, 1970.
- (2) S.R.O. 83-L/80/532/, dated, the 14th March, 1980.

The exemptions provided by this Annex shall not apply to:---

- (a) Stationery ;
- (b) Books, publications and documents (except catalogues, travel posters and travel literature referred to above) published by or for a private commercial enterprise essentially for advertising purposes.
- (c) Newspapers and periodicals in which the advertising matter is in excess of 70 per cent. by space:
 - 1 other items (except catalogues referred to above) in which the advertising matter is in excess of 25 per cent. by space (in the case of travel posters and literature, this percentage shall apply to private commercial advertising matter).

Annex 2

WORKS OF ART AND COLLECTORS' PIECES OF AN EDUCATIONAL, SCIENTIFIC OR CULTURAL CHARACTER.

- (i) Paintings and drawings, including copies, executed entirely by hand, but excluding manufactured decorated wares.
- (ii) Hand-printed impressions, produced from hand-engraved or hand-etched blocks, plates or other material, and signed and numbered by the artist.
- (iii) Original works of art, of statuary or sculpture, whether in the round, in relief, or in intaglio excluding mass-produced reproductions and works of conventional craftsmanship of a commercial character.
- (iv) Collectors' pieces and objects of art consigned to public galleries, museums and other public institutions, approved by the Ministry of Education and intended for public exhibition and not for sale.
- (v) Collections and collectors' pieces in such scientific fields as anatomy, zoology, botany, mineralogy, palaeontology, archaeology and ethnography not intended for resale.
- (vi) Antiques, being articles in excess of 100 years of age.

Annex 3

VISUAL AND AUDITORY MATERIALS OF AN EDUCATIONAL, SCIENTIFIC OR CULTURAL CHARACTER.

- (i) Films, filmstrips, microfilms and slides of an educational, scientific, or cultural character imported by an educational, scientific or cultural institution or society approved by the Central Ministry of Education or a Provincial Education Department and certified by that Ministry or Department as being of an educational, scientific or cultural character.
- (ii) Newsreels (with or without sound track), depicting events of current news value at the time of importation, and imported in either negative form, exposed and developed, or positive form, printed and developed, by the Ministry for Information and Broadcasting or its nominee.
- (iii) Sound recording of an educational, scientific or cultural character for use exclusively in public or private educational, scientific or cultural institutions or societies approved by the Ministry of Education and certified by that Ministry as being of educational, scientific or cultural character.
- (iv) Films, filmstrips, microfilms and sound recordings of an educational, scientific or cultural character produced by the United Nations or any of its Specialized Agencies.
- (v) Patterns models and wall charts for use exclusively for demonstrating and teaching purposes in public or private educational, scientific or cultural institutions approved by the Ministry of Education

SCIENTIFIC INSTRUMENTS OR APPARATUS

Scientific instruments or apparatus and spare parts and accessories thereof intended exclusively for educational purposes or scientific research imported by a public or private scientific or educational institution approved by the ministry of Education or the science and Technology Division, provided:

- (a) that a certificate from the Registrar in case of a University and from a Director of Education or Technical Education or Public Instruction, as the case may be or by the Ministry of Education or the science and Technology Division is issued to the effect that the instruments or apparatus and spare parts and accessories thereof imported will be used under the control and responsibility of the importing institution; and
- (b) That instruments or apparatus and spare parts and accessories thereof of equivalent scientific value are not being manufactured in Bangladesh.

Annex 5

ARTICLES FOR THE BLIND

- (i) Books, publications and documents of all kinds in raised characters for the blind.
- (ii) Other articles specially designed for the educational, scientific or cultural advancement of the blind which are imported directly by institutions or organizations concerned with the welfare of the blind.

APPENDIX XIII

CENTRAL BOARD OF REVENUE

(Customs)

NOTIFICATIONS

Dated, the 4th August, 1960

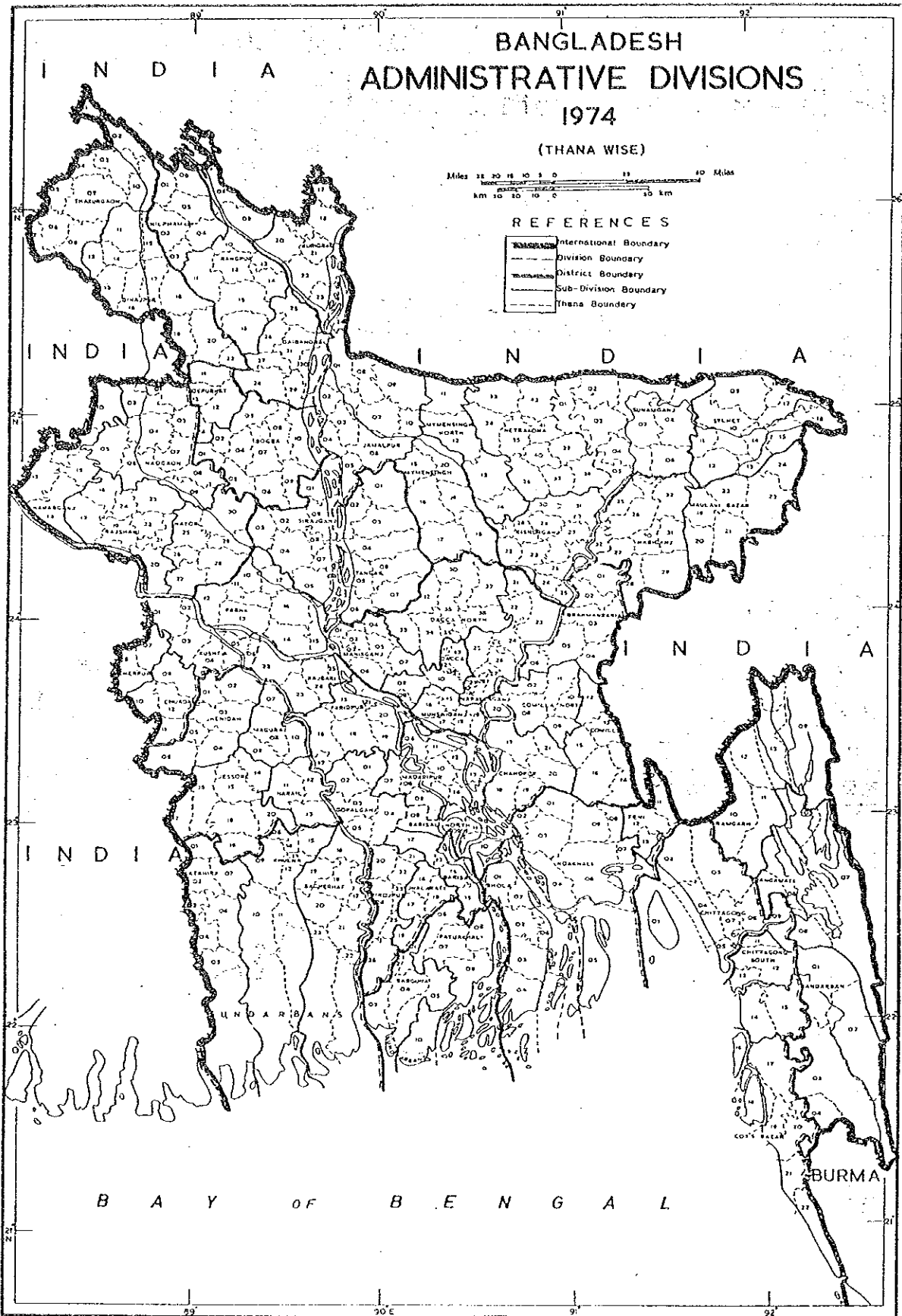
S.R.O. 977(k)/60.—In exercise of the powers conferred by section 23 of the Sea Customs Act, 1878 (VIII of 1878) and in supersession of this Division notification No. S.R.O. 188, dated 9th May, 1959 the Government is pleased to exempt all such gifts as are received and such X-Ray equipment for fighting tuberculosis, and such equipment and apparatus for the rehabilitation of the deaf, the blind or the crippled, as are purchased or otherwise secured, by a charitable non-profit institution solely for the purpose of advancing the declared objectives of such institution, from the Customs-duties leviable on their import into Bangladesh, subject to the conditions that—

- (i) no conditions are attached to the gift by the donor and the receiving institution is at liberty to use the gift in accordance with its declared objectives, and
- (ii) the receiving or importing institution furnishes an undertaking in writing to the Collector of Sea or Land Customs, as the case may be, to the effect that such gifts, equipment or apparatus will not be sold and will not be utilized or disposed of otherwise than for the purposes for which they were received, purchased or secured, and binds itself to pay the said duties in the event of a breach of that undertaking.

Explanation—“GIFT” includes goods purchased from out of money donations made by donors residing in foreign countries (As adopted in Bangladesh).

HAFIZUDDIN AHMED,
Section Officer.

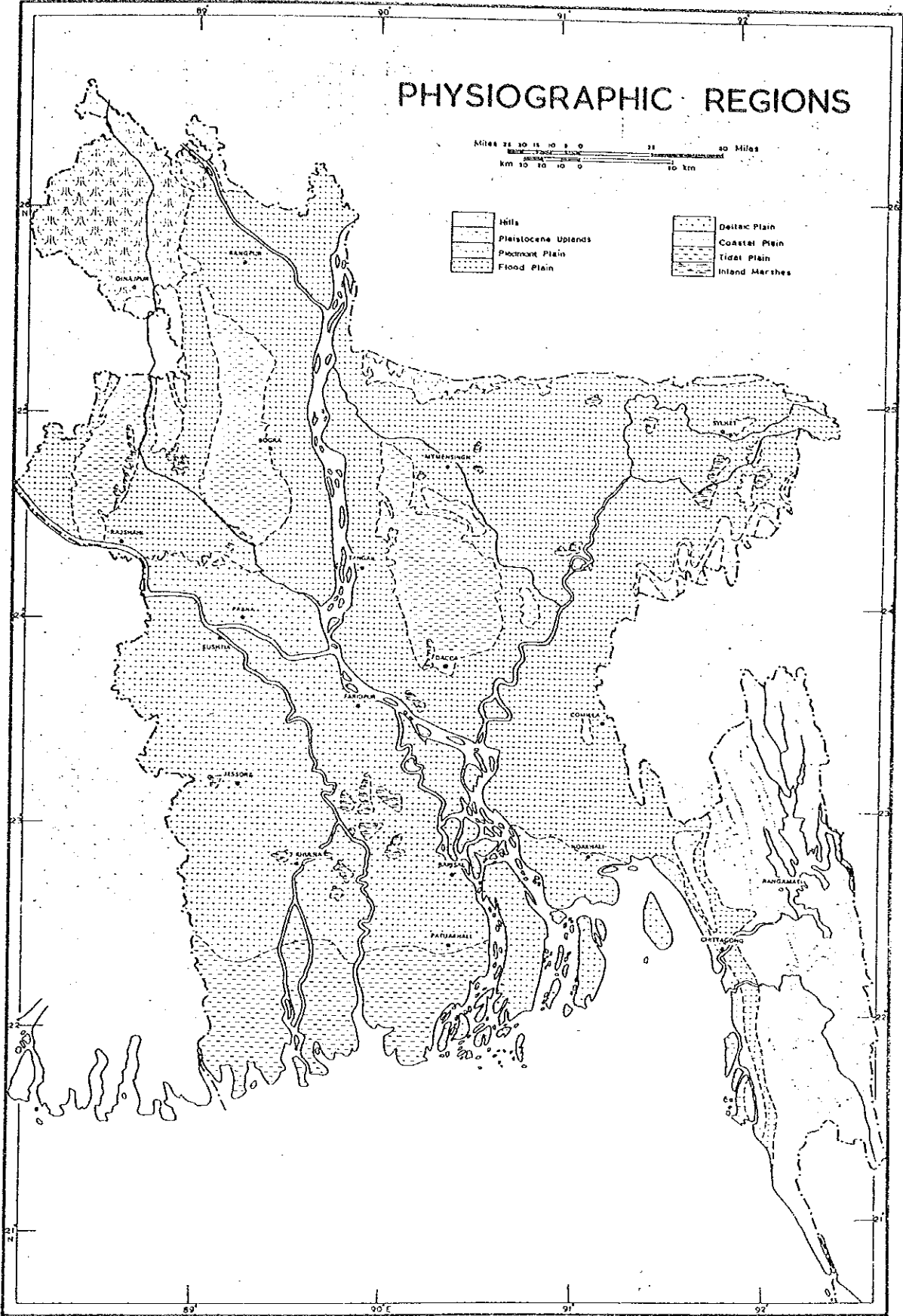
5. Bangladesh in Map

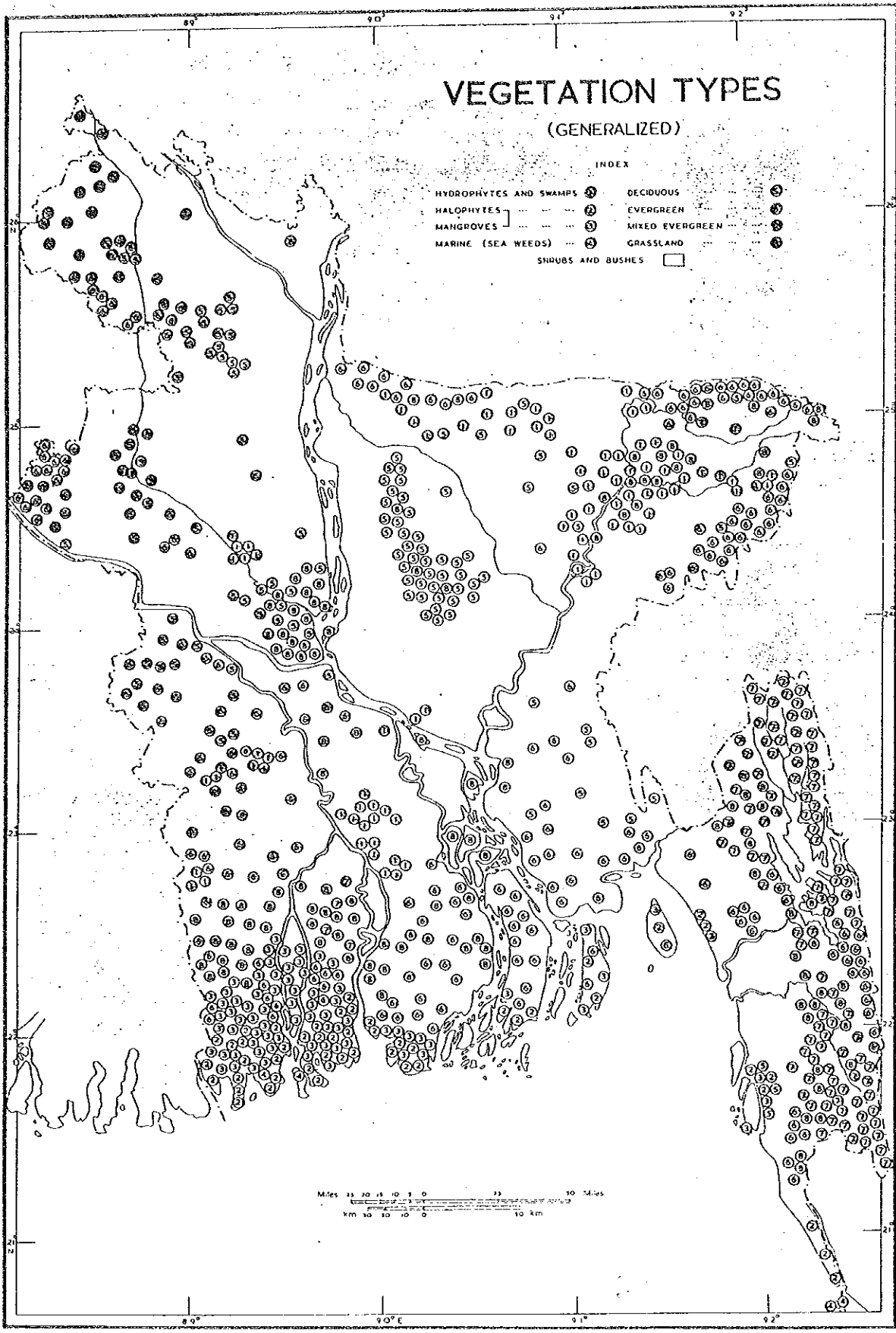


PHYSIOGRAPHIC REGIONS

Miles 25 20 15 10 5 0 5 10 15 20 Miles
 km 10 20 30 40 0 10 20 km

- | | | | |
|---|---------------------|---|----------------|
|  | Hills |  | Deilac Plain |
|  | Pleistocene Uplands |  | Coastal Plain |
|  | Piedmont Plain |  | Tidal Plain |
|  | Flood Plain |  | Inland Marshes |

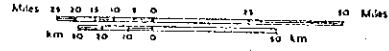




AGRICULTURAL LAND USE

(GENERALIZED)

1975-76

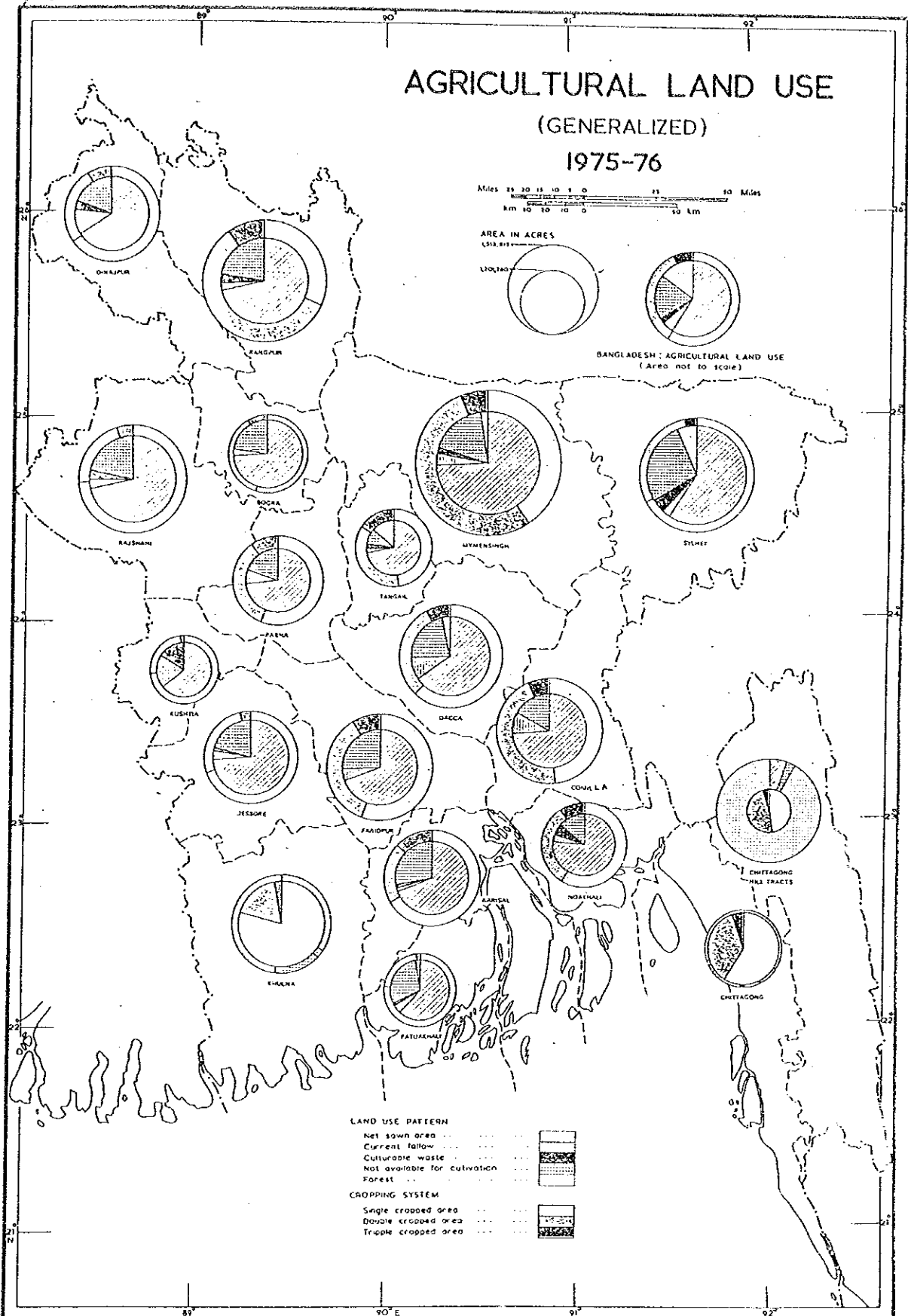


AREA IN ACRES

518,818

1,10,340

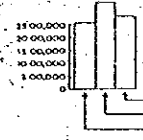
BANGLADESH: AGRICULTURAL LAND USE
(Area not to scale)



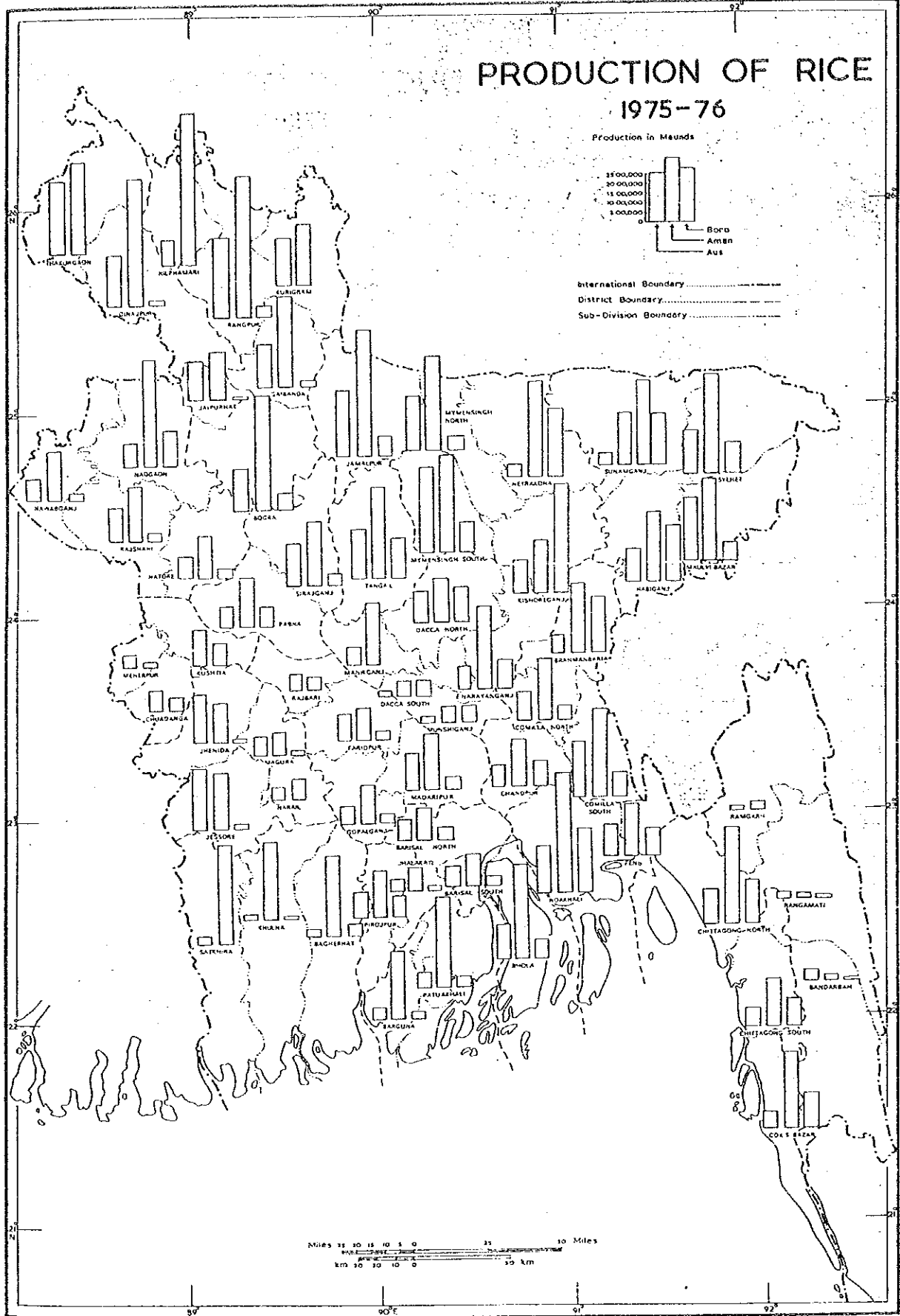
PRODUCTION OF RICE

1975-76

Production in Mounds



International Boundary
 District Boundary
 Sub-Division Boundary

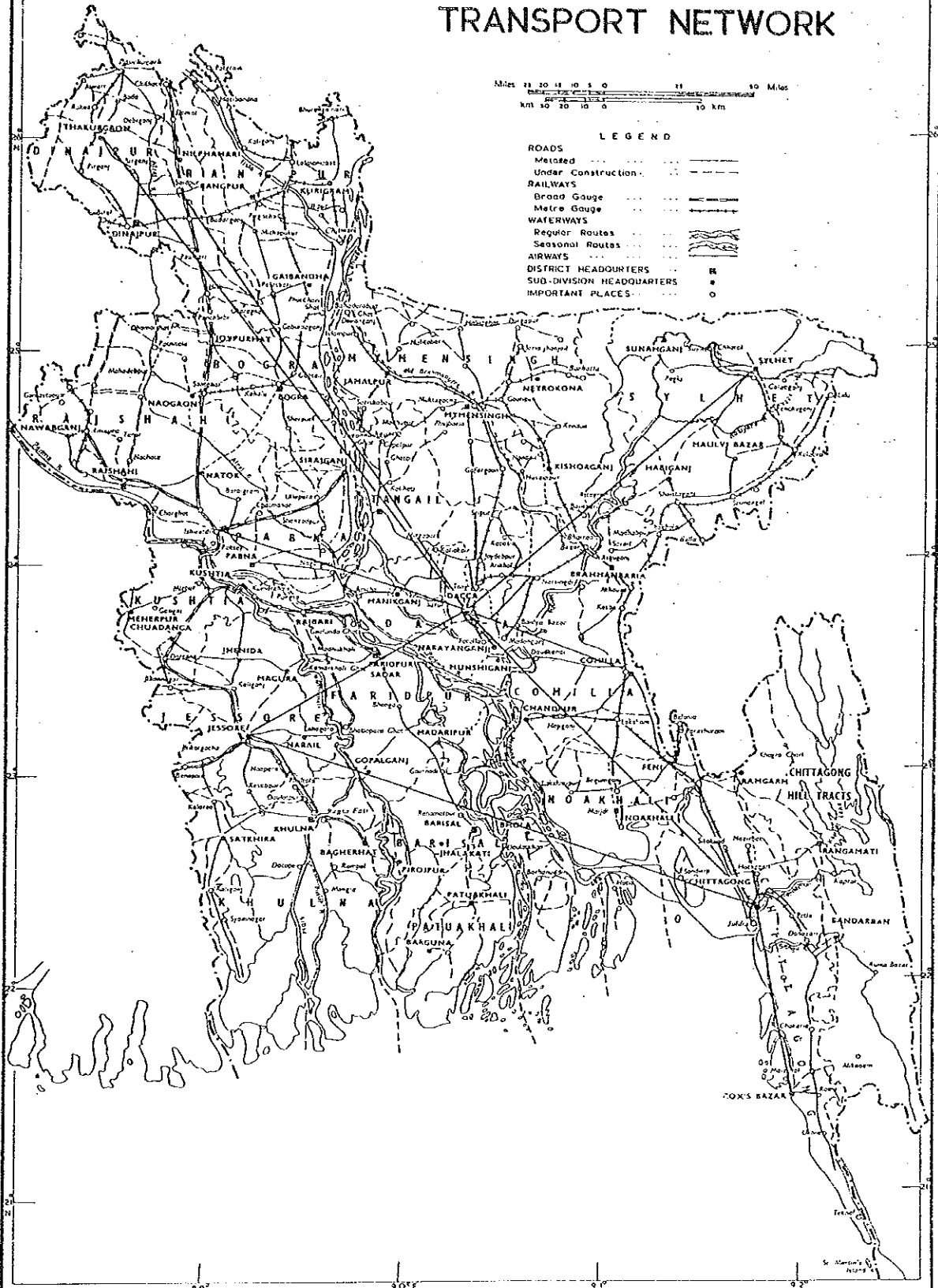


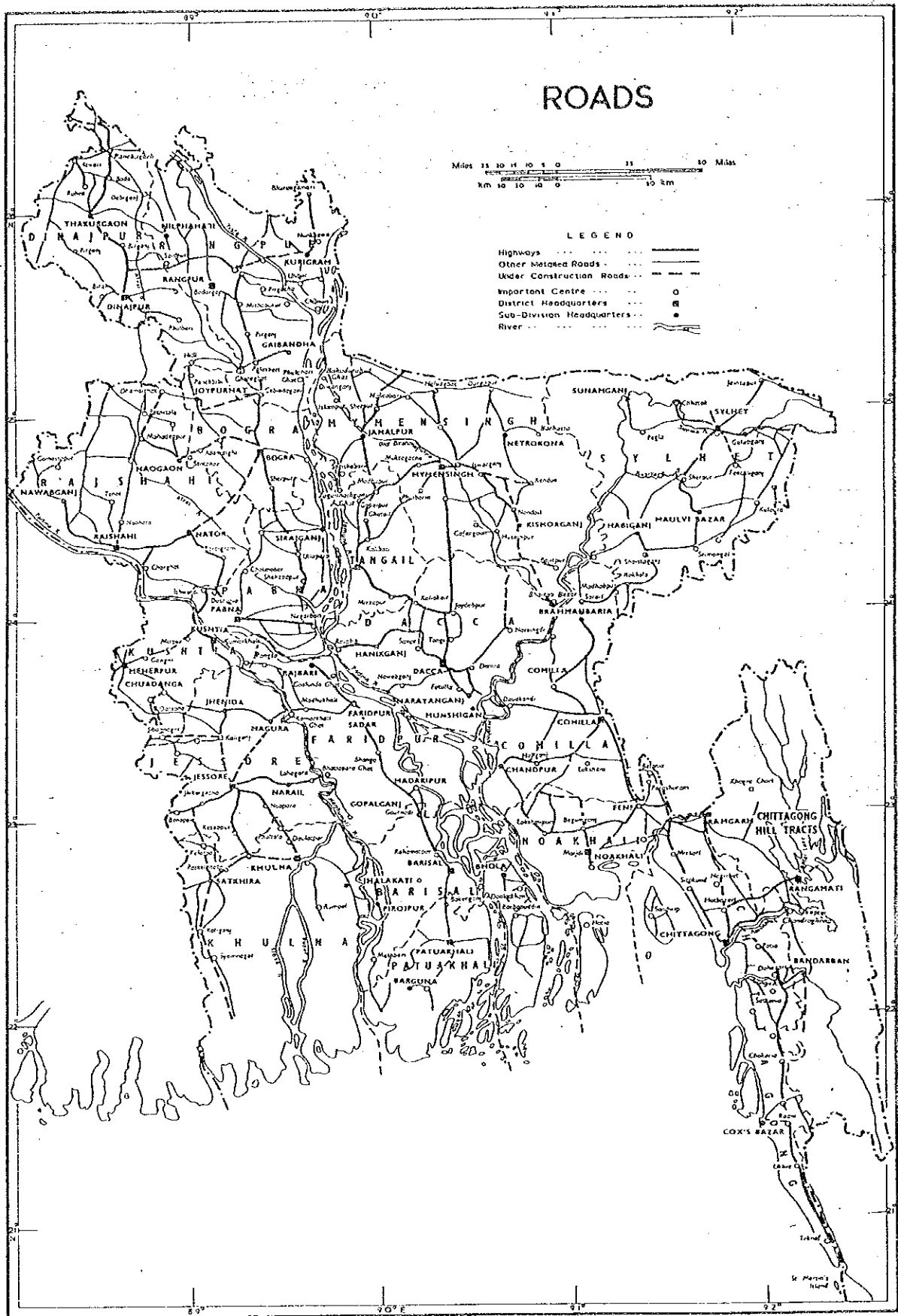
TRANSPORT NETWORK

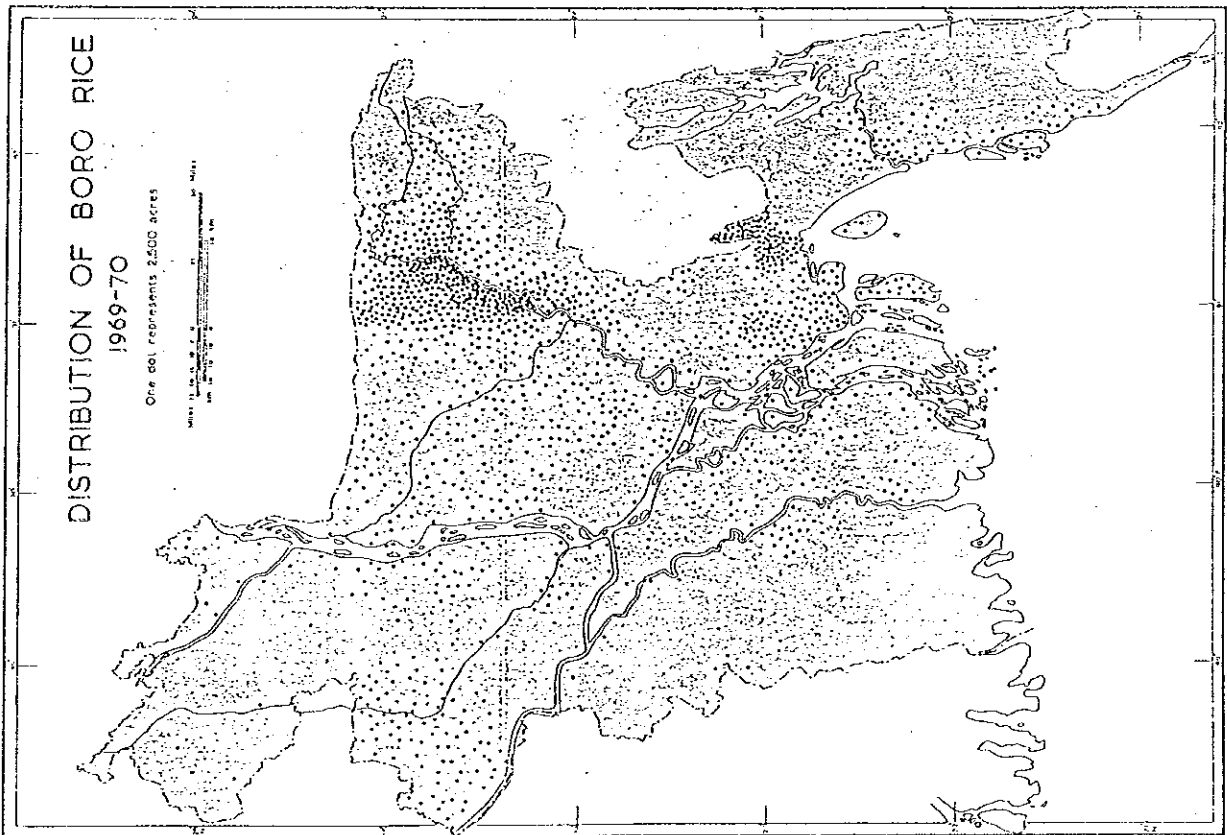
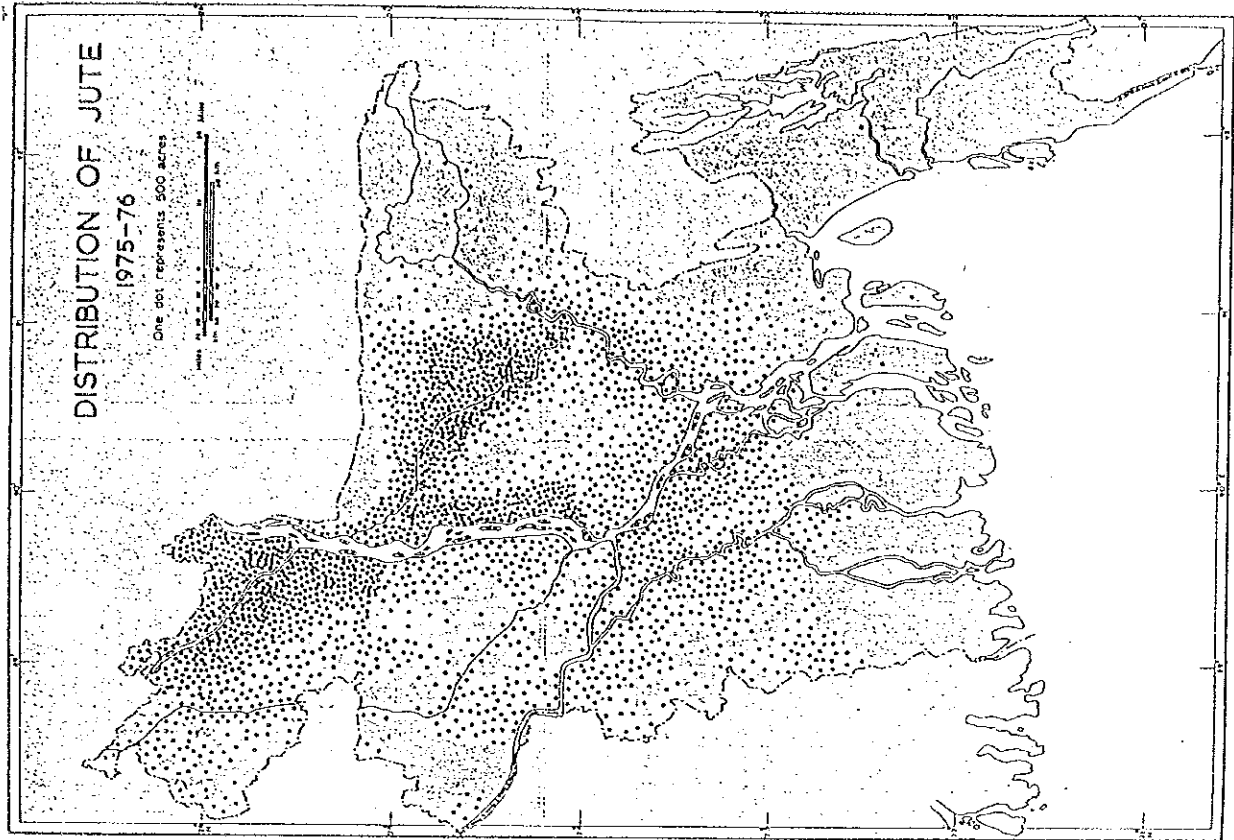


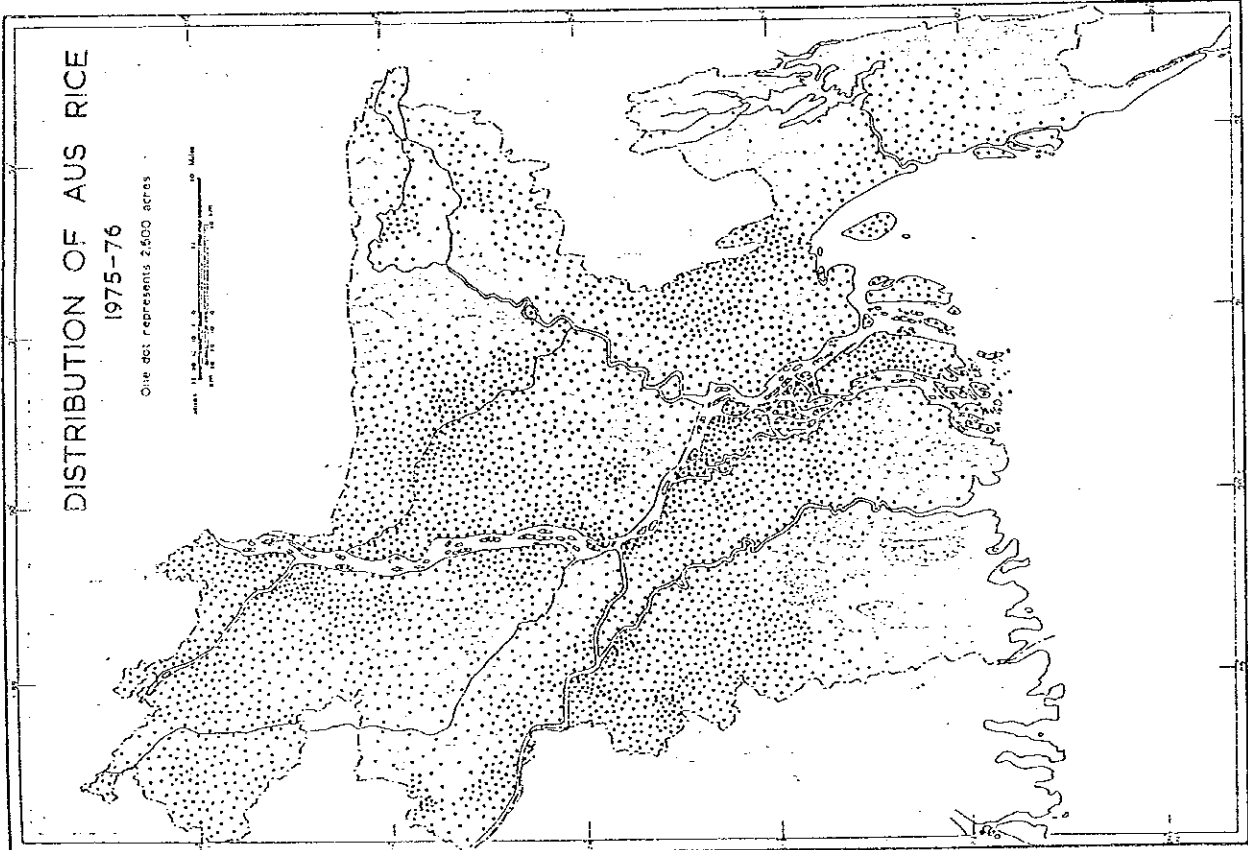
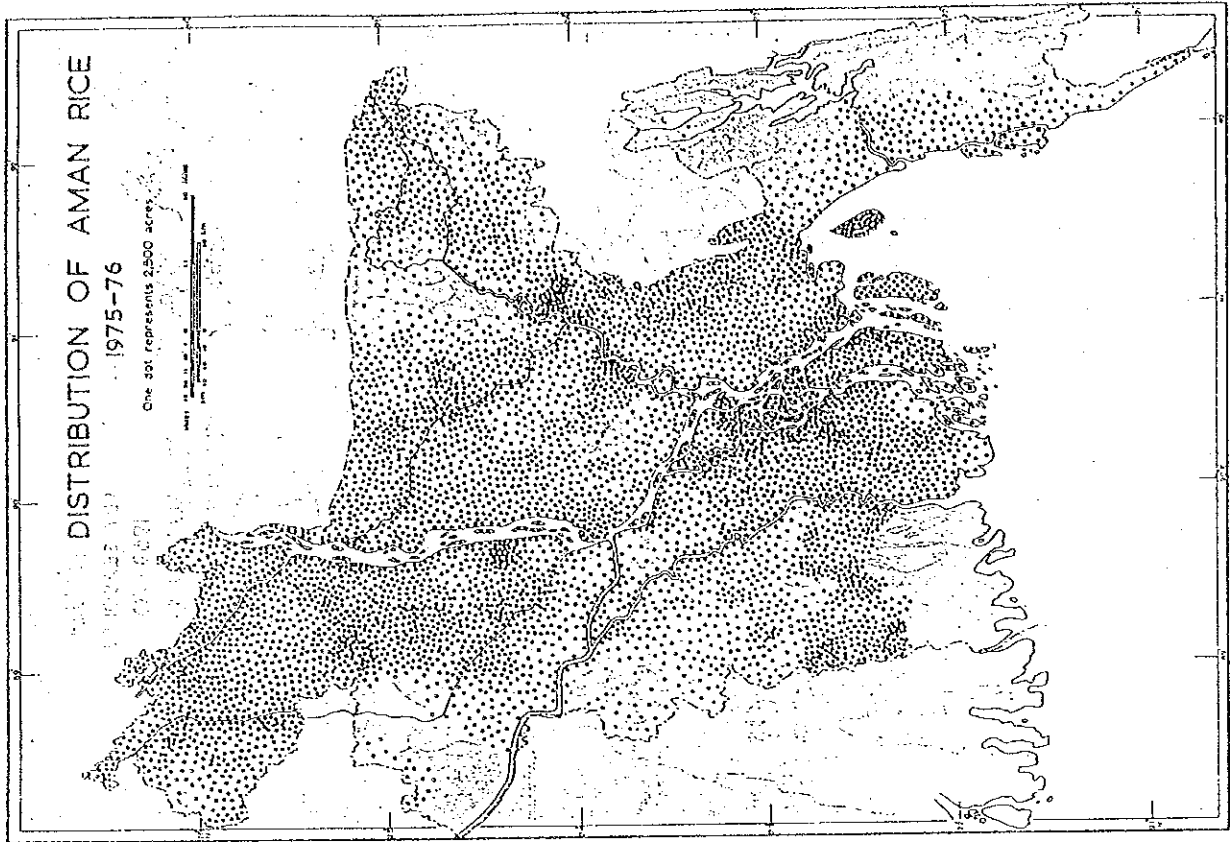
LEGEND

- ROADS
 - Motored
 - Under Construction
- RAILWAYS
 - Broad Gauge
 - Metre Gauge
- WATERWAYS
 - Regular Routes
 - Seasonal Routes
- AIRWAYS
- DISTRICT HEADQUARTERS
- SUB-DIVISION HEADQUARTERS
- IMPORTANT PLACES









JICA