

**BASIC DESIGN STUDY
ON
THE PROJECT FOR EXPANSION
OF
TV FACILITIES
IN
THE SOCIALIST REPUBLIC OF THE UNION OF BURMA**

AUGUST, 1982

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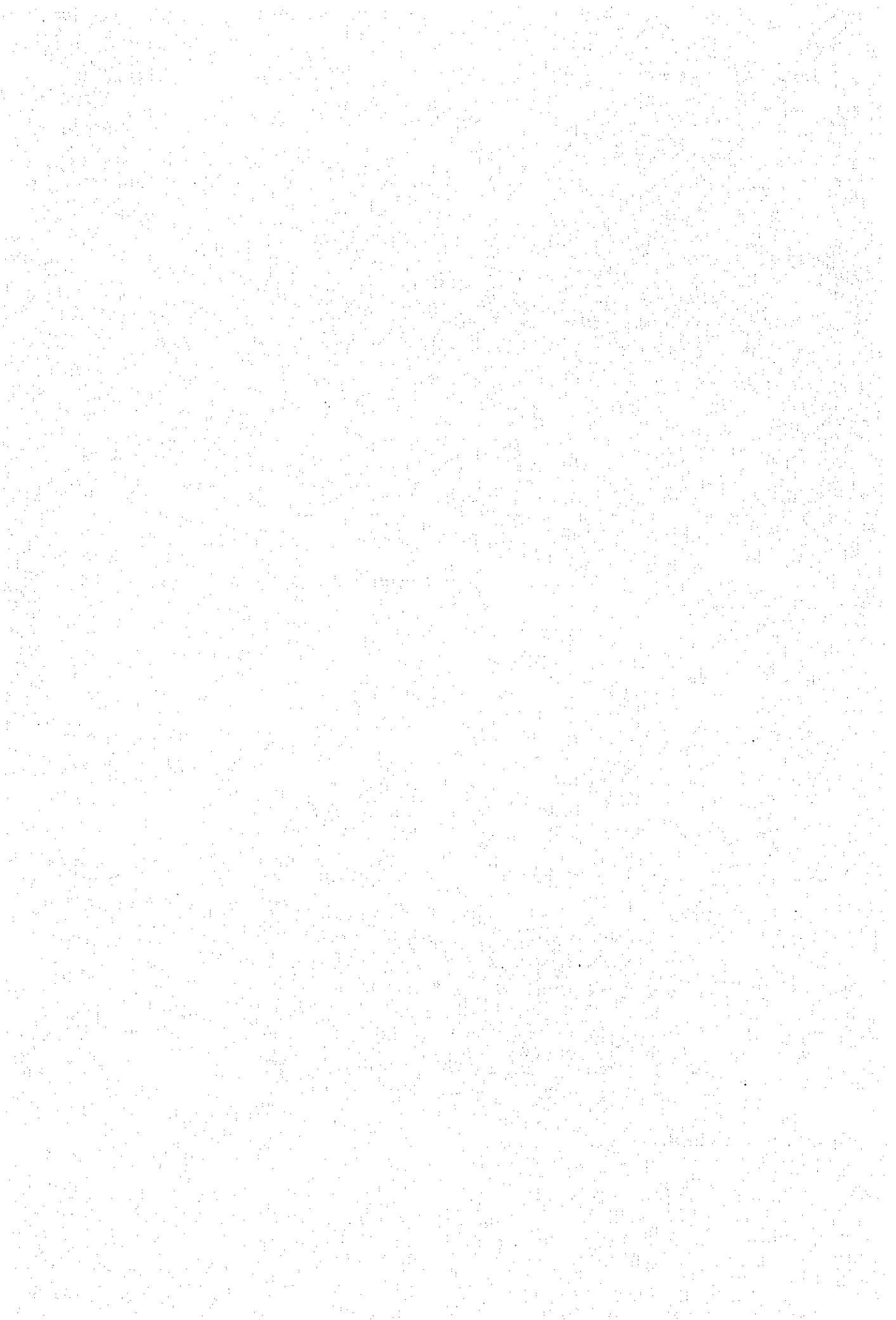
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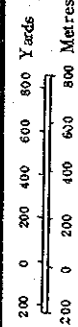
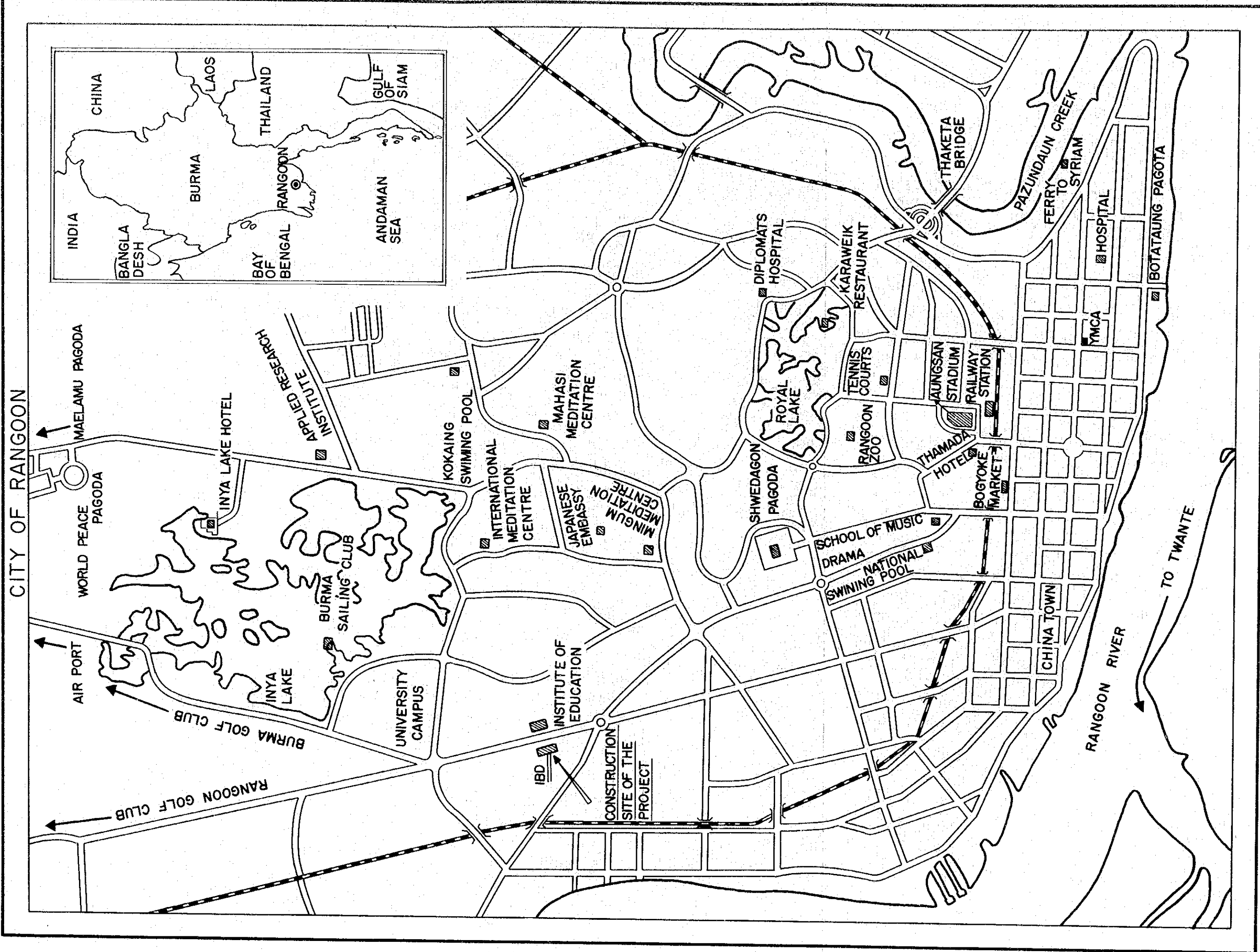
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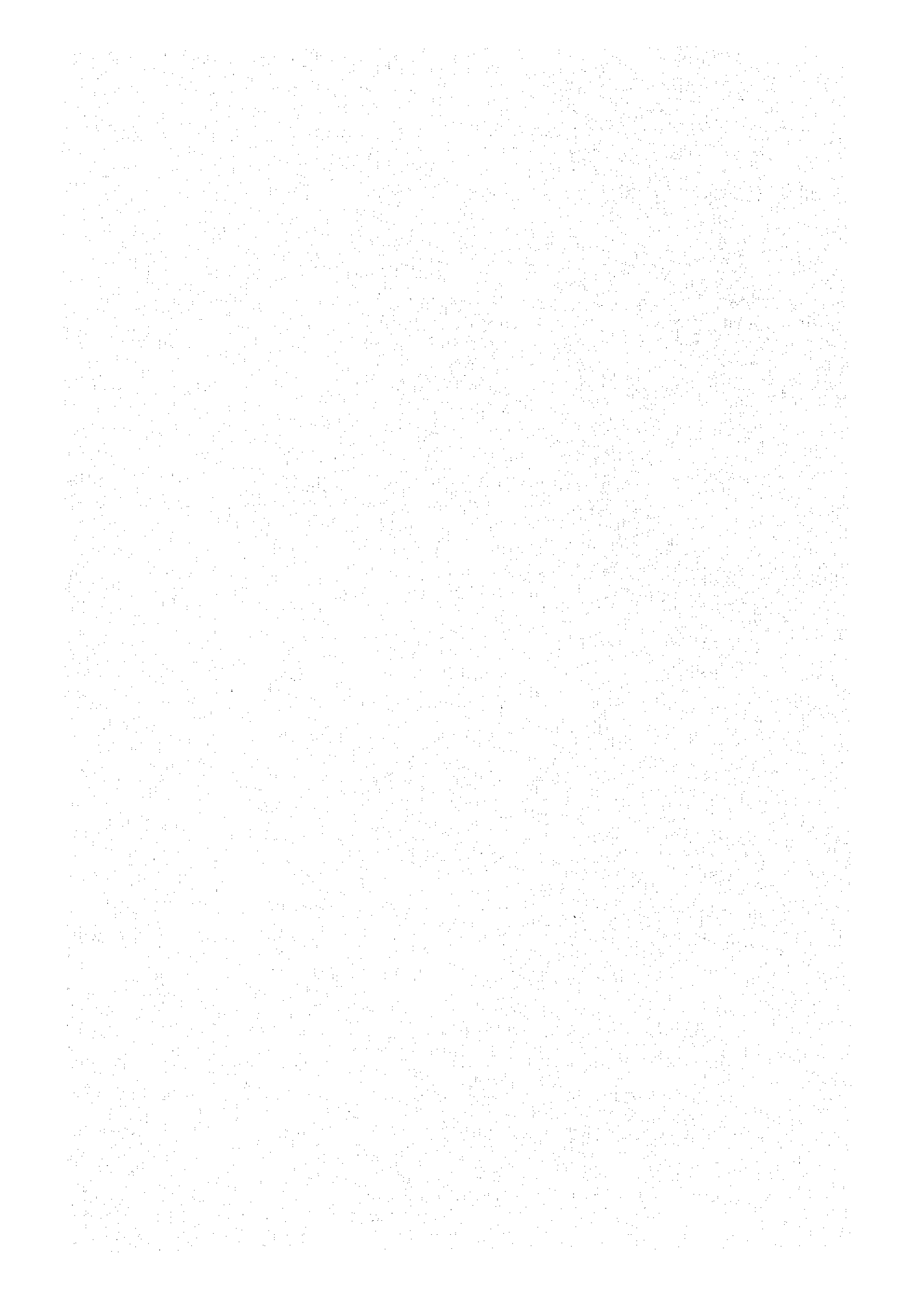
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P R E F A C E

In response to the request of the Government of the Socialist Republic of the Union of Burma, the Government of Japan decided to conduct a survey on the Project for Expansion of TV Facilities and entrusted the survey to the Japan International Cooperation Agency. The JICA sent to Burma a survey team headed by Mr. Mitsuaki Yamagata from 21st March to 3rd April, 1982.

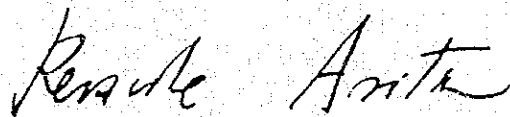
The team had discussions with the officials concerned of the Government of Burma and conducted a field survey in Rangoon area.

After the team returned to Japan, further studies were made and the present report has been prepared.

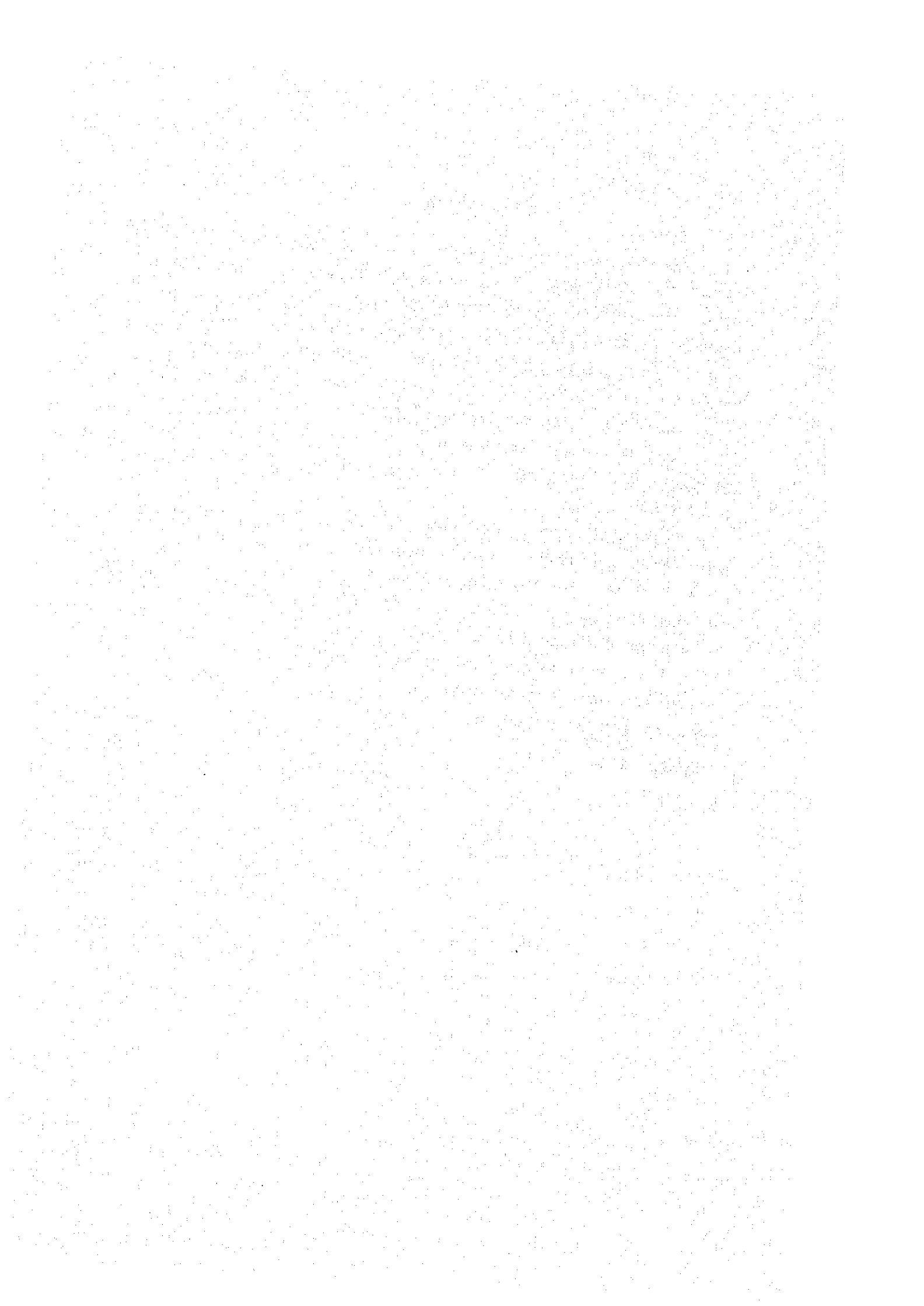
I hope that this report will serve for the development of the Project and contribute to the promotion of friendly relations between our two countries.

I wish to express my deep appreciation to the officials concerned of the Government of Burma for their close cooperation extended to the team.

August, 1982



Keisuke Arita
President
Japan Internatioanl
Cooperation Agency



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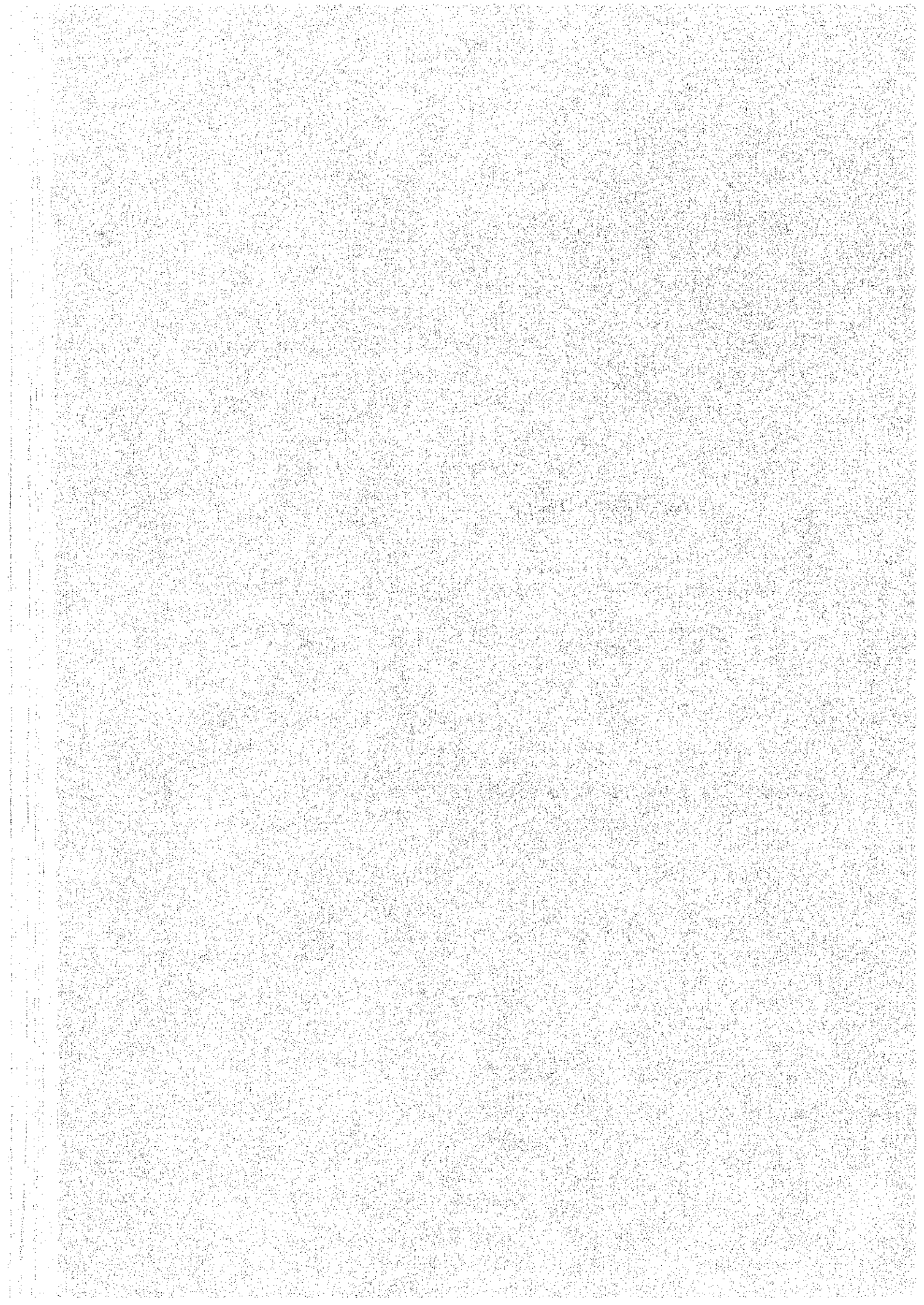
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SUMMARY



Summary

For the purpose of stabilizing the people's life and of further engancing the levels of welfare and education within the country, in November 1980, the Socialist Republic of the Union of Burma inaugurated its television service under the NTSC colour system, and today, about two hours are devoted every evening to the broadcastng to the nation with educational, cultural, entertainment and news programs on television.

The Burmese Government, paying due attention to the role the television broadcasting can play in promoting economic and social development, in elevating the nation's educational level and also in bringing into reality the unification and stabilization of the multi-racial country, has since decided to incorporate the project for expansion of TV facilities into the nation's Fourth 4-year Plan (1982 - 1985). Under this TV expansion plan, the Burmese Government envisaged to extend the daily broadcasting time by two hours and requested the Japanese Government for assistance in the construction of facilities and provision of materials and equipment which are indispensable for the independent production of TV programs to be broadcast during the extended transmission time.

The Japanese Government, with such a background and under such circumstances, through Japan International Cooperation Agency, sent a Basic Design Survey Team to Burma to conduct

the survey in an effort to find out the most appropriate way of assisting in the carrying out of the TV expansion project as envisaged the Burmese Government.

As a result of the survey, a conclusion was reached that the most suitable site on which to construct the broadcasting facilities would be within the compound of the IBD (Information and Broadcasting Department) which is located at a distance of about 5 kilometers from the centre of Rangoon and that the most appropriate installation plan would be to equip the new facilities with a set of broadcasting implements and devices including an OB van and a TV standards conversion equipment.

The broadcasting facilities envisaged include a 2-storied building of reinforced concrete construction, consisting of two studios with subcontrol rooms, a master control room, makeup rooms, a tape editing room, etc. The equipment will include a complete set of broadcasting facilities as well as the colour cameras. The total building area will be about 2,000m² and total floor area, about 3,300m².

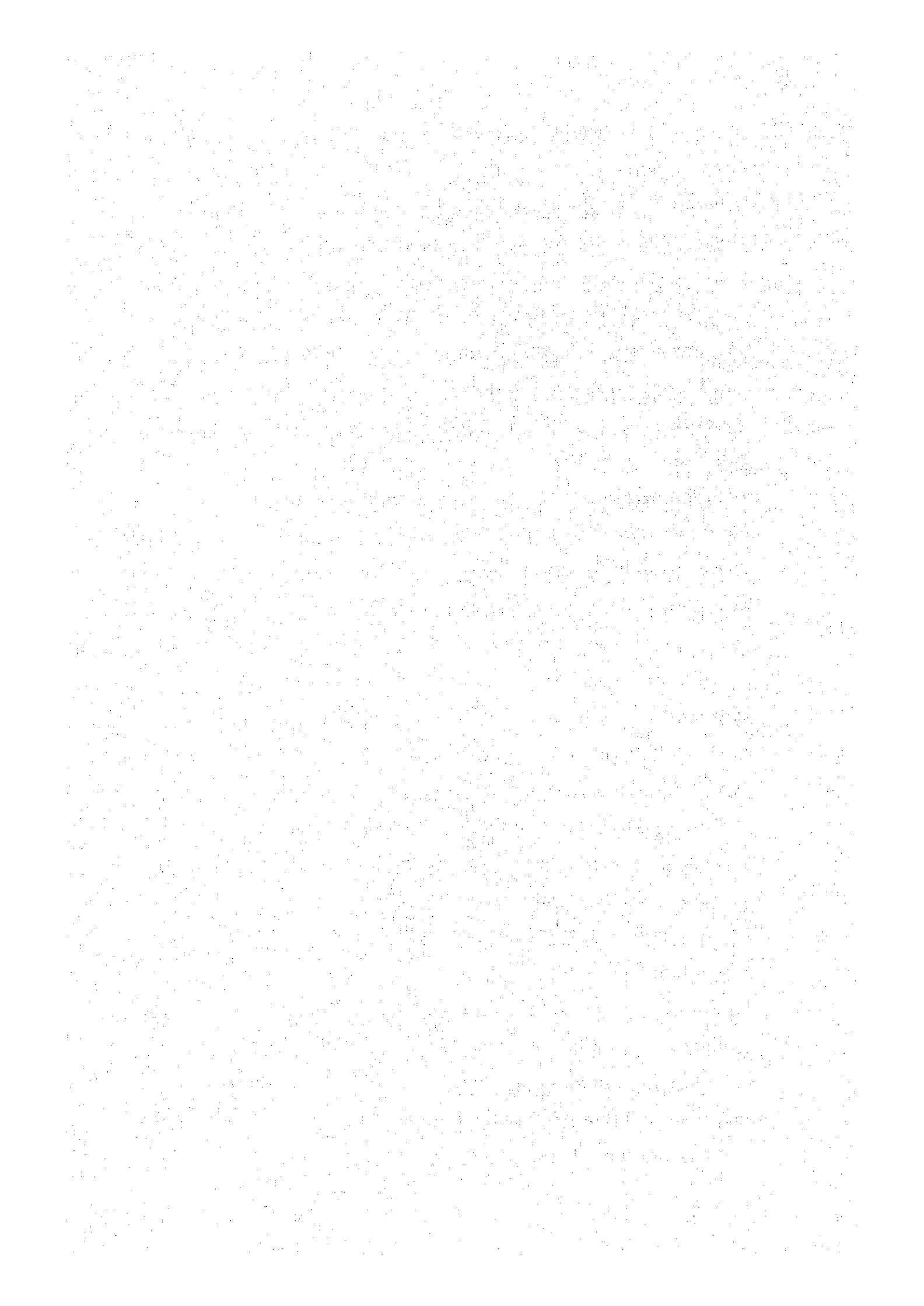
While a technical staff of about 80 would be required in maintaining and managing these new facilities, there will be no problem in securing the required number of engineers and technicians, since the availability is assured of the new graduates from the Rangoon Institute of Technology and other educational institutions in this country. As for the facilities-designing itself, a Burmese construction method will be adopted so that the maintenance and management of

the facilities may not give excessive strains on the staff in charge.

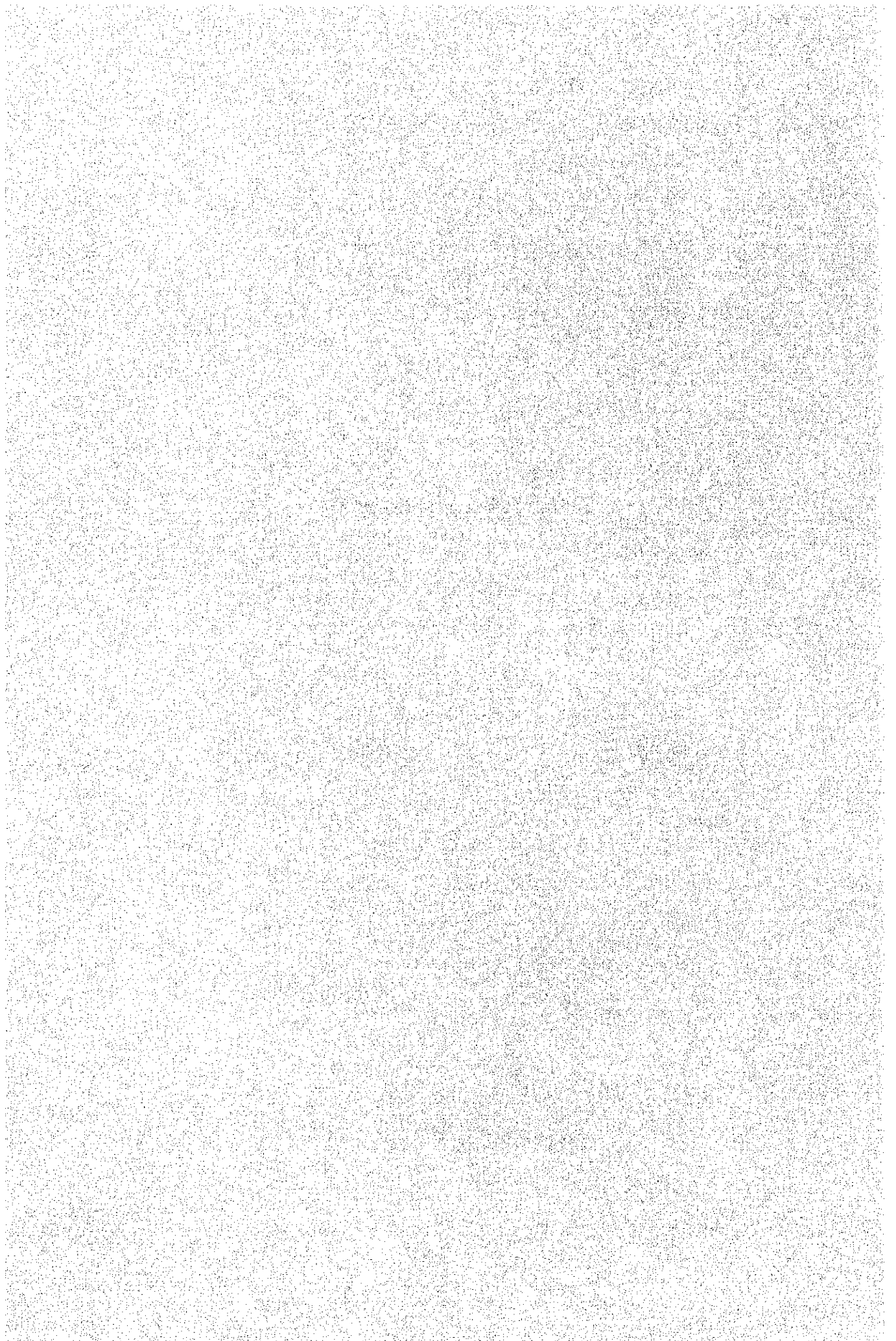
Meanwhile, in Burma, the number of TV receiving sets installed is as yet in the neighborhood of 6,700 sets but, with the steady expansion going on in the manufacturing facilities, the production of TV receiving sets is expected to show a spectacular increase in the coming years. As regards the TV sets for communal-reception use, there is every possibility of a ratio being achieved of one set for every 200 viewers by the first half of 1988.

This TV broadcasting facilities expansion project as outlined above will not only help the people of Burma make their long-held dream come true - the dream of using television for educational purposes - but also means, in particular, that one of the most effective means is additionally secured of further promoting the spread of adult education. It is, therefore, most significant that the carrying out of this project is made feasible with the economic cooperation grant of Japan, the grant which is expected to prove extremely effective in the national development of Burma.

However, in order to cooperate in the improvement of the Burmese broadcasting personnel's techniques in various fields of broadcasting work including those for program production and for the maintenance and operation of broadcasting facilities, it is believed that Japan's technical cooperation will become even more effective if it could be rendered in such aspects as the sending of Japanese experts to Burma or receiving the Burmese broadcasting personnel for training in Japan.



SECTION 1 INTRODUCTION



SECTION 1 INTRODUCTION

In response to the request from the Government of Burma for cooperation in connection with the planned improvement and expansion of colour TV facilities, the Government of Japan through its representative agency (JICA) sent a preliminary study team to Burma for a period of 13 days from January 17 to 29, 1981 for the purpose of clarifying the appropriateness of Japan's providing economic cooperation grant to Burma and the significance of the cooperation.

The preliminary study team confirmed the contents of the request and had discussions with those concerned in the Government of Burma on the subjects of the positioning and present state of TV broadcasting service in Burma, problems encountered in it, the basic concept of Burma for its expansion and improvement, its operation and management plan, the present state and the plan for the future of the spread of TV reception, etc.

Although the Burmese side requested the five items of the construction of TV studios, the supply of OB (outside broadcast) van, the supply of system converter, the construction of local transmitter stations, and the construction of microwave links for relay in local areas, the preliminary study team (1) excluded the construction of local transmitter stations and microwave links because

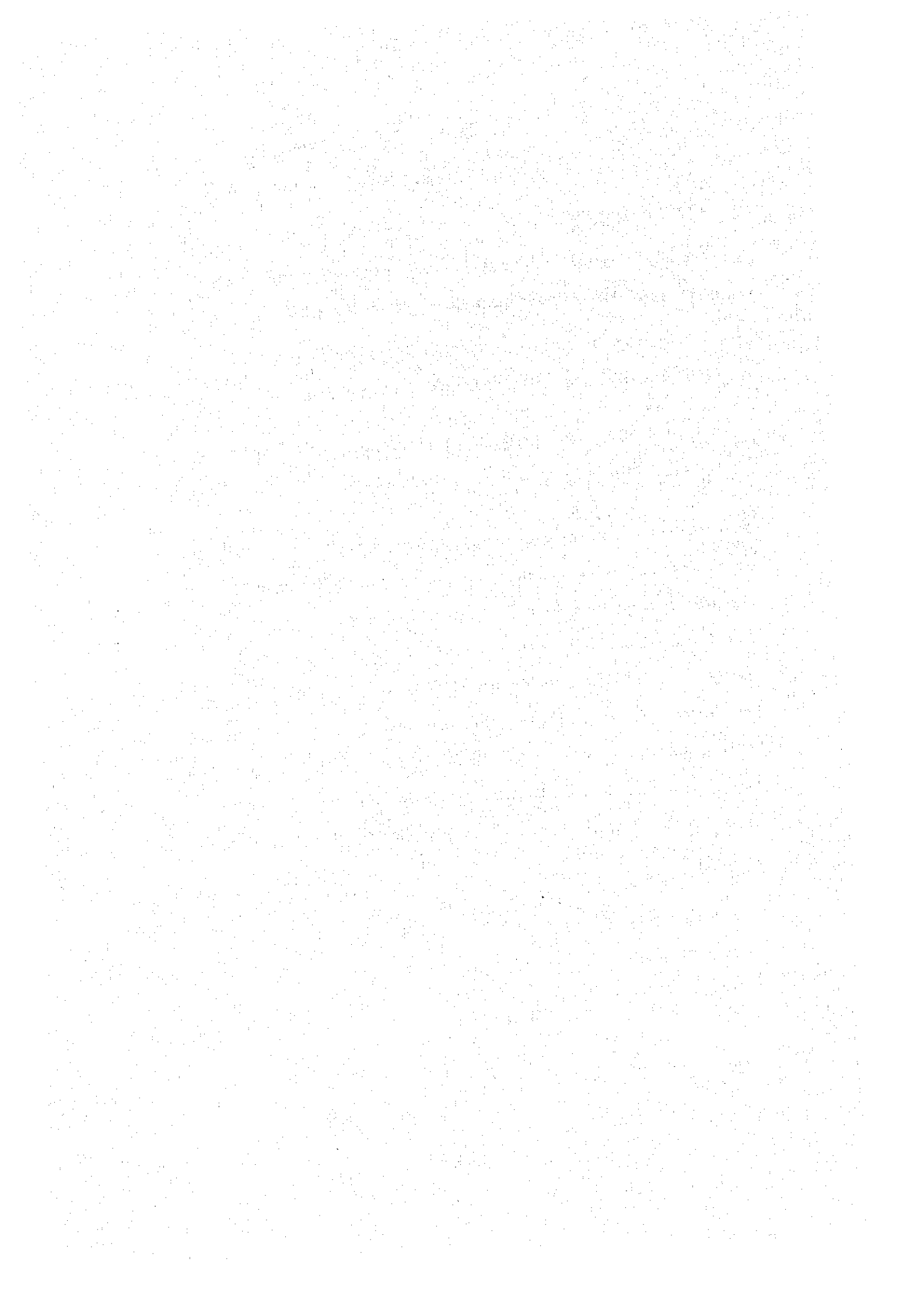
of insufficient preparation of the Burmese side which may be determined by the immaturity of the plans and the condition of spread of receivers and (2) recommended to study about the cooperation as to the equipment and expansion of programme production functions including the construction of TV studios. (For the list of members of the preliminary design study team, refer to Appendix 1.)

Based on the results of preliminary service and the recommendations of the preliminary survey team, the Government of Japan dispatched a basic design study team to Burma for stay for a period of 14 days from March 21 to a time April 3, 1981. After agreeing with those concerned in the Government of Burma that the basic design study was intended for the improvement and expansion of programme production functions including the construction of TV studios, the basic design study team had discussions with Burmese side mainly on the following items regarding programme production plans, the scope of work to be covered by the two governments, receiver distribution/spread plan, etc., on the basis of the inception report prepared in advance by the study team, collected necessary data, and inspected related facilities in Burma. (It is to be noted that the project for the expansion of TV broadcasting facilities mentioned in this report is that related only with the facilities for programme production such as TV studios.)

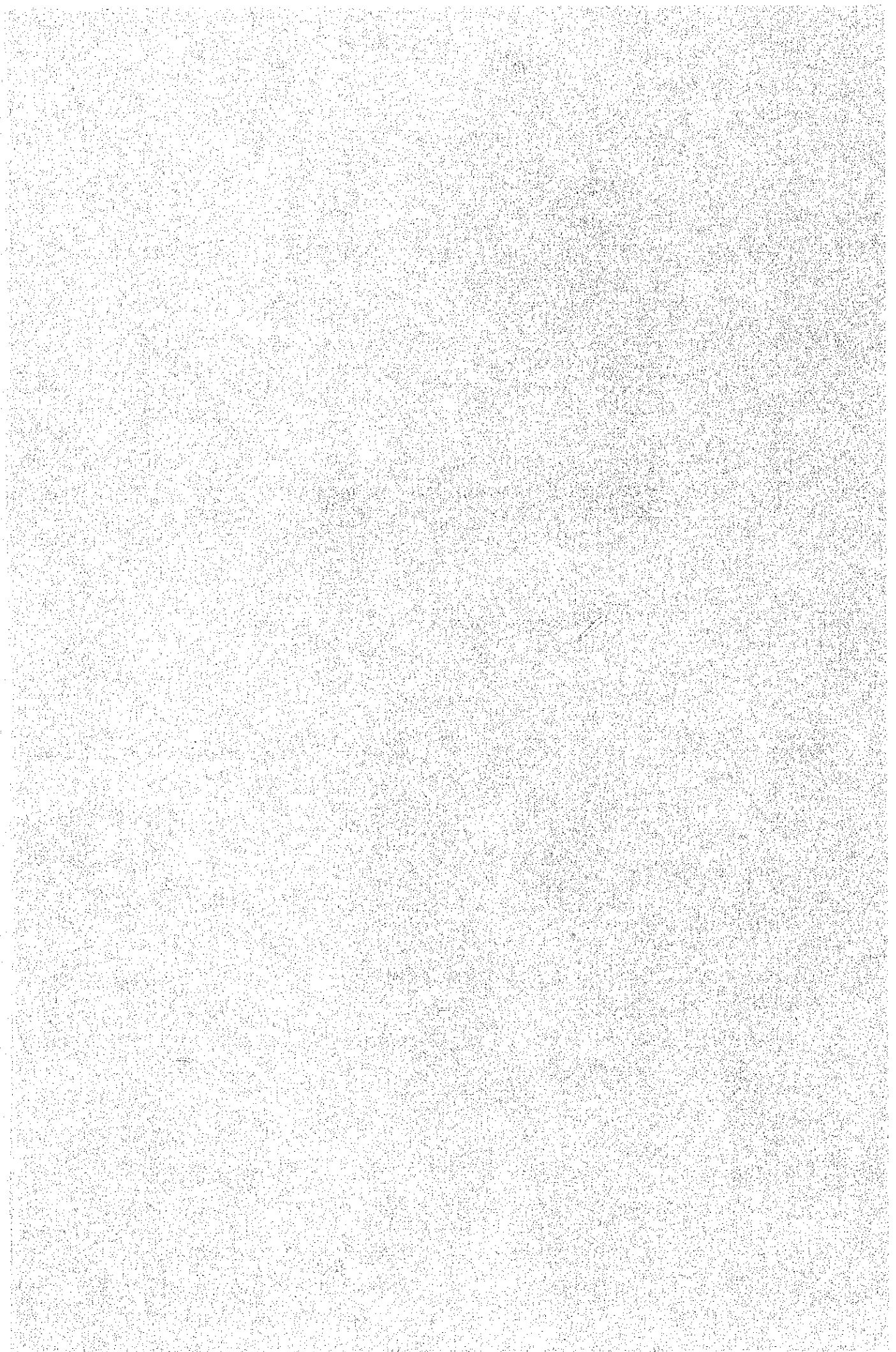
- (1) Determination of the scale and functions of facilities to be accomplished in the project
- (2) Operating budget and personnel plan
- (3) Distribution or allocation of TV receivers
- (4) Building construction circumstances
- (5) Scope of work to be accomplished by Burma
- (6) Basic idea of programme production

(For the list of members and itinerary of the basic design study team, refer to Appendix 2).

Through the survey of various items necessary for the basic design and discussions with those concerned in the Government of Burma, the study team summarized in the form of minutes of discussion the basic items agreed to by both sides regarding the objectives of the project, the scope of work to be carried out by the governments of both countries, etc. These minutes were approved and signed by the head of IBD of Burma and the Japanese Study Team Leader (Mr. M. Yamagata) on March 29, 1982.



SECTION 2 BACKGROUND OF PROJECT



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2-1 Social and Economic Trends in Burma

Burma made a 20-year economic development plan in June 1971, aiming at: (1) maximum development of natural resources to be exported, (2) growth of industries to replace import of goods and (3) growth of heavy industries on the basis of domestically produced mineral resources. Burma is executing this long-term plan in blocks of four years. The annual GDP growth rate and the achievement ratio during the past three years in the third 4-year plan (1978 ~ 1981) were 6.7% and nearly 100%, respectively. This progress may be ascribable to (1) the success in increased rice production plan, (2) partial introduction of free economy in the management of organizations, reformation of the tax system and simplification in distribution mechanism, and (3) increase in economic aid from foreign countries. The national product per capita increased 6.7% and the national income per capita increased 7.0%, both in the fiscal 1980/81, so that the economy in Burma is gradually rising and expanding.

As for the financial situation of Burma, the balance sheet has turned black since fiscal 1976/77 and the cost of living stopped rising in 1976 and has tended

to fall since then. The rate of employment in, for example, fiscal 1976/77 was 14%; that is, the number of those employed was 28,412 out of 197,733 persons who desired to be employed. The employment problem is one of the most important problems to be solved in future. As to the fields of employment, 64% of all working people are engaged in agriculture.

2-2 Present and Future Situations of Broadcasting Services in Burma

All broadcasting services in Burma are operated by the IBD (Information and Broadcasting Department), the Ministry of Information.

Radio broadcasting service was commenced for the first time in 1939 and at present radio programs are broadcast in Burmese, English and Nationalities languages on one medium-wave and five shortwave bands by using two medium-wave transmitters and three shortwave transmitters. Radio programmes are transmitted only from a station in Rangoon. There are no transmitters in any local district. All programmes are self-produced programmes and no programmes are imported.

Radio broadcasting facilities have been used for more than 30 years and are greatly superannuated. West Germany surveyed the radio broadcasting facilities in 1981 and is now examining making an economic cooperation grant.

Meanwhile, the test broadcasting of TV broadcasting service was commenced on June 3, 1980 by the facilities granted by the Japan Foundation and actual TV broadcasting service has been presented since November 1, 1980. For the colour TV system, the NTSC system which is also employed in Japan has been adopted and TV programmes are broadcast for about two hours from 7:30 p.m. most weekdays and for about three hours on Wednesday, Saturday and Sunday.

For the broadcasting facilities, simple cyclorama and lighting equipment for studio use have been provided on the stage of a radio broadcasting audience participation studio (with about 400 seats) which is to be modified into a TV studio with an effective area of about 160m². Three 1-inch plumbicon cameras (one of which was purchased by Burma after the grant by the Japan Foundation) are used.

In the subcontrol room on the first floor, subcontrol facilities and 3/4 inch VTR equipment are installed for recording and sending. Other facilities installed are telecine equipment for film and slide

projection, transmitters, antennas and news gathering equipment, which can not be said sufficient, in both quality and quantity, as the facilities for a TV broadcasting station.

These items of equipment provided for the time being are minimal for producing 55-minute self-produced programmes and it cannot be helped to broadcast Burmese moving pictures or foreign programmes in English for the remaining broadcasting hours exceeding one hour. However, the Government of Burma has recognized that TV broadcasting is the most effective media for the social and economic development of the country, for the educational and cultural cultivation of its people and for the stability and unity among its nationalities for constructing a modern nation, and made the following three basic plans for the expansion of TV broadcasting facilities.

- (1) To expand the TV service area to cover the entire area of the country.
- (2) To use TV to develop the educational, moral, and cultural standards of people.
- (3) To extend the existing broadcasting hours beyond two hours.

On the basis of these basic plans, the Government of Burma has prepared a master plan which will be finished by 10 years

if the required funds including foreign funds can be raised. The master plan consists of the following plans.

(1) Rangoon TV Broadcasting Centre improvement plan

- 1) Construction of a studio complex to incorporate a total of nine studios (large, medium and small studios)
- 2) OB van, system converter, etc.

(2) Broadcasting network expansion plan

In addition to the six TV transmitting stations to be constructed in the fourth 4-year plan, a total of 10 TV transmitting stations are to be constructed throughout the country.

On the basis of this master plan, Burma has made the fourth 4-year plan for the purposes of extending the broadcasting hours to 4 hours, improving and enriching broadcast programmes including educational and cultural programmes and spreading the broadcasting network to local areas as well and requested Japan for economic cooperation grant for the following five items to be positioned as the first-priority project.

- (1) Construction of large-scale studio furnished with facilities for programme production and broadcasting 1
- (2) Outside broadcasting (OB) van 1

- (3) System converter and microwave link
for introducing international programmes 1
- (4) TV transmitting stations and equipment 3
- (5) Microwave system for transmitting programme
signals to TV transmitter stations 1

Of these items, items (1) ~ (3) are intended for the expansion of broadcasting hours to four hours and for improving and enriching programmes and items (4) and (5) are intended for expanding the TV service area. However, the Government of Burma has not yet made a complete nation-wide station location plan essential for the construction of local transmitting stations and if TV stations are located under these circumstances, seeds of future trouble may be left in the frequencies, power, and locations of TV stations.

This project will be enhanced by IBD with cooperation from the Ministry of Information, the Ministry of Industry 2, the Ministry of Construction, and the Ministry of Transportation and Communication through meetings and conferences to be held periodically.