

**ESTIMATES COMMITTEE
(1973-74)**

(FIFTH LOK SABHA)

SIXTY-FOURTH REPORT

**MINISTRY OF INFORMATION AND BROADCASTING
TELEVISION**



**LOK SABHA SECRETARIAT
NEW DELHI**

April, 1974/Vaisakha, 1896 (Saka)

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Para	Line	For	Read
2.28	2.28	Para 2.28 may be read as a recommendation.	
2.51 (1)(b) (1v)	"gate"	"gate"	"gate"
2.53	5	after "community" delete full stop	
2.53	15	after "community" ^{2.53} insert "a"	
2.66	11	93.61 crores read 9.51 crores.	
2.111	20	after "Bhawan" <u>del ete</u> full stop.	
2.117	5	"tre" "are"	
2.134 to 2.137		read as recommendations.	
2.154	3	"affluent"	"affluent"
2.158	10	"common"	"common"
2.242	1	after "note" <u>insert</u> "that"	
3.12	1	"are" "at"	
3.122	3	Library Museums	Library/Museums
3.152	10	"A19"	"A 19"
3.171	4	"reorganized"	"recognised".
		"in"	"is"
		"TX"	"TV"
3.172	10	after "of" <u>insert</u> "a"	
	2	"Rs.35,00"	"Rs. 3,500"
		after "is" <u>insert</u> "so"	
		after "no" <u>insert</u> "the"	
3.173	12	"and"	"are"
3.174	4	"nor"	"on"
	7	"custom"	"customs"
		"interest"	"interests"
3.182	8	"Base"	"Based"
4.11	27	"S 1.14"	"S 1.14"
	8		

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(1973—74)

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INTRODUCTION

I, the Chairman, Estimates Committee having been authorised by the Committee to submit the Report on their behalf, present this Sixty-Fourth Report on the Ministry of Information and Broadcasting—Television.

2. The Committee took the evidence of the representatives of the Ministry of Information and Broadcasting, Planning Commission, Finance and the Departments of Space and Communications at their sittings held on the 24th and 25th September, 1973 and 9th November, 1973. The Committee wish to express their thanks to the officers of these Ministries and Departments for placing before them the material and information which they desired in connection with the examination of the subject and for giving evidence before the Committee.

3. The Committee also wish to express their thanks to Shri Abu Abraham, M.P., Dr. M. M. Chaudhuri, Head, Television Centre, Indian Institute of Technology, Kanpur and Dr. Amarjit Singh, Director, Central Engineering Research Institute, Pilani (Rajasthan) for furnishing memoranda to the Committee and also for giving evidence and making valuable suggestions.

4. The Committee also wish to express their thanks to all the associations and individuals who furnished memoranda on the subject to the Committee.

5. The Report was considered and adopted by the Committee on the 23rd April, 1974.

6. A statement giving the summary of Recommendations contained in the Report is appended to the Report (Appendix I). An analysis of recommendations is also appended (Appendix II).

NEW DELHI;

April 27, 1974

Vaisakha 7, 1896 (Saka)

R. K. SINHA,

Chairman,

Estimates Committee.

CHAPTER I

INTRODUCTORY

Television has, of late, been increasingly looked upon not only as a powerful media for mass communication but also for social and economic growth. The growth of Television as a visual medium of communication has, therefore, been phenomenal throughout the world. In 1953, North America had 90 per cent and Europe 9.7 per cent of 31 million TV sets the world over. The remaining three-tenth of one percent was divided between U.S.S.R., South America and Asia. By 1964, the world total of TV receivers had grown to 164 million, of which North America had 45 per cent and Europe 31 per cent. A U.N. count in 1969 placed the total number of T.V. receivers at 251 million with North America having 89.0 million T.V. receivers, Europe 86.5 million, Asia 25.5 million with Africa 1.1 million and Oceania 3.3 million TV receivers. The distribution of T.V. receivers in Asia, however, varied from Japan's high number of 214 TV sets per 1,000 population to India's as low as 0.05 per 1,000 population. India stands almost at the bottom in the development of television as compared to the other developing countries like Singapore, Honkong, Laos, Taiwan etc. However, with the economic conditions improving in the industrial and agricultural sectors, the demand of T.V. sets both for education and entertainment purposes is bound to rise.

1.2. In India, television was introduced in September, 1959 when a pilot TV centre was established at Delhi with the UNESCO grant as as experimental service for imparting education. An experimental programme of social education was carried out from December, 1960 to May, 1961 and in 1961 telecasting "In school Instructional Programme" for Middle and Higher Secondary Schools in Delhi was started with the aid of Ford Foundation. Subsequently, in August, 1965 with the setting up of a modern studio with the assistance of the Federal Republic of Germany, a daily service of entertainment was also started.

1.3. In 1969 a United Nations Educational Scientific and Cultural Organisation (UNESCO) Mission, headed by Mr. John Willings visited India at the request of Government to analyse All India Radio's Development and Training needs in the field of Television Broadcasting. The Willings Commission submitted in November, 1969, a detailed report on the various aspects of TV development in the country. Backed by positive recommendations of the Willings Mission, Government took up implementation of TV expansion programme in two phases at a total estimated cost of Rs. 112 crores. The first phase included the upgrading of New

Delhi TV station and construction of six additional "mother" stations and eight relay stations at an estimated cost of Rs. 25 crores. The second phase of the development plan is scheduled to run through the Fifth Five Year Plan.

1.4. The range of Delhi TV increased from 40 Km. to 60 Km. from July, 1971 covering Ghaziabad, Meerut, Buland Shaher, Muzaffarnagar, and Morad Nagar in Uttar Pradesh and Gurgaon, Rohtak, Karnal and Sonepat in Haryana. The number of electrified villages in the service map of Delhi TV Centre is estimates to be 1,770. There has also been phenomenal rise in TV receivers in Delhi. The number of TV receivers rose from 3598 in 1966 to 75,000 in August, 1973.

1.5. Introduction of television in India has had until recently rather a low priority. Realising that TV, as a powerful medium can give effective support to developmental efforts in the fields of Education, Agriculture, Health and Family Planning etc., it was only during the Fourth Plan that expansion of TV net-work in the country was thought of. In the Fourth Plan Schemes expansion of TV net work in the country envisaged setting up of six TV mother stations at Bombay, Madras, Calcutta, Lucknow, Jullundur and Srinagar and 8 relay stations at Mussorie, Poona, Kanpur, Asansol, Amritsar, Bhatinda and Kasauli, With the completion of these projects 10 per cent of country's territory and about 17 per cent of population was anticipated to have TV coverage. TV station at Bombay was commissioned on 2-10-1972, Srinagar on 26-1-1973 and relay stations at Poona and Amritsar were commissioned on 2-10-1973 and 29-10-1973 respectively.

1.6. The high prices of the television receivers in the country today have also made it beyond the reach of almost nine-tenth of India's population unless more than a million TV receivers are installed at Governmental level for community viewing. Recognising the fact of high prices of TV sets the Electronics Commission in their Annual Report (1972-73) have stated. "It must however, be recognised that a TV set, even at internationally competitive prices, is a high priced item and thus is not within the reach of large numbers in India for private purchase.

1.7. Fifth Five Year Plan proposals for the expansion of TV net work in the country at an estimated cost of Rs. 204 crores envisaged TV mother stations at Cuttack, Patna, Bhopal, Hyderabad and Jaipur and 8 relay stations at Villupuram, Tiruchi, Jammu, Nagpur, Kolhapur, Rohtak, Allahabad and Varanasi. In addition, mother stations at Trivandrum, Bangalore, Gauhati and Ahmedabad are proposed to be included.*

*At the time of factual verification the Ministry of Information and Broadcasting have stated : "However, due to constraints in resources, the Planning Commission has approved an outlay of Rs. 80 Crores only for TV expansion in the Fifth Plan."

1.8. The Committee note that introduction of T.V. in India has had a low priority and that it was only during the 4th Plan that expansion of T.V. net work in the country was seriously thought of. They agree that other pressing problems like agricultural and industrial development, employment, education etc., facing the country, required higher priorities compared to Television. Now that Government have taken a decision to expand the TV net work in the country, the Committee would like to sound a note of caution that extreme care should be taken in regard to planning and programming of TV broadcasts in the country. It is to be realised that TV medium, as an audio-visual medium, is very powerful for mass-communication and has a unique role to play in this regard. It is an important means of transmission of messages relating to national development. It can play a vital role in the successful implementation of Five Year Plans and accepted national socio-economic policies. The Committee recommend that Government should learn a lesson from the experience gained in the use of this medium in foreign countries and its effect on the viewers and carefully plan the use of this powerful medium for nation building activities and for achievement of socio-economic objectives, besides providing healthy entertainment, by directing it in proper channels.

CHAPTER II

DEVELOPMENT OF TELEVISION

(i) Schemes/Projects undertaken for the development of TV network during the Fourth Five Year Plan and the progress made.

2.1. Television made a modest beginning in India when an Experimental Television Centre was set up in Delhi in September, 1959 with a view to using this medium both for school and out of school educational purposes with special emphasis in the fields of agricultural development and health and family planning.

2.2. In May 1965, Government approved in principle that development of TV net-work in the country should be undertaken in a phased programme. The question of expansion of television net-work in the country was thought of during the Fourth Five Year Plan only. The following schemes were included in the Fourth Five Year Plan for the development of TV net-work in the country.

Fourth Plan T.V. Schemes

- (1) Television Centre, Srinagar.
- (2) Television Centre, Bombay with relay centre at Poona.
- (3) Television Centre, Jullundur with relay centres at Amritsar and Kasauli.
- (4) Television Centre, Madras.
- (5) Television Centre, Lucknow with relay centre at Kanpur.
- (6) Television Centre, Calcutta with relay centres at Kharagpur/Midnapore and Asansol.
- (7) Extension of Television facilities at Delhi, comprising:
 - (i) Augmentation of studio facilities at Delhi TV Centre.
 - (ii) Recording Studio at Mandi House.
 - (iii) Permanent 2x10 kw TV Transmitter with 200 M tower.

2.3. The following schemes included in the Fourth Plan, have already been implemented during the Plan period:

- (1) T.V. Transmitting Centre, Amritsar.
- (2) Srinagar T.V. Centre.
- (3) Bombay/Poona TV Centre.

2.4. It has been stated by Government that the remaining projects that would be spilled over to the Fifth Plan were as follows:

- (1) TV Jullundur/Kasauli.
- (2) Lucknow-Kanpur T.V.
- (3) Permanent 2×10 kw TV Transmitter at Delhi under extension of TV Delhi.
- (4) Relay Transmitter at Mussoorie under expansion of Delhi T.V.
- (5) T.V. Madras.
- (6) T.V. Calcutta
- (7) Three Satellite Base Production Centres at Hyderabad, Cuttack and Delhi.
- (8) Extension of coverage of TV Calcutta to Asansol/Kharagpur.

2.5. Work on T.V. Centre, Madras and Base Production Centres was already at an advanced stage. Subject to improvised studios facilities being made available by West Bengal Government an interim set up at Calcutta to come up in the beginning of 1975 was also being planned.

2.6. Most of these projects like TV Jullundur/Kasauli, Permanent 2×10 kw T.V. Transmitter, Delhi, TV Relay Transmitter at Mussoorie, three Satellite Base Production Centres and Extension of coverage of T.V. Calcutta to Asansol/Kharagpur were included in the Fourth Plan only at the time of the mid-Term Appraisal in September, 1971.

2.7. The original outlay revised outlay and the revised anticipated cost and the anticipated expenditure to be incurred on the schemes by the end of the Fourth Plan is as under:

Sl. No.	Name of Project	Outlay as approved by Planning Commission		Revised anticipated cost	Anticipated expenditure by the end of Fourth Plan (Rs. in lakhs)
		Originally in 1969	During Mid- term Ap- praisal of Plan in September, 1971		
1	2	3	4	5	6
1	TV Srinagar .	167.00	306.00	372.00	240.81
2	TV Bombay/Poona .	102.00	224.00 (excluding Rs. 113 foreign aid)	300.00	207.16
3	TV Madras	101.00	182.76	514.00	147.35

1	2	3	4	5	6
4	TV Calcutta	99.00	190.59	760.00	133.18
5	TV Lucknow/Kanpur	99.00	300.33	564.00	121.89
6	Film & TV Training Institute, Poona.		109.98 (Excluding Rs. 83 lakhs as gift)	130.06	49.03
7	Base Production Satellite Centres		125.87	242.10	44.01
8	Extension of Coverage of TV Calcutta to Asansol / Kharagpur/Midnapore.			180.00	
9	Augmentation of TV facilities Delhi.	72.00	424.95	650.00	42.27
10	TV Jullundur/Kasauli/ Amritsar.		334.00 (In August, 1973, planning Commi- ssion approved a Provision of for Rs. 550.40 lakhs for Jullundur /Kasauli TV net work)	550.40	26.25
11	Amritsar Phase I		75.60	87.00	76.50

2.8. As against the original estimate of Rs. 6.40 crores at the beginning of Fourth Plan in 1969, the revised total estimated cost during the mid-term appraisal of Plan was stated to be 23.34 crores. The representative of the Ministry of Information and Broadcasting, however, stated during evidence that the revised cost of the schemes in the Fourth Plan had gone up from Rs. 23 crores to Rs. 35 crores.

2.9. As regards the reasons for upward revision of the outlay, the Ministry of Information and Broadcasting in a written note had stated:

“Upward revision of the outlay for most of the schemes of the Fourth Plan is generally due to the following reasons:

- (i) Escalation in the cost of equipment.
- (ii) Change in the scope of the project in the light of experience gained to provide more technical and studio facilities etc.
- (iii) Revision of height of the TV Tower from 150 Metres to 175 Metres with a view to accommodate second TV Channel.
- (iv) Provision of O.B. Vans for field coverage.”

2.10. Asked by the Committee whether the question of price rise was also taken into consideration at the time of making assessment regarding cost of the schemes, the Chief Engineer, A.I.R. replied that these were the estimates worked out at various stages as part of the Fourth Plan. The witness added that the prices were going up and one of the reasons for escalation was general rise in the prices. Citing the example of TV station in Jammu and Kashmir, the witness stated that, as against the original estimate of Rs. 1.67 crores as part of the Fourth Plan, it was now Rs. 3.25 crores whereas in the case of Calcutta TV station, the estimate had gone upto Rs. 7.43 crores as against the original estimate of Rs. 1.91 crores. He added, "In certain respects our scope of the projects has altered. That also contributes to the revised figure of estimates."

2.11. Asked to state whether any exercise has been done about the enhanced estimates due to various factors, the Director General, AIR stated during evidence:

"We have done that in most of the cases. There are two components for increased cost. One is escalation. The increased cost during the past 3 or 4 years in respect of building, equipment, cost of steel, cement and so on and so forth. The second one is due to major change in the scope of the project. Calcutta is one example of this type. If the same room is to be constructed, the figure will be of a different order. But if there is to be a different room and a bigger room and better equipments to be installed which we gain in the light of experience, then the variation will be larger."

2.12. As regards the reasons for non-completion of the aforesaid schemes during the Fourth Plan period, it has been stated by Government that normal time schedules for completion of the TV studios and the transmitter projects respectively were about 4 years and 3 years from the date of the administrative approval of the projects. Hence some of these stations were not expected to be commissioned during the Fourth Plan period. The position of cases which were to take more than the normal period of four years and had been abnormally delayed is stated to be as follows:—

"As a long term measure, it was decided to revise the specifications for the TV towers at Madras, Calcutta, Lucknow and Kanpur to accommodate a second TV Channel. This required redesigning the profile of the towers and consequent revision in contractual terms between the D.G.S.&D. and Suppliers. In view of this some delay has been caused in the supply of T.V. towers at these places."

In the case of Calcutta TV Centre, delay has also been caused due to change in site. The site at Victoria Square selected earlier could do not be made available by the State Government. Instead, the Chief Minister of West Bengal offered a site at Golf Course which was taken over only in March, 1973. Similarly, at Lucknow considerable delay has occurred due to non-availability of suitable site for studios.

In the scheme of setting up of permanent 2×10 kw TV Transmitter at Delhi which was included in the Mid Term Appraisal under the scheme 'Extension of TV Delhi', the delay has mainly been due to the change in site. The scope of the project has also changed due to change in site from N.D.M.C. building to the new site at the 'Ridge' near the University which has been finalised only recently."

2.13. Subsequently, the Ministry of Information and Broadcasting, in a written note have stated, "It has been observed while implementing TV schemes included in the Fourth Plan that delay has mainly occurred due to the time taken in (a) acquisition of site (b) construction of tower and (c) revision in the scope of project in some cases." With regard to each of these causes, the Ministry of Information and Broadcasting stated as under:

"(a) Acquisition of site:

Normally it takes from 1½ to 2 years to acquire sites for construction of studios, transmitter and staff quarters for a TV station. The time taken in the acquisition of site for studio is naturally more as the studio may have to be located within the city limits....."

(b) Construction of TV Tower

According to present procedure, A.I.R. is required to place an indent for fabrication of T.V. towers on the D.G.S.&D who invite tenders, scrutinise them in consultation with A.I.R. and place orders. Our experience has been that this process takes between 12—18 months. Another 24 months are taken in the fabrication of the tower by the firm on which the order is placed. Adding to it the time taken in installing the TV Antenna on top of the tower and in test transmission, it will be seen that the tower segment of a TV project requires a minimum of 3-4 years to complete from the time of first placing the indent on D.G.S.&D. This seriously upsets the schedule of commissioning of a T.V. Station. In the design of the TV masts, A.I.R. engineers are involved from the very start with the suppliers. They know exactly what they want and have the necessary expertise to judge whether the installations being delivered to them are according to their specifications and needs. This Ministry had, therefore, taken up with the Ministry of Supply that A.I.R. should be allowed

to place direct orders on M/S Triveni Structural Ltd. who are a Government Undertaking, because our experience was that the present procedure through D.G.S.&D. was more time consuming. The Ministry of Supply, however, have not found it possible to allow A.I.R. to place orders directly on M/s. Triveni Structural without going through the D.G.S. & D.

(c) Revision in the Scope of the Project:

Originally TV Studios at Lucknow, Madras, Calcutta were designed for operation with two studios, more or less similar to the facilities provided at Bombay and Srinagar. The number of studios and the technical areas had to be revised at all the Centres on the basis of our experience gained from the functioning of Bombay and Srinagar TV Centres and programme production facilities as required by software divisions and keeping in view the recommendations of Mr. N. C. Davey (International Broadcasting Consultant, London) on the designing of the TV studios. In view of this, what was originally a two studio set up at Calcutta has now been planned for 3 studios. TV Studios at Lucknow and Madras have also been redesigned with revised floor areas. Such revision in scope naturally result the overall delay in the execution of the project."

2.14. Asked by the Committee regarding physical achievements made, the representative of the Ministry of Information and Broadcasting stated during evidence that the TV stations at Srinagar and Bombay have been commissioned and the relay centres at Amritsar and Poona would be inaugurated on the 29th September and 2nd October 1973 respectively. In the case of Madras and Lucknow TV Stations, the witness said that the Madras station was late by 6 months, whereas building plans for Lucknow TV stations were ready and construction will be taken up as soon as the land problem was solved. The witness added that in the Fourth Five Year Plan, the concerned projects did not start from the very first year but round about the second or third year of the Plan and one great bottleneck in the case of these projects was the acquisition of land.

2.15. Explaining further the reasons for the partial implementation of the Fourth Plan schemes, the representative of the Ministry of Information and Broadcasting stated:

"There are specific reasons with respect of each project. For instance, about Lucknow, I explained to you the problem of land acquisition. In Madras, the delay was caused by our own decision to change the height of the tower. Then you may ask as to why we did not foresee this earlier. The answer is that we were not highly experienced people in setting up new television stations. We decided that while building the tower we should increase the height from 150 to 175 metres, because we wanted the tower to have an inbuilt capacity for a second

channel when we want to have it. This is the decision which we have taken.

In Calcutta, the delay has been caused by our decision to go in for a nation-wide architectural competitions, apart from the delays in the acquisition of land. There are specific reasons sometimes because of the decisions taken by us; sometimes the delay is caused by our suppliers, and sometimes the delays of various agencies that build various buildings for us. There are various reasons why various projects have been delayed.

But there is also a larger consideration that I wish to place before you. That is regarding the Plan implementation. At the beginning, the Planning Commission gives us a plan. After that, in the actual sanction and implementation of the projects, it is not merely the Ministry of Information and Broadcasting or the main administrative Ministry that is involved. For instance, the actual final sanction of the project is given by the Finance Ministry. And then, of course, land acquisition is involved. State Governments come in. In those days, buildings used to involve the C.P.W.D., that is, till a year or so when we set up our own civil engineering organisation. Supplies of equipment have to be done through the D.G.S. & D. That means these have been post offices between us and the suppliers. And we have to go through this agency. And this agency also can be responsible for the delays. So, it is quite a complex of decision making not only by the Ministry concerned but by a number of associated limbs also of Government. It is then that the Plan gets implemented.

I was going to add that when the orders are placed, they are placed with the big firms that make our transmitter towers. Our orders were placed with the Bharat Electronics Ltd. There too some delays can take place. The sum total of all these delays is that all these factors are responsible for the delay in the completion of plan project."

2.16. Asked to state as to what time is taken by the Planning Commission to give clearance to the Schemes, the representative of the Planning Commission stated during evidence that the clearance of schemes was given at the beginning of every Plan. Elaborating further, the witness stated:

"Though the Fifth Plan is still at formative stage, we have by now formed some tentative ideas of the likely TV development programmes in the Fifth Plan. We have already discussed these tentative details with the representatives of the concerned Departments. The Planning Commission will take a firm view

in this regard before the Fifth Five Year Plan is finally formulated. Thus, the new T.V. schemes which will be agreed to by the Planning Commission will be known to the Information and Broadcasting Ministry before the beginning of the Fifth Five Year Plan, that is, April, 1974..... But it is true that finalisation of these development plans takes some time. For instance, at the initial stage, it was suggested by the Ministry of Information and Broadcasting that 15 additional TV mother stations should be set up in the Fifth Plan. The matter was discussed in detail in the Working Group and subsequently the number of mother stations was revised and reduced to 9. Even 9 additional TV mother stations may prove to be too ambitious with due regard to the resources in sight. The various aspects of the programme have, therefore, been further discussed and a broad view has now been taken. All these processes take sometime.

I will give one illustration as to how things can be delayed. Planning Commission approved the Jullundur TV scheme some two years back at an estimated cost of about Rs. 3.5 crores. Subsequently, the cost was increased to Rs. 9 to 10 crores. Naturally because of such a significant rise in cost, the matter was again referred to the Planning Commission. We had to sort out various details in several sittings with the representative of Information and Broadcasting Ministry and the proposal has now been modified to cost about Rs. 5 to 6 crores. All these take some time.”

2.17. As regards the time taken by the Ministry of Finance, the representative of the Information and Broadcasting Ministry said that it takes time for the Ministry of Finance to sanction funds. He stated:

“The next stage is for the Ministry of Information and Broadcasting to prepare what is called a E.F.C. memo which gives various details, cost estimates, staff that is needed, the supplies that are needed for the project and all kinds of details and financial estimates are given in this E.F.C. memo. This goes to the Ministry of Finance and it comes back and forth between the administrative Ministry and the Ministry of Finance for another six months or more. My experience—not here—in other places is that sometimes it comes back and forth for over a year.”

2.18. As regards the delay caused due to land acquisition proceedings, the Director General A.I.R. stated during evidence:

“Land acquisition proceedings take about a year..... When the proposals for the Fifth Plan, in the first stage for 15 stations

was formulated in April, 1972.....I put forward the proposition that if for about half a dozen stations, they give us the formal clearance to acquire land, we can go ahead, because the options of choosing the sites in these towns are fast decreasing. The point I am trying to make is, if today we are given clearance to acquire land, the position would have been different from our having been given that discretion 12 months earlier. The position is becoming difficult every day."

2.19. The representative of the Ministry of Information and Broadcasting elaborating further stated:

"No formal steps can be taken for the acquisition of land. It is not merely that the Planning Commission has to do it. We have to go and get the approval of the Finance Ministry. Now, there has to be a general blessing from the Planning Commission to the Finance Ministry to make available the money that is needed for acquisition of land, as an advance action for a plan project. If we get that, then of course, we will be able to plan ahead."

2.20. The representative of the Planning Commission agreeing with the above proposition stated:—

"In fact, in all the plans, I might say that we just try to have a portion of the outlay earmarked for the advance action for the next Plan period. For instance, in regard to steel plants etc., they will have to take advance action for the Sixth Plan in the Fifth Plan itself. From the side of the Planning Commission, there is absolutely no difficulty in accepting this principle—that certain portion of the outlay has to be earmarked for advance action for the next Plan period. About that, there is no difficulty absolutely."

2.21. In reply to a question posed by the Committee as to what was the way out to effect improvement in the functioning of the ministries so as to avoid delay when there was tendency among the Ministries concerned to throw the ball in the court of one ministry or the other, the representative of the Ministry of Information and Broadcasting, stated:

"The actions of the implementing Ministry are subject to scrutiny and clearance at so many points. Suppose a plan outlay has been given to a particular Ministry, a financial outlay is sanctioned; but still that Ministry has to go to the Finance Ministry for a precise financial sanction. Once a plan has been given to a Ministry, let that Ministry implement at the plan within

that outlay, or hand itself. This is something that the Government as a whole will not approve of, because it works on the principle that the financial scrutiny is necessary to prevent waste. That may be so. But it means delay. Suppose we set out to buy something, e.g., studio equipment or order a tower or transmitter etc. You may have engineers, high level electronic engineers in AIR etc. but still, you have to go to the D.G.S. & D. They order for us. If we have to order radio or TV sets for Kashmir, they do it for us and we cannot order directly. If there is delay in the provision of TV such as in Kashmir, we do not blame ourselves. We throw the ball in their courts. It is true. It is they who are responsible for the supply..... Once the responsibility is diffused over so many areas and in this manner when the ball is to be thrown back and forth, there will be delays. Therefore, it is a much larger matter of the problem of effecting reform of the administrative machinery of the Government, under which the responsibility is thrown squarely on the Ministry concerned to implement the plans.... This would be possible only when, as far as possible, the authority and the responsibility for the implementation of a project is concentrated in the Ministry concerned."

2.22. Asked to state whether, apart from keeping in view the space requirements for the main buildings, the requirements of space for housing the staff, were also kept in view while planning for development of TV Centres, the witness stated:

"We can start in a smaller way provided for the lay-out we are allowed to select the optimum area so that in future for the expansion in Phases 2 and 3, there would be no difficulty. We are not always able to convince the people."

2.23. Citing an example of cuts made in the plans, the witness stated that in the case of Jullundur, it has been suggested to omit the staff quarters entirely. Elaborating the point, the representative of the Ministry of Information and Broadcasting stated that as TV was something new in the country, the earlier designs and estimates were a little low-pitched. But, in the light of the experience gained at Bombay and other centres, the designs were revised and these were of the order of Rs. 8 crores. But, after discussion with the Ministry of Finance the figure as agreed to now was of the order of Rs. 5.50 crores. He added that as a consequence of the strain on the resources, the staff quarters have been mostly cut down.

2.24. The Secretary, Ministry of Information and Broadcasting, stated:

“With the new experience that we are gaining, in the working of the existing TV stations, our plans for the new buildings for TV stations will have to considerably go up. For example, for Lucknow itself, we provided for about Rs. 37 lakhs originally. But, the present estimate is about Rs. 80 lakhs. We will have to engage in a very rigorous dialogue with Finance to get this money.”

He further added:

“Every television station must fully meet the operational needs of the staff. In connection with the designing of new television stations, which we are undertaking, particularly in Calcutta and all that, the design is subjected to a great deal of users' reaction. The electronics, engineering and other programme personnel are all asked to look at the design and see to what extent it will meet their requirements, and that the design that is prepared with full consideration of the users angle of engineers and programmers, should be looked at. We do hope that this will be reviewed by Finance with understanding and sympathy.”

2.25. With regard to making the funds available for future schemes to avoid difficulties in respect of space etc., the representative of the Ministry of Finance stated “only such schemes for which funds were available should be sanctioned and the others should be kept in abeyance.

2.26. Asked by the Committee about the design and pattern of TV Buildings on the pattern evolved in other countries, the representative of the Ministry of Information and Broadcasting replied that recently, UNESCO Experts who had great deal of experience of TV design and construction were invited for consultations regarding the designing of TV stations and in the light of the discussion held, plans for new TV Stations have been substantially revised.

2.27. The Ministry of Information and Broadcasting furnished the following information as regards the percentage of population anticipated to be covered both in urban and rural areas by the TV net work during the Fourth Plan period and the coverage likely to be achieved by the end of the Plan period. The Ministry of Information and Broadcasting in a written note have stated:

“At the commencement of the Fourth Plan, only Delhi T.V. Station was in operation. Six mother stations namely Bombay,

Srinagar, Madras, Calcutta, Lucknow and Jullundur and 7 relay Centres, namely Poona, Amritsar, Kasauli, Kanpur, Asansol, Kharagpur and Mussoorie are included in the Fourth Plan. It was estimated that on the completion of these projects included in the Fourth Plan, the all India coverage of the population by the television service would become 16.8 per cent. Out of this, the percentage of population in rural and urban areas was anticipated to be 9.8 per cent and 7 per cent respectively. However, only two mother stations at Bombay and Srinagar and two relay centres at Poona and Amritsar have already been commissioned, in addition to Delhi. No other T.V. stations are expected to be commissioned during the Fourth Plan period. Thus, the percentage of population that will be covered till March, 1974, will be 4.7 per cent. Out of this, 2.5 per cent will be in rural areas and the rest i.e. 2.2 per cent in urban areas".

2.28. The Committee note that the Fourth Five Year Plan envisaged completion of six mother TV stations viz. Bombay, Srinagar, Madras, Calcutta, Lucknow and Jullundur and Seven Relay Stations at Poona, Amritsar, Kasauli, Kanpur, Asansol, Kharagpur and Mussoorie at an estimated cost of Rs. 23 crores. It was estimated that on the completion of these projects, the all India coverage of the population by TV service would be about 16.8 per cent i.e. 9.80 per cent and 7 per cent of population in the rural and urban areas respectively.

2.29. The Committee also note that only two TV mother stations at Bombay and Srinagar and two relay centres at Poona and Amritsar have been commissioned and that the achievement in terms of population coverage will be 4.7 per cent only (till March, 1974), of which 2.5 per cent will be in the rural areas and 2.2 per cent in the urban areas, the remaining TV stations/relay stations being spilled over to the Fifth Plan period.

2.30. The Committee are unhappy at the slow progress in the execution of the television projects/schemes during the Fourth Plan period.

2.31. The reasons for the slow progress in the implementation of the TV scheme have been mainly attributed to the time taken in the acquisition of site, revision in the scope of the project, decision to revise the specifications of TV towers in the case of certain TV stations and delay in supply in the equipment etc.

2.32. The Committee are constrained to observe that there has been lack of proper initial planning and estimation which necessitated revision in the scope of projects at a later stage resulting in delays in the execution of the projects.

2.33. The Committee need hardly emphasise the desirability of close coordination and concerted efforts at all levels of planning and implementation of schemes/projects to achieve the desired results.

2.34. The Committee feel that in the light of the experience gained the reasons regarding the progress in the implementation of the plan schemes should be identified and the existing arrangements for coordination and the implementation of the schemes reviewed in their entirety with a view to streamlining the entire arrangements to ensure smooth implementation of the schemes in future.

2.35. The Committee need hardly emphasise that continuous review of progress is of vital importance for ensuring successful and timely implementation of projects. There should be annual performance review of the schemes which should be incorporated in the Annual Report of the Ministry.

2.36. The Committee note that acquisition of land for TV station/relay station takes anything between one to three years because of legal difficulties and financial constraints and that the normal time schedule for their completion is between three and four years.

2.37. The Committee also note that at times, there is delay in the procurement of equipment for schemes/projects as the normal procedure for ordering them through DGS&D has to be followed.

2.38. The Committee are strongly of view that the whole procedure for acquisition of land and procurement of equipments etc. has to be nationalised.

2.39. It was brought to the notice of the Committee that the Ministry of Finance has been approached for their concurrence in initiating advance action for the acquisition of sites and ordering of equipment etc. required for the TV/relay stations proposed to be set up during the Fifth Plan period and that their formal concurrence was being awaited. The Committee would like to be apprised of the final decision taken in this regard.

2.40. Television programme is new to the country and it is therefore imperative that the Ministry charged with the responsibility for implementation of the programme should be vested with adequate powers to initiate timely action in the matter of acquisition of land and the ordering of equipments etc. for new TV stations. The Committee would like Government and the Planning Commission to examine whether some additional funds could be specifically earmarked and made available for taking such advance action. Government should also consider the question of the Ministry of I. & B. being authorised to place orders direct on public

undertakings such as Bharat Electronics and Triveni Structural for supply of equipment in the interest of speedier execution of projects.

2.41. The Committee recommend that keeping in view the problems inherent in the acquisition of land, delivery of equipments, managerial build-up and organisational set up, a realistic time bound schedule for completion of the various TV schemes in hand and those proposed to be taken up during the Fifth Plan period should be drawn up and effective measures taken to ensure proper and close coordination at all levels to ensure implementation of the schemes according to the schedule.

2.42. The Committee suggest that necessary steps should also be taken simultaneously to seek active cooperation of the State Government concerned where TV/relay station is proposed to be set up in sorting out the procedural delays in the acquisition of sites and necessary procedure evolved to maintain close coordination with the State machinery for the purpose.

2.43. The Committee feel that there is need for a realistic re-assessment of the capacity of the indigenous suppliers of TV equipment etc., particularly BEL to meet within the assumed time schedule, the requirements of the schemes/projects proposed to be taken up during the Fifth Plan period both the spilled over schemes as well as the new schemes. Based on such a reassessment a time bound programme for the supply of indigenous equipment required for TV/relay stations should be drawn up in consultation with the Department of Electronics and BEL and necessary procedure evolved for proper and close coordination to ensure that the implementation of any TV/relay stations is not held up for delay in the supply of equipment etc.

2.44. The Committee are concerned to note that the estimated outlay on the schemes which were originally included in the Fourth Five Year Plan, increased from Rs. 6.40 crores only to Rs. 16.29 crores at the time of the Mid-term Appraisal and is now anticipated to rise to Rs. 31.60 crores, i.e., an increase of about five times of the original estimates. Similarly, the estimated expenditure on four other schemes which were included in the Fourth Plan, during Mid-term Appraisal (1971), has risen from Rs. 6.45 crores to Rs. 10.10 crores. The rise in the estimated cost has been attributed to escalation in the prices, revision in the scope of projects etc. The Committee strongly feel that the original estimates of the various projects/schemes were not only framed in a rather unrealistic manner but the wide variations in the original estimated costs and the latest revised costs also indicate the casual manner in which the cost of the schemes were estimated originally. The Committee realise that in a

developmental economy, rises in costs are likely to occur but then the estimates should provide for such escalations in cost to enable Government to consider the schemes in a realistic manner before sanctioning them. The Committee feel that such wide variations between the original estimated cost and the final costs of the projects, vitiate the very basis on which these schemes are approved by Government. The Committee strongly recommend that not only this tendency should be curbed effectively but the responsibility for such abnormally unrealistic estimates should be fixed to avoid recurrence of such cases in future.

2.45. The Committee need hardly stress the need to step up the progress in respect of the TV schemes in hand so as to complete them as early as possible as further delay in their completion would involve higher cost due to continued escalation in prices.

TV Schemes/Projects undertaken during the Fourth Five Year Plan

2.46. The Schemes/projects undertaken for the development of TV net work in the country during the 4th Plan period are dealt with as under:

Maharashtra State

Bombay/Poona Television Centre. (Plan provision Rs. 337.00 lakhs— including Rs. 113 lakhs foreign exchange).

It has been stated that the Scheme was administratively approved on 30th April, 1970. The TV Station at Bombay with a range of 95 kms. covering a population of 85 lakhs was commissioned on the 2nd October, 1971. The TV Station has been set up mainly with the aid provided by the Federal Republic of Germany.

2.47. The Poona TV relay transmitter relaying programmes from Bombay TV Station was commissioned on 2nd October, 1973. With the commissioning of Poona relay transmitter TV coverage would extend over an additional 86 Kms. around Poona and a population of 53 lakhs.

Jammu and Kashmir

Television Centre, Srinagar

(Plan provision Rs. 306 lakhs)

2.48. It has been stated that the project was administratively approved on 5th June, 1968. The television studio and the transmitter are located separately. The installation of TV stations and the transmitter has been completed. However, consequent to the damage to the tower on 19th January, 1973 during a gale, the project has got somewhat delayed. The contractor M/s. Kamani's have now taken up the construction and repairs to the television tower, the total height of which will be 122 meters.

2.49. At present the TV centre is giving temporary transmission on low power antenna with effect from 26th January, 1973. The Centre will be commissioned on full power as soon as the tower is ready. The estimated cost of the project is Rs. 326.00 lakhs. A proposal is under consideration for augmenting the television facilities at Srinagar by the addition of a third studio and provision of additional equipment like O.B. Van, telecine chain, independent video control to the existing studios and construction of additional office accommodation.

2.50. The Ministry of Information and Broadcasting in their written note furnished to the Committee gave the following reason for increase in the cost of the project:

- (a) Entire cost of the construction of the road upto the top of Shankaracharya Hill had to be borne by A.I.R. against the earlier decision of sharing the expenditure with the State Government on 50:50 basis.
- (b) Provision of an O.B. Van for field coverage.
- (c) Provision of additional accommodation for office, another studio and a Rehearsal Studio.
- (d) Original estimates were made on the assumption that equipments would be imported. It was later decided to obtain equipment through M/s. BEL which has resulted in higher cost.

Elaborating, the Ministry of Information and Broadcasting have stated:—

“Plan provisions for various projects are normally based on typical costs of projects, since specific estimates for individual projects can be prepared only after details of the project are worked out. These typical costs are based on the equipment costs available at that time average requirements of sites for such projects and costs thereof in the region concerned, average costs of Civil Works and broad details of equipment requirements.

In the case of Srinagar, the Fourth Plan provision of Rs. 306 lakhs was based on the estimated cost of the project at that time, which included a provision for half the cost of construction of the road to the top of Sankaracharya Hills, on the assumption that the cost of the road will be shared by J & K Government and the Central Government. Subsequently it was decided to provide for the full cost of construction of the road initially in our project estimate, as per the estimated cost intimated by the Border Roads Development Board.

The difference of Rs. 20 lakhs between the plan provision and the present estimated cost is due to the increased quantum of cost of the road upto the top of Shankaracharya Hill. The amount included in the earlier estimates was Rs. 55 lakhs while in the latest estimates, the full cost of Rs. 79.57 lakhs has been included and the sanctions have been accorded for the purpose. The enhanced cost on the road is mainly due to construction of retention and breast walls on the hill where the road traverses."

2.51. Asked about the reasons for delay in the commissioning of the T.V. centre, Srinagar, besides damage caused to the tower, the Ministry of Information and Broadcasting in a written note have stated:—

- “(a) The original target date for commissioning the T.V. centre, Srinagar was July, 1972. Test transmission started *w.e.f.* 26-1-1973 on a temporary antenna and low power. With these limitations 4 hourly service was introduced *w.e.f.* 13-7-1973. T.V. transmitter has been tested on full power on 6-11-1973 on normal antenna and has started functioning on full power for regular transmissions.
- (b) The other factors that contributed to the delay in the execution of the project were as follows:—
 - (i) Delay in the acquisition of studio site.
 - (ii) Delay in the sanction to civil estimates.
 - (iii) Limited working period due to severe weather conditions in winter months.
 - (iv) Damage caused to the tower due to the heavy gate.

2.52. As regards Community Viewing T.V. sets in the area covered by Srinagar T.V. Station the Ministry of Information and Broadcasting, in a written note furnished the following information to the Committee:

“....(a) To start with, it has been proposed to set up 550 community viewing centres in the State. Over 440 centres have been selected thus far by the State Government. An order for 660 T.V. sets along with accessories was placed by Director-General, Supplies and Disposals, on 6-12-72 on M/s. J. K. Electronics, New Delhi, 422 sets have reached Srinagar 150 Centres have already been equipped with sets and installation at other centres is in progress. The balance 238 sets are under inspection by the inspection staff of Directorate General, Supplies and Disposals, New Delhi.”

2.53. With regard to the installation and organisational set up for the maintenance of these community T.V. sets the Ministry of Information and Broadcasting in a written note have stated:—

“Over the last several years, All India Radio has been responsible for the maintenance of the Community. Receivers for sound broadcasting in J & K State.... A basic organisation for maintenance of community radio receivers already exists in the State. The maintenance of T.V. receivers has been organised by suitable additions, modifications to the existing set-up.

With the installation of a T.V. Station at Srinagar, Government approved a proposal to provide Community Viewing Centres within its service zone. The expenditure sanction was issued by the Ministry in the Month of May, 1971 which provides Rs. 72 lakhs for procurement of 2,750 community Receivers.

The Government of J. & K. State constituted Committee to decide on the location and functioning of Community Viewing Centres. This Committee appointed three teams to go around and select suitable locations for community sets one each for the three districts. Anantnag, Baramulla and Srinagar. The teams have prepared a list of possible locations under four categories.

- (1) Locations where T.V. reception is expected to be good and where power supply is also available.
- (2) Locations where T.V. reception is expected to be good but electric power is not available.
- (3) Locations where electric power is available but T.V. reception is doubtful as they appear to be marginally situated and are within the shadow zone.
- (4) Locations which are not electrified at present and are located in areas where T.V. reception is also doubtful.

The Committee at its meeting held on 18th March, 1971, at Jammu decided that, as a first step, action should be taken for installation of sets in category (1) above only. The total number of these locations is about 550.

The Committee also decided that the question of installing Community Viewing sets in category (2) above should be taken up as soon as these locations are electrified by the State Government.

The Committee has also recommended that the Care-takers should be paid a honorarium of Rs. 50 per month to give them an incentive to properly organise the viewing Centres even in bad

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weather conditions. The question whether this amount will be paid by the State or Central Government, will be taken up with the Central by the State Government.

Arrangements have been made for the maintenance of these 550 sets in the first phase. As more villages become electrified and more sets are installed, the Maintenance Organisation will have to be accordingly expanded.

Besides the technical maintenance, the sets will have to be periodically inspected according to a schedule to prevent shifting of sets and for the detection of defunct centres. It has been our experience that when not inspected regularly, the sets are likely to be shifted to the residences of the individuals and at times the Centres remain inoperative for long spells, once the sets got out of order as the care-takers do not bother to contact maintenance centres in time."

2.54. The Television Centre at Srinagar is yet another example of unrealistic planning and estimation in respect of the cost of the project. In the case of certain items, provision was made on assumptions which did not prove to be correct. The Committee hope that keeping in view the experience gained every possible care would be taken in framing a more realistic estimate of the proposed augmentation of the television facilities at Srinagar which are estimated to cost Rs. 3 crores and effective measures would be taken to ensure proper coordination at all levels of planning and implementation of the scheme to avoid any delay in the execution of the project.

2.55. Committee note that the T.V. station at Srinagar which started operation on low power antenna has switched over to normal antenna with effect from 6th November, 1973.

2.56. The Committee note that out of 550 community viewing centres proposed to be selected, 440 centres have been selected of which 150 centres have been provided with community viewing T.V. sets.

2.57. The Committee desire that immediate steps should be taken to finalise the remaining community viewing centres and to provide them with T.V. sets expeditiously, so as to extend T.V. service to these areas also without delay.

2.58. The Committee would like that the question regarding electrification of the villages/locations selected for T.V. service where T.V. reception is expected to be good but power is not available should be taken up with the State Government.

2.59. The Committee note that in view of the fact that the All India Radio has been responsible for the maintenance of the community receivers for sound Broadcasting in the State of Jammu and Kashmir, the existing organisation for maintenance of these receivers is proposed to be augmented suitably for the maintenance of community T.V. sets also under the central responsibility.

2.60. The Committee would like Government to carefully evaluate the experience of the working of community sets in Jammu and Kashmir so that in the light thereof, guidelines could be evolved for the location of these viewing centres as well as for the upkeep and efficient maintenance of community T.V. sets. The Committee feel that unless the maintenance of community sets and their efficient functioning is assured it would hardly be possible to extend the benefit of television to the rural masses as the present cost of sets is too high for an ordinary farmer to afford its luxury.

2.61. The Committee also stress the need for intensified research so as to evolve a T.V. set which would be hardy and render trouble-free service over a period and which could be maintained and repaired easily and economically. As many of the villages may not have electricity, though coming in the command area of the television centre, it is necessary to speed up the development and manufacture of transistorised television sets within the country for establishing viewing centres in such villages.

2.62. The Committee would like to be informed within six months of the concrete action taken and progress achieved in pursuance of the above recommendations.

Punjab

Television Station, Jullundur

(Plan provision Rs. 334.00 lakhs)

(Revised anticipated cost: Rs. 550.40 lakhs)

2.63. It has been stated that it was proposed to set up a Television mother station at Jullundur with relay centres at Kasauli, Bhatinda and Anuritsar. A ten acre site belonging to the Urban Improvement Trust has been taken over and the T.V. centre is expected to be ready by 1976-77.

T.V. Centre at Bhatinda and Kasauli

2.64. Sites for the T.V. relay centres are yet to be finalised. The relay centres are expected to be ready by 1976-77.

T.V. Centre, Amritsar

2.65. As part of the above project a relay centre has been set up at Amritsar with a limited play back facilities. The relay centre was commissioned on 29th September, 1973. The programmes for telecast from the Centre are for the present being recorded at Delhi for which a studio has been set up at Akashwani Bhawan, New Delhi.

2.66. During evidence the Committee were informed that Jullundur TV Scheme was approved at an estimated cost of Rs. 3.5 crores but subsequently the cost was increased to Rs. 9 to 10 crores and the plan proposals have now been modified to cost about Rs. 5 to 6 crores. Giving the basis of the earlier estimate of Rs. 9.61 crores and its subsequent modification to Rs. 5.50 crores the Ministry of Information and Broadcasting in a written note have stated:—

“A proposal for the establishment of a programme originating and transmitting centre at Jullundur with relay centres at Bhatinda, Kasauli and Amritsar was prepared at an estimated cost of about Rs. 93.61 crores to provide television coverage to near cent per cent population of Punjab. The estimates of Rs 9.61 crores were based on assessed cost at the time of formulation of the proposal. No specific provision had been made in these estimates for likely increases in the prices by the time the project would be executed.

These proposals were submitted to Ministry of Finance in February, 1973. However, based on discussions in that Ministry the estimates were amended to Rs. 9.08 crores and resubmitted, for placing the proposal before the Public Investment Board. On further examination, Ministry of Finance amended the estimates to Rs. 7.38 crores by reducing provision of Staff Quarters and certain equipment facilities for Amritsar and put up the proposal to the Public Investment Board for consideration in their meeting on 12th June, 1973. The Board in that meeting directed that the revised approval of Planning Commission for the project should be obtained before the proposal could be considered by them. Subsequently, discussions were held in the Planning Commission and as per the decisions arrived at, the scope was reduced further by deleting completely the provision for Staff Quarters, one relay centre at Bhatinda and reducing the studio facilities at Jullundur and a revised proposal at an estimated cost of Rs. 5.50 crores was sent in August, 1973. The proposal as revised was approved by the Public Investment Board in their meeting held on 12th October, 1973.”

2.67. The increase in the cost of the project has been attributed to the following reasons:—

“The main reasons were the change in the scope of the project through provision of additional facilities etc. and escalation in costs. These are indicated below:—

- (i) Increase in cost of Jullundur site.
- (ii) Provision of O.B. Equipment like Van etc. for outside coverage.
- (iii) Increase in complement of film equipment as now found necessary.
- (iv) Provision of independent production facilities from each of two studios.
- (v) Higher cost of building construction due to increased plinth area and increased rates.
- (vi) Increase in cost of equipment to be supplied by BEL and other sources.
- (vii) Increase in height of tower to 200 Mand increase in cost of tower.”

2.68. With regard to the progress made in setting up the T.V. Station at Jullundur and reasons for non-finalisation of the sites for Bhatinda and Kasauli relay stations, the Ministry of Information and Broadcasting in their written note furnished to the Committee have stated:—

“The proposal approved by Government for television coverage in Punjab at a cost of Rs. 5.50 crores includes a mother station at Jullundur with studios and a transmitter, and a relay centre at Kasauli in addition to the relay centre already established at Amritsar. Due to constraint on resources, one relay centre at Bhatinda has been deleted from the project.

A 9.7 acre site for the location of the studio centre at Jullundur has been taken over at a cost of approximately Rs. 25 lakhs. Preliminary survey for selection of sites for the transmitter site at Jullundur and the relay centre at Kasauli has been undertaken and sites provisionally selected. Further action to acquire the sites expeditiously, is in progress. Delay in the selection of site at Kasauli has been mainly due to the time taken in the approval of the project by the Planning Commission and the Ministry of Finance.”

Amritsar Transmitting Station

Plan Provision : 75.60 lakhs
 Revised anticipated cost : 87.00 lakhs

2.69. The original date for commissioning the Amritsar Station on War Emergency basis was end of April, 1972, allowing 6 weeks for installation after receipt of equipment at site. The equipment itself was received by middle of September, 1972 and the installation was completed on 1st November, 1972. In the meanwhile, war conditions had eased and the urgency under which the project was sanctioned had diminished. It was felt that telecasting the same programmes as were put out from Delhi Centre would not be quite acceptable to viewers in Punjab and in Lahore and it would be more appropriate to originate special programmes for the area. This required Studio facilities at Delhi Centre. However, one of the Studios of Delhi Centre, was very old (set up in 1959) and needed renovation and the equipment was being replaced under German Assistance Programme. Since the Studio was under renovation, the facilities for Delhi Centre itself were curtailed and no special programmes for Amritsar could be produced and recorded. This is the reason for the delay in starting the Service even though the installation was complete on 1st November, 1972. This studio has since been made available for service and the Amritsar Station has been commissioned with effect from 29th September, 1973.

2.70. The Committee are distressed to note the manner in which the Jullundur T.V. Scheme has been dealt with at various stages. The proposal to set up Jullundur T.V. Station with relay centres at Kasauli, Amritsar and Bhatinda was initially estimated to cost Rs. 3.5 crores. This was subsequently revised to cost Rs. 9.61 crores to provide cent per cent population coverage in Punjab. The proposal was again amended to cost Rs. 9.08 crores on the advice of the Ministry of Finance. On further examination the cost of the scheme was reduced to Rs. 7.38 crores by the Ministry of Finance. Finally the scheme was approved at an estimated cost of Rs. 5.50 crores by completely deleting the provision for staff quarters, one relay centre at Bhatinda and studio facilities at Jullundur. The main reason for the rise in the cost of the scheme from Rs. 3.5 crores to Rs. 5.50 crores has been attributed to increase in the cost of site at Jullundur, increase in the complement of film equipment now found to be necessary, higher cost of building, increase in the cost of equipment to be supplied by B.E.L. etc.

2.71. The Committee trust that specific provision has been made in the revised estimates for likely increase in the prices by the time, the project would be executed.

2.72. The Committee feel that the existing system of coordination should be reviewed thoroughly with a view to streamlining the procedure of forming, scrutinising and sanctioning the schemes/projects and, if necessary suitable guidelines laid down in this regard.

2.73. The Committee note that the site for the location of the studio centre at Jullundur has been taken over and that the site for the transmitter at Jullundur and relay centre at Kasauli has been provisionally selected. The Committee desire that concerted efforts should be made to acquire the transmitter site at Jullundur and for relay centre at Kasauli expeditiously.

2.74. The Committee are unable to appreciate the manner in which the setting up and commissioning of the Amritsar Transmitting Station had been planned as the very purpose for commissioning it on war emergency had been defeated. The transmitting station which was originally scheduled to be commissioned in April, 1972, was completed in November, 1972 and the service was started only in September, 1973.

2.75. The Committee are surprised to note that setting up of the Amritsar Transmitting Station was taken up without making any assessment of the programme requirements for telecasting and without making adequate arrangements for their production and availability simultaneously with the commissioning of the transmitting station. The result was that though the installation of the transmitting station was completed in November, 1972, service from the station could be started only in September, 1973 when arrangements for the production and recording of the programme to be telecast from the transmission station were made at the Delhi T.V. Station after its renovation. This again goes to show lack of advance planning and effective coordination between all authorities concerned with the implementation of the projects.

Delhi Television Expansion Programme

(Plan provision Rs. 424.95 lakhs)

2.76. It has been stated that the project for expansion of Delhi television centre was administratively approved in January, 1972 at an estimated cost of Rs. 424.95 lakhs. The project envisages construction of additional Television Studio in Mandi House at Delhi, augmentation of television studio facilities at Television Centre, Delhi, installation of a 2×10 kw television transmitter in Delhi and a relay centre at Mussorie for extension of television coverage of Delhi centre in Uttar Pradesh.

2.77. Site at Mandi House had been acquired. Departmental works of a recording studio at Mandi House were in progress and were expected to be ready by July/August, 1973. The site for location of 2×10 kw Television Transmitter has been finalised. Clearance from SACFA is awaited.

A pavilion at the exhibition grounds is proposed to be utilised for the Base Production unit at Delhi. Estimates for modifications to the studio amounting to Rs. 2.41 lakhs have been sanctioned.

2.78. Asked about the delay in the implementation of the expansion programme of Delhi TV Centre, the Ministry of Information and Broadcasting in a written note have stated:—

“The project was administratively approved in January, 1972. The execution of the project has been delayed due to site.

The transmitter complex along with the tower was originally envisaged to be located in the projected 39 storeyed N.D.M.C. building so as to get a 200 M effective height above ground level for mounting TV Antenna. Because of the limitations of height of buildings of 60 M only, imposed by the Connaught Place Redevelopment Advisory Committee on 26th September 1972, survey for an alternative site for the transmitter building and a 200 M TV tower was carried out.

As a result of the survey, two sites were selected—one at Mandi House and another at the Exhibition Ground. These had to be dropped on account of objections raised by the Directorate General, Civil Aviation and Air Headquarters. Another site has now been selected along side the Hindu Rao Hospital on the Ridge. Ministry of I&B has taken up the matter for transfer of this site with the Ministry of Works and Housing. A series of meetings have been held to sort out the issues, involved in the transfer of the site.

Clearance for locating a 200 M tower on the Ridge site has been obtained from the Civil Aviation and Air Headquarters.”

2.79. During the evidence the Director-General, A.I.R. informed the Committee that the total population which will come under the Delhi transmitter coverage was 12 million and the number of T.V. sets now was 80,000.

2.80. With regard to the area covered by Delhi T.V. service, Ministry of Information and Broadcasting in a written note have stated that in the Union Territory of Delhi, 573 square miles (126.1 urban and 446.9 rural), in Haryana 1985.6 square miles and in U.P. 1797.7 square miles are approximately covered.

2.81. Asked by the Committee during evidence about the installation of the Community Viewing TV sets both in the rural and urban areas of

the Union Territory of Delhi, the Chief Engineer, A.I.R. stated during the course of evidence "we have 560 TV sets in schools, 166 sets in urban community viewing centres and 68 sets in rural community viewing centres and 4 sets have been supplied to centres for physically or socially handicapped children". The witness added, "most of the sets have been gifted, except 40 which were bought at a cost of Rs. 91,000.

As regards maintenance of the community viewing T.V. receivers, the witness stated that maintenance is the responsibility of the A.I.R. He added, "all the gifted sets as well as the purchased sets are maintained by the A.I.R., which has got a maintenance organisation. When they receive a complaint that a particular set has gone-faulty these are sophisticated equipments—they go to that place with another set and replace the faulty set and bring the faulty set to the maintenance depot or workshop where it is repaired and got ready for replacement elsewhere. On an average about 40 complaints are received every week....."

2.82. To another querry made by the Committee regarding operation and handling of the community T.V. receivers, the D.G., A.I.R. replied, "the original concept was teleclubs and those (who operate) are called conveners. The critical factor is the interest that the Convener takes. If he is active and regular that works well. It has also been found that for doing this work continuously, some monetary compensation was necessary and in Jammu and Kashmir the Government are paying a small honorarium; also in Haryana he is paid Rs. 20/- per month and the man belongs to the village. The Haryana experience shows that this amount does make a difference in the performance of the conveners". The witness added, "He is given some little training to open it, to close it and then tune, it which even a householder does. If the set becomes faulty, he is to report back to the maintenance workshop....."

2.83. The Committee desired to know the monthly average expenditure on the operation and maintenance of the community viewing T.V. sets and the steps take to minimise the maintenance cost if considered to be on the high side. The Ministry of Information and Broadcasting in a written note stated:—

"The Television centre, Delhi is maintaining 800 sets spread over schools, Urban and Rural Community viewing centres. 240 sets have been installed at Community Viewing Centres. The average number of complaints regarding these are 40 per month. The total number of complaints including those from schools, however, average out to 40 per week.

(i) The centre is not incurring any expenditure on the operation of the Television sets. The electricity charges for operating the sets are borne by the community viewing centre/

tele club itself. However, in the case of some Rural Viewing Centres the Haryana State Government is paying an honorarium of Rs. 20/- per month to the convener of the club.

The maintenance of the sets includes three types of expenditure (a) replacement of parts to make the set operable (b) salary of staff (c) transport charges for collecting and delivering back the set. The average cost of maintenance per set per annum on account of replacement is approximately Rs. 31.00. The average for staff salary per set per annum on maintenance account comes to approximately Rs. 32.00. It is not possible to work out the transport cost as this facility is shared out of a common pool.

(ii) The expenditure on the maintenance of community sets is considered reasonable. The maintenance cost of Rural Community Viewing Centres is higher than that of Urban Community Centre because of (a) lesser distance from the Television Centre (b) greater care exercised by the operator compared to the Rural one (c) better environmental conditions prevailing in the city particularly with regard to dust and rodent menace. Efforts have been made to educate the rural operator in the proper upkeep of the sets."

2.84. The Committee note that there has been delay of more than 2 years in the expansion of the Delhi T.V. Centre. They consider that this delay was not mainly because of the difficulty in the acquisition of site for the transmitter complex but because of faulty planning in the selection and finalisation of a suitable site necessitating changes in the sites for one reason or the other.

2.85. The original proposal to locate the transmitter complex along with the tower in the projected N.D.M.C. building had to be abandoned because of the limitation imposed on height of the building in that area. The two alternative sites selected at Mandi House and the Exhibition ground had to be dropped because of objections raised by the Directorate General, Civil Aviation and Air Headquarters necessitating a survey for the selection of alternative sites.

2.86. The Committee desire that effective steps should be taken to sort out the issues involved in the transfer of the finally selected site near the Hindu Rao Hospital, Delhi for the transmission complex expeditiously to avoid further delay.

2.87. The Committee note that in the Union Territory of Delhi, 68 TV sets have been provided in the Community viewing centres in the rural areas as against 166 TV sets provided in the urban areas.

2.88. The Committee cannot understand why the number of community viewing centres in the rural areas of the Union Territory of Delhi should be only 68 when the community viewing area in the rural sector within the command of Delhi T.V. station is over 446 sq. miles. The Committee would like Government to review the working of the existing rural T.V. centres and take effective measures to increase the community viewing centres in the rural areas. The Committee have, elsewhere in the report given recommendations about the need for efficient maintenance of T.V. sets at the community viewing centres and they would like Government to keep these recommendations in view while establishing more community viewing centres in the rural areas of Delhi.

2.89. The Committee would like to be informed of the progress made in this behalf within six months.

Uttar Pradesh

Lucknow/Kanpur Television Centre

Original outlay: 99.00 lakhs

Mid-term appraisal: Rs. 300.33 lakhs.

2.90. It has been stated that the project was administratively approved on 30th April 1971.

Lucknow Television Centre

2.91. Committee is given to understand that while major portion of the site for location for the T.V. studio has been taken over, a small remaining portion is under equisition. The site for television transmitter has been taken over. C.P.W.D. estimates for the transmitting building has been sanctioned. Tenders have been received and are under scrutiny. Bulk of the equipment has been received and is available at Delhi. Revised plans and estimates for the studio building are under preparation.

The Centre is likely to be ready by 1974-75.

Television Relay Centre, Kanpur

2.92. Television relay centre at Unnao (Kanpur) is part of the television Lucknow project. Site has been taken over and building estimates have been sanctioned. Tenders have been received and are under scrutiny. Equipment has been received. The centre is proposed to relay "offair" programme from Lucknow to start with. The station will ultimately be linked with Lucknow through a microwave link hired from P. & T. Department. The T.V. centre is likely to be ready by 1974-75.

2.93. During the course of evidence the Committee were informed that in the case of Lucknow T. V. Station there was problem of land acquisition. The U.P. Government was being pressed to give the land adjoining the plot already acquired but the U.P. Government were in two minds. Building plans for the T.V. station was ready and construction would be taken up as soon as the land problem was solved.

2.94. Asked by the Committee the reasons for delay in the acquisition of site, the Ministry of Information and Broadcasting in a written note have stated:—

“A site totalling about 3.7 acres in the centre of the city was proposed for T.V. studio centre at Lucknow. The area was in possession of 4 different parties. Out of the 3.7 acres of land proposed for acquisition, 0.9 acres of Municipal land was acquired on 27th July 1972. Land Acquisition proceedings for the private land measuring 1.61 acres commenced in March/April, 1972 and the site was taken over on 5th March, 1973. Thus land totalling 2.51 acres has been acquired. Papers for acquisition of the other two plots of land measuring 0.68 acres and 0.5 acres were filed in October, 1972 and April, 1973 respectively.

In order to get adequate land expeditiously the Secretary, Ministry of Information and Broadcasting had personal discussions on 16th October 1973 with the State Government authorities. The State authorities later agreed to place an additional 3 acres of Government land, known as the U.S.I.S. site, at our disposal. With this, a total contiguous area of 5.51 acres was likely to be available. However, in the middle of December, 1973 the State Government indicated that on reconsideration of the matters U.S.I.S. site is not likely to be available to A.I.R. and that instead, they have now decided to offer an alternative site on Ashoka Marg, Lucknow, presently housing the offices of the Chief Medical Officer and the S.D.O Hydel, measuring about 9 acres. This site has been inspected by the officers of A.I.R. on 18th December, 1973 and it is felt that this would be suitable if the original site is not available.”

2.95. To a query made by the Committee whether the revised estimate for the T.V. station has been finalised and how the revised estimates differed from the original estimates, the Ministry of Information and Broadcasting in a written note have stated, “Revised estimates for building works had been prepared before the State Government agreed to give the U.S.I.S. land. In view of the availability of this additional land, the layout plans for the building are under revision. Revised preliminary estimate for the

building works will be finalised on the basis of the revised layout plans. The increase in the estimates is partly due to escalation in the costs and partly due to increased scope of works which are now considered necessary."

2.96. The Committee wanted to know the steps taken to ensure proper planning and coordination at all levels so as to avoid delay in the finalisation and execution of the project. The Ministry of Information and Broadcasting in a written note informed the Committee as under:—

"A separate Television Cell has just been sanctioned in the Directorate General, All India Radio to ensure undivided attention to Television Projects. This is expected to avoid delays in the finalisation of projects."

2.97. To another query made by the Committee regarding studio equipment, the Ministry of Information and Broadcasting have stated, "The bulk of the studio equipment has been diverted for utilisation at the Base Production Centre for the Satellite Programme at Delhi. Adequate precautions have been taken for the maintenance and safeguarding of the balance equipment. The equipment ordered for the Base Production Centre at Delhi will be available in time for installation at Lucknow."

2.98. The Committee are unhappy to note that the Lucknow TV Station scheduled to be completed in the Fourth Plan period, will now be completed and commissioned in the Fifth Plan period as the Lucknow T.V. Scheme too has been a victim of the land acquisition problem which has been one of the major causes for the slow progress in the implementation of the various T.V. Schemes.

2.99. The Committee earlier in the Report have expressed the view that in the light of the experience gained, it is imperative to have the existing administrative procedures simplified and to initiate advance action for the acquisition of land and ordering of equipment etc. to cut down delays and to avoid escalation in cost.

2.100. The Committee desire that concerted efforts should be made both at the Central and State level to finalise the site and to complete the acquisition proceedings expeditiously.

2.101. The Committee note that a separate T.V. cell has been created in the Directorate-General, A.I.R. to ensure undivided attention to T.V. projects.

2.102. The Committee would like to be apprised of the results achieved in the expeditious execution of this project with the setting up of the T.V. Cell in the Directorate-General, A.I.R.

2.103. The Committee hope that the Studio equipment procured for the Lucknow T.V. Station and diverted for utilisation at the Base Pro-

duction centre for satellite at Delhi would be available in time for installation and commissioning of Lucknow T.V. Station.

WEST BENGAL

Television Centre, Calcutta.

Original outlay:	99 lakhs
During Mid-term Appraisal:	190.59 lakhs
Revised Anticipated Cost:	760.00 lakhs

2.104. It has been stated that it was proposed to set up a television centre at Calcutta with 2 relay centres at Asansol and Kharagpur areas.

(a) *Television Centre, Calcutta*

2.105. Administrative approval to this scheme was accorded on 2nd April, 1971. It was proposed to instal a television studio building with 3 studios and a Television Transmitter at the same location. Permissive possession of the site measuring 10 acres belonging to Calcutta Metropolitan Development Authority has been taken. It was proposed to entrust the design of the television building to a private architect. For this purpose an architectural competition was to be held. The last date for receiving the design from the Competitors was 14th August, 1972. Major portion of the equipment had already been received at site. The T.D. has been advanced by about 6 months owing to the architectural competition that is to be held and the project is expected to be ready during 1975-76.

(b) *Television Relay Stations at Asansol and Kharagpur areas*

2.106. It has been stated that the administrative approval to this scheme was accorded on 28th April, 1972. 2,170 Parliamentary survey of sites had been carried out in March, 1973. Sites are yet to be finalised. These centres will relay Calcutta. The Centres are expected to be ready towards the end of 1976.

2.107. During evidence the representative of the Ministry of Information and Broadcasting informed the Committee that the estimated cost of Calcutta T.V. had gone up to Rs. 7.43 crores as against Rs. 1.91 crores originally estimated.

2.108. Asked on what basis the plan provision of Rs. 190.59 lakhs had been made for Calcutta T.V. Centre and the two relay stations, the Ministry of Information and Broadcasting in a written note stated:—

“The Plan provision of Rs. 190.59 lakhs was only for Calcutta Centre and does not include the cost of the relay centres.

This provision was based on equipment requirements, similar to the Srinagar and Bombay T.V. Centres and on the costs of equipment ordered with M/s. BEL for the Srinagar project. A site near Victoria Memorial was proposed for studio centre and

the A.I.R. site at Eden Garden for Transmitter. Subsequently, the State Government have suggested a better site near the Golf Course, which could accommodate the studios, transmitter centre and some staff quarters and this site has been taken over.

Since the formulation of the original proposal in 1970-71 the scope of the project has undergone revision, considering the need for larger accommodation, more equipment facilities and construction of some essential staff quarters. The revised cost of the project is estimated to be around Rs. 810 lakhs taking into account the current prices."

2.109. During evidence the Committee were informed that in the case of Calcutta T.V. Station apart from the delay in the acquisition of land, the delay was caused because of the decision to go in for a nation-wide architectural competition.

As regards the present position in respect of the acquisition and transfer of site for Calcutta T.V. Station, the Ministry of Information and Broadcasting have stated:—

"The Ministry have taken up with the State Government for expeditious action regarding the formalities connected with the acquisition and transfer of the site selected for the T.V. Centre near the Golf Course, Calcutta. The State Government have been kind enough to give permissive possession of the land to A.I.R. in anticipation of completion of the acquisition formalities."

2.110. Asked about the reasons for assigning the designing work of T.V. building at Calcutta to private architects and for delay in entrusting the work, the Ministry of Information and Broadcasting in a written note have stated that "The designing of T.V. Studio buildings is a very complex job and needs special skill. Although, the buildings of the existing T.V. Stations have been designed by A.I.R. engineers the decision to award the work for Calcutta or Delhi T.V. Stations by inviting a national competition was taken to get better talent from a wider field. These designs will also be useful in setting up future T.V. Stations.

Forty-one competitors have submitted their design upto 31st August, 1973, the last date fixed for receipt of designs. The designs were judged by a Board of Assessors appointed by the Government. The result of the architectural competition has been declared on 17th October, 1973 and the architects who have won the first prize may be appointed as architects, if have won the first prize may be appointed as architects if so desired by Government."

2.111. The Ministry of Information and Broadcasting in a note furnished to the Committee have stated, "in view of the urgency, T.V. equipments procured for projects at Lucknow, Calcutta and Madras are proposed to be diverted to Delhi, Cuttack and Hyderabad respectively." Asked about the nature of the urgency for diverting the equipment to these stations, the Ministry of Information and Broadcasting in a written note have stated "The bulk of the Studio equipment received for the project has been diverted to an urgent projects viz., "Base Production unit at Cuttack for production and protesting of programmes for Satellite T.V. experiment. Adequate precautions have been taken for the maintenance and safeguarding of the balance equipment.

In the Satellite Instructional T.V. Experiment, it is the full responsibility of A.I.R. to provide programme material to be transmitted. Since these transmissions are scheduled for June, 1975 it is necessary that the programme production centres are completed by March/April, 1974 in order to provide adequate time for pre-testing of programme and advance preparation of programmes.

The modifications to the buildings at Hyderabad are scheduled to be completed by December, 1973 and at Cuttack by January, 1974. The location in Delhi will be in Vigyan Bhawan, Annexe. The allotment of this area has just been received and work is being taken in hand. All the Base Production Centres will be ready before the completion of Calcutta T.V. Centre.

2.112. To a query made by the Committee regarding steps taken to ensure that commissioning of Calcutta T.V. is not held up for want of equipment, the Ministry of Information and Broadcasting have stated that, "Orders have already been placed to the extent of equipment diverted to the Base Production Centres and these would be available before the Civil Works are ready for the permanent centre at Calcutta. There is, therefore, no chance of Calcutta project being held up due to diversion of equipment."

2.113. In reply to an unstarred Q. No. 1559 answered in Lok Sabha on 1st August, 1973 the Ministry of Information and Broadcasting stated that pending construction of a permanent T.V. building in Calcutta, interim arrangements are being made in consultation with the State Government for earlier telecast of programmes. Asked about the additional expenditure, if any, and how the equipment etc., was proposed to be procured for the interim arrangement for telecasting for Calcutta T.V., the Ministry of Information and Broadcasting in a written note stated:—

"The additional expenditure for installing the studios for the interim set up is estimated at about Rs. 25 lakhs on the basis that the studios would be installed in the film studio offered by the

State Government. The State Government have agreed to meet this additional expenditure.

Some of the equipment for the permanent T.V. project has been currently diverted to Cuttack Base Production Centre. Equipment already ordered for this Base Production Centre at Cuttack would be utilised for the interim set up at Calcutta suitably and later shifted to the permanent set up at Calcutta."

As regards steps taken for close coordination with all the authorities concerned to ensure that T.V. centre is commissioned according to schedule, the Ministry of Information and Broadcasting further stated, "The Regional Engineer (East) of All India Radio whose offices are located at Calcutta is in constant touch with all the State Government Departments whose assistance is required for the expeditious completion of the Project. He will be in touch with the power supply authorities, the Metropolitan Council of Calcutta and other agencies in all matters pertaining to the execution of this project. Pending construction of permanent T.V. Buildings, it is proposed to start telecast of programme through a temporary set up which will be completed before the end of 1974...."

Television Relay Stations at Asansol and Durgapur

2.114. As regards the setting up of relay stations at Asansol and Durgapur, the Ministry of Information and Broadacsting had in a written note stated:—

"Preliminary Survey of sites has been carried out in March, 1973. Sites are yet to be finalised. The Centres will relay Calcutta. These centres are expected to be ready towards the end of 1976."

2.115. Asked by the Committee the reasons for delay in the finalisation of sites, the Ministry of Information and Broadcasting in a written note have stated, that "Sites for T.V. relay centres near Asansol and Kharagpur have been provisionally selected. These are presently under examination of Air Force authorities who have to clear the sitting in view of the proposed location of a high tower in each of the centres. Their clearance is awaited before formal acquisition proceedings are initiated. The Civil Aviation authorities have just cleared the siting.

The sites initially selected were objected to by the local Railway authorities and the Air Force necessitating a re-survey and re-examination by the Civil Aviation and Air Force.

To another query made by the Committee regarding steps taken to procure the equipment in time to avoid delay in the commissioning of these

centres, the Ministry of Information and Broadcasting in a note have stated that, "Tenders for the transmitting equipment and accessories have already been asked from M/s. Bharat Electronics on 7th of September, 1973. Action has also been initiated for procurement of imported equipment.

Since these centres will be relaying the programmes from the mother station at Calcutta, the procurement of equipment is being coordinated so that these relay centres are ready by the time the mother station at Calcutta is ready for service."

2.116. The Committee regret to note that the Calcutta T.V. Scheme is yet another case of unrealistic planning and under estimation of the expenditure involved in the scheme. The Scheme which was originally estimated to cost Rs. 99 lakhs was subsequently revised to cost Rs. 190.59 lakhs and is now estimated to go upto Rs. 760 lakhs.

2.117. The Committee are not satisfied with the manner in which the whole question regarding finalisation of the site of Calcutta T.V. and its acquisition has been dealt with. The process of selection and acquisition of site was started as far back as September, 1969 and its finalisation and acquisition took more than four years. The acquisition formalities are yet to be completed.

2.118. The Committee are of the view that with more concerted efforts and close and proper coordination among the authorities concerned the period taken in the selection, finalisation and acquisition of the site could have been reduced considerably.

2.119. The Committee desire that effective measures should be taken to complete the acquisition formalities in respect of the site finally selected for the Calcutta T.V. Centre expeditiously.

2.120. The Committee would also like Government to finalise the contract for the construction of the T.V. building at Calcutta without delay so that the construction work could be taken up and the T.V. station commissioned according to the revised schedule.

2.121. The Committee note that bulk of the T.V. equipment procured for Calcutta is proposed to be diverted to Base Production Unit at Cuttack for production and pre-testing of programmes for Satellite T.V. experiment.

2.122. The Committee would, however, like to stress that adequate measures should be taken to maintain and safeguard the remaining equipment from any damage that might be caused due to passage of time.

2.123. The Committee would also like to emphasise that effective measures should be taken by Government to ensure the timely availability of the equipment so diverted so that the commissioning of the T.V. station at Calcutta is not delayed for want of equipment.

2.124. The Committee note that the State Government of West Bengal have agreed to meet the additional expenditure to the tune of Rs. 25 lakhs for installing a T.V. studio as an interim arrangement for telecasting the programmes till a permanent T.V. station is commissioned at Calcutta. The Committee hope that the equipment procured for the temporary T.V. Studio at Calcutta would be gainfully utilised after the commissioning of a permanent T.V. station at Calcutta and that there would be no loss on this account.

2.125. The Committee note that the sites for T.V. relay centres at Asansol and Kharagpur have been provisionally selected and their clearance from the Air Force authorities is still awaited.

2.126. The Committee desire that in the light of experience gained, effective measures should be taken to finalise and to acquire in time the sites for the transmitting stations at Asansol and Kharagpur.

2.127. The Committee also note that tenders for the supply of transmitting equipment and accessories for these transmitting stations have been invited from M/s. Bharat Electronics.

2.128. The Committee desire that the question regarding placing of order with M/s. Bharat Electronics Ltd., for the equipment required should be finalised expeditiously and a well coordinated plan drawn up for the procurement of the equipment both indigenous and imported to ensure commissioning of these centres along with the commissioning of the Calcutta T.V. Station.

TAMIL NADU

Madras TV Centre

	Rs.
Original Outlay 101.00 lakhs
Mid-term appraisal	. 182.76 lakhs
Anticipated Revised Cost	. 514.00 lakhs

2.129. It has been stated that the project was administratively appropved on 2nd April, 1973. It will comprise a Television studio building with two studios and a television transmitter located at the same place.

2.130. The site has been made available by Tamil Nadu Government free of cost and was taken over on 17th September, 1971. The studio block was expected to be ready by July, 1973. Bulk of the transmitter and studio equipment has been received from M/s. B.E.L. and is available at Madras.

The project is expected to be ready during 1974.

2.131. Asked about the reasons for delay in completion of the civil works and the additional expenditure, if any, likely to be incurred on account of delay, the Ministry of Information and Broadcasting in a written note have stated, "There has been no delay in completion of civil works for T.V. station, Madras. After the site was taken over, CPWD was requested to prepare the plans, but in the meanwhile a separate Civil Construction Wing was started in All India Radio and all new works were transferred from CPWD to Civil Wing. As the creation and establishment of the organisation of Civil Wing was likely to take time, the work was entrusted to PWD, Tamil Nadu Government in December, 1972. The civil works are expected to be completed by February, 1974, according to the schedule.

Since there has been no delay in the civil works, the question of additional expenditure due to this factor does not arise."

2.132. During evidence the Committee were informed that the Madras TV station was late by six months.

Asked by the Committee regarding original target date and the revised target for the commissioning of the TV centre and the steps taken to ensure its commissioning according to the revised schedule, the Ministry of Information and Broadcasting in a written note have stated. "The project was scheduled to be completed by September, 1974. Although there was no delay in civil works, there has been some delay in the finalisation of the contract for supply and erection of a 175 Meter tower. Order for a 150 meter tower was placed by DGS&D in January, 1973 but due to a subsequent decision to provide in the tower facility for installation of another antenna for a second channel service in future, the height had to be increased to 175 meters clearance for this higher height had to be obtained from Standing Advisory Committee on Frequency Assignments. DGS&D was asked on 19th June, 1973 to obtain revised quotations from M/s. TSL for 175 meter tower. Tenders have been received and recommendations already sent to DGS&D to place orders. Secretary, Ministry of Information and Broadcasting, has addressed Secretary (Steel), Ministry of Steel & Mines, to instruct M/s. TSL to proceed with the work ending settlement of contractual forma-

lities by DGS&D. The TV Station at Madras is now expected to be operational by the *end of 1974.

All activities required to complete the project as per schedule are being coordinated in the P&D Unit and by the Regional Engineer (South), Madras and it is expected that there will be no bottleneck from any side in commissioning the station as soon the tower is erected. Orders for all the essential equipment have been placed and deliveries will be according to schedule."

2.133. To another query made by the Committee regarding safeguarding the equipment received from any damage that might be caused due to delay in the completion of civil works, the Ministry of Information and Broadcasting have stated:

"The bulk of the studio equipment has been diverted for utilisation at the Base Production Centre for the Satellite at Hyderabad. Adequate precautions have been taken for the maintenance and safeguarding of the balance equipment. The studio equipment ordered for the Base Production Centre at Hyderabad will, however, be available in time for installation at Madras."

2.134. The Committee note that the Commissioning of the Madras TV Station scheduled for September, 1974 has been delayed by six months and the TV Station is now scheduled to be completed by the *end of 1974. The reason for delay in the commissioning of the TV. Station has been attributed to the subsequent decision to increase the height of the tower from 150 M to 175 M to provide facility for installation of another antenna for a second channel service in future.

2.135. The Committee desire that effective measures should be taken to ensure that the revised schedule of commissioning of Madras TV station is adhered to.

2.136. The Committee have elsewhere in the Report emphasised the desirability of taking all precautionary measures to maintain and safeguard the remaining equipment from any damage where bulk of the equipment is proposed to be diverted to some other TV station.

2.137. The Committee have also else where in the Report stressed the need for Proper and close coordination at all levels to ensure the timely availability of the equipment so diverted so as to ensure that the commissioning of a TV Station is not delayed for want of equipment.

*At the time of factual verification the Ministry of Information and Broadcasting have stated that the TV Station would be completed by March, 1975.

(ii) Schemes/Projects for the Fifth Five Year Plan

2.138. In May, 1972, the Planning Commission had set up a steering Group on Communication and Broadcasting in connection with the formulation of the Fifth Plan proposals. The shelf of the Projects for the Fifth Plan originally prepared involved a total outlay of Rs. 179 crores out of which Rs. 94 crores was for sound Broadcasting and Rs. 85 crores for TV.

Subsequently it was felt that the main objectives during the Fifth Plan should be:

- (i) To provide cent per cent coverage on medium wave.
- (ii) Establishment of "Yuv Vani" service at about 40 centres on FM Transmitters.
- (iii) Augmentation of External Services without resorting to Super Power Medium Wave Transmitters.
- (iv) (a) Establishment of TV mother stations in all States capitals with one Relay Transmitter in each State.
- (b) Provision of Community viewing sets in all centres where TV transmitters are proposed.

Accordingly, another shelf of schemes involving a total capital outlay of Rs. 501.00 crores was prepared out of which Rs. 193 crores was on sound broadcasting and Rs. 308 crores on TV.

2.139. Subsequently, on the suggestion made by the Planning Commission for phasing and reducing of the targets with a view to reducing the investment in the Plan as much as possible, the Fifth Plan proposals were accordingly revised and a scheme involving Rs. 341 crores—Rs. 137 crores for Broadcasting and Rs. 204 crores for TV—was prepared.

The break up of the proposed estimate of Rs. 204 crores for TV schemes during the 5th Plan is as under:

	Capital Outlay	Foreign Exchange component
	I	2
(i) Mother TV Stations :		(in lakhs)
(i) Proposed to be established at Cuttack, Patna, Bhopal, Hyderabad and Jaipur	1,750	780
(ii) In addition, mother stations at Trivandrum, Bangalore, Gauhati and Ahmedabad have been included in the Plan proposals	1,400	544
	3,150	1,224

	I	2
	Capital Outlay	Foreign Exchange component (in lakhs)
(2) Transmitters		
(i) Cuttack, Patna, Bhopal, Hyderabad & Jaipur	650	192.50
(ii) Trivandrum, Bangalore, Gauhati & Ahmedabad	520	154
(iii) 8 Relay transmitters at Villupuram, Triuchi, Jammu, Nagpur, Kolhapur, Rohtak, Allahabad and Varanasi	1,049	308
	<u>2,210</u>	<u>654.50</u>
(3) Community Viewing Sets		
(i) Community viewing sets for Fourth Plan TV Schemes (59,400 sets)	2,079	
(ii) For 9 mother stations proposed in the Fifth Plan	990	
(iii) For 8 relay centres	880	
	<u>3,949</u>	..
(4) Personnel for Manning TV Stations		
A Second TV Training Centre at Delhi is proposed to be set up as the facilities at the TV training wing in Poona Institute are expected to be inadequate	600	100
(5) 16 mm Film Technology		
A 16 mm Film Research & prototype production centre is being set up with UNDP assistance in the current plan period. It will also produce prototype of programme suitable in the specialised areas of health & Family Planning etc.	90	..
	<u>690</u>	..
(6) Staff Quarters		
A provision of Rs. 1238.90 lakhs have been made for staff quarters	<u>1,238</u>	..
	<u>1,239</u>	..

	I	2
	Capital Outlay	Foreign Exchange component
	(in lakhs)	
(7) In addition to the above, schemes, provision has also been made for the following :		
(i) Expenditure on staff, operation maintenance of new hardware during Plan period (2 years)	5312	
(ii) Establishment of P & D unit, Regional Officers etc	408	..
(iii) Non-recurring revenue expenditure . . 2%	272	90
(iv) Installation staff T & P etc. . . 6%	816	..
	<hr/> 6,808	<hr/> 90

Summary

(1) Mother stations	3,150	1,224
(2) Transmitters	2,210	654
(3) Community Viewing sets	3,949	..
(4) Personnel for manning TV Stations	600	100
(5) 16 mm. Film Technology	90	..
(6) Staff quarters	1,238	..
(7) Miscl.	6,808	90
(8) Augmentation of TV Plan schemes	<hr/> 2,390	<hr/> 945
TOTAL :	<hr/> 20,435	<hr/> 3,013

or Rs. 204 crores

2.140. The Ministry of Information and Broadcasting furnished the following information regarding Fifth Plan proposals for TV schemes:

Fifth Plan Proposals for Television Schemes

- (1) 3 Mother Stations at Patna, Hyderabad and Cuttack.
- (2) 18 Relay TV Centres in the 6 cluster areas for the SITE Experiment.
- (3) Augmentation of TV Plan TV Schemes such as provision of OB Vans at 5 Centres, Extension of TV Training Centre and

the Studio Complex at Mandi House etc. A provision has been made for Community Viewing Scheme in the areas where TV stations are to be set up.

The television relay transmitters are proposed to be set up to provide coverage in the following districts/areas:—

Rajasthan

- (1) Jaipur,
- (2) Sawai Madhopur,
- (3) Kota.

Madhya Pradesh

- (4) Raipur,
- (5) Bilaspur.

Karnataka

- (6) Bijapur,
- (7) Raichur,
- (8) Gulbarga.

Andhra Pradesh

- (9) Nizampad,
- (10) Warangal,
- (11) Mahboobnagar,
- (12) Kurnool.

Bihar

- (13) Motihari,
- (14) Katihar,
- (15) Monghyr.

Orissa

- (16) Sambalpur,
- (17) Dhenkanal,
- (18) Phulbani.

..

2.162. The Distinctive features of the schemes are:

“During the 5th Plan subject to adequate financial resources being made available it is proposed to augment the facilities of the 4th Plan TV schemes and set up new stations. The main features of this proposal are broadly as follows:—

- (i) Three TV Programme Originating and Transmitting Centres with associated relay centres at 18 locations have been included in the 5th Plan proposals as an on-going backware

cluster areas in the States of Andhra Pradesh, Bihar, Karnataka, Madhya Pradesh, Orissa and Rajasthan after the SITE programme is over. The programme from the Mother TV Stations is proposed to be fed on wide-band microwave circuits to be provided by the P&T Department to 9 relay centres. Pre-recorded video tapes will be sent to the other remaining TV relay centres which cannot be connected through microwave links. The three programme originating TV Stations, are proposed to be set up at Patna, Cuttack and Hyderabad.

- (ii) In order to provide TV viewing facilities to the under-privileged and weaker sections of the community, it is proposed to provide community viewing sets during the 5th Plan in both the rural and urban areas which fall under the TV coverage of the 4th Plan schemes and those proposed to be set up under the 5th Plan. In our original proposals it was proposed to provide one TV set for every electrified village and one for each municipal ward in a town falling within the coverage area of each centre. However, as Planning Commission has reduced the proposed allocation of Rs. 47 crores, for this scheme, it may become necessary to revise these norms downward.
- (iii) A TV Studio Complex is proposed to be set up in the land already allotted for the purpose at Mandi House in New Delhi to accommodate multi-studio complex and the Headquarters for the National TV. This work is, however, proposed to be carried out in phases.

TV Coverage: With the implementation of the schemes in the 5th Plan, the total TV coverage is likely to be increased to about 30 per cent of the population of which the rural population covered is expected to be nearly 20 per cent".

2.141. The Ministry of Information and Broadcasting furnished the following information to the Committee regarding Fourth Plan TV Schemes spilling over to the Fifth Plan:—

- (1) TV Jullundur/Kasauli.
- (2) Lucknow|Kanpur T.V.
- (3) Permanent 2×10 kw. TV Transmitter at Delhi under Extension of TV Delhi.
- (4) Relay Transmitter at Mussorie under Expansion of Delhi TV.
- (5) T.V. Madras.
- (6) T.V. Calcutta.

- (7) Three Satellite Base Production Centres at Hyderabad, Cuttack and Delhi.
- (8) Extension of coverage of TV Calcutta to Asansol/Kharagpur.

2.142. During evidence the representative of the Ministry of Information and Broadcasting, informed the Committee that the revised Fifth Plan proposals for sound broadcasting and TV was Rs. 341 crores with Rs. 204 crores components for television alone. He added that apart from the Fourth Plan TV Stations, there would be three more mother stations at Cuttack, Hyderabad and Patna and 17/18 relay stations at Jaipur, Swaimadhopur, Kota, Motihari and two transmitters which were yet to be determined. The witness further informed the Committee that there were *three transmitters linked to Cuttack, Raipur, Bilaspur and three or four transmitters linked to Hyderabad, extending to Gulbarga, Bagalkot and Raichur.

2.143. The representative of the Planning Commission informed the Committee that in addition to the 7 mother stations sanctioned in the Fourth Plan they might be able to have 3 more mother stations and another 17 to 18 relay centres during the Fifth Five Year Plan. He, however, added, "Some modifications may be made at the Planning Commission level at the time of finalisation of the Plan."

2.144. The Committee drew attention of the representative of the Ministry of Information and Broadcasting to the information furnished by that Ministry in respect of the Plan proposals for broadcasting and television. Asked whether the objectives laid down would be achieved, the representative of the Ministry of Information and Broadcasting replied, "Hundred per cent coverage goal was propounded by us not in relation to TV but to sound broadcasting.... The Planning Commission thinks that 100 per cent coverage is not feasible." He added that as against 15 stations asked for in the 5th Plan, only 3 more stations would be put up. Kerala, Mysore and Gujarat would remain uncovered and North-East India would also be without a station. According to the witness these would be substantial reduction in the TV coverage excepting what would be made up in the INSAT.

2.145. Elaborating, the representative of the Planning Commission stated, "At the initial stage, it was suggested by the Ministry of Information and Broadcasting that 15 additional TV mother stations should be set up in the Fifth Plan. The matter was discussed in detail in the working Group and subsequently, the number of mother stations was raised and reduced to 9. Even 9 additional TV mother stations may

*At the time of factual verification the Ministry of Information and Broadcasting have stated that there will be five transmitters linked to Cuttack (3 in Orrisa and 2 in Madhya Pradesh) and 7 in Hyderabad (4 in Andhra Pradesh and 3 in Karnataka).

prove to be too ambitious with regard to the resources in sight. The various aspects of the programme have therefore been further discussed and a broad view has now been taken."

2.146. As regards the plan provision for the development of TV during the Fifth Plan period he stated, "So far as Planning Commission is concerned, whatever tentative view has been taken so far, Rs. 204 crores provision does not appear in sight for the development of TV programme in the Fifth Plan. That being so, the outlay on television would be substantively less than Rs. 204 crores. But whatever provision we made in the Fifth Plan, the intention is to see that the on-going TV programme in the cluster villages is maintained....." He added that having regard to the financial constraints it may not be possible to cover the whole of India with TV programme at one go and the Planning Commission had to strike a balance among the various competitive claims. The witness further added, "Our tentative view is that it may perhaps be possible to provide an outlay of the order of Rs. 75 to 80 crores in the Fifth Five Year Plan for TV programme out of which about Rs. 15 crores may be earmarked for the community viewing sets."

2.147. Asked by the Committee regarding clearance of the projects, the representative of the Planning Commission stated during evidence in September, 1973 "Though the Fifth Plan is still at formulation stage, we have by now formed some tentative ideas of the likely TV development programmes in the Fifth Plan." He added, "The new TV schemes which will be agreed to by the Planning Commission will be known to the Information and Broadcasting Ministry before the beginning of the Fifth Five Year Plan, that is, April, 1974. The Planning Commission will thereafter review the programmes annually at the time of Annual Plan discussion. Depending on the results of these discussions, some adjustments may become necessary."

2.148. To another query made by the Committee the representative of the Planning Commission stated that though the Fifth Plan proposals would be finalised by April, 1974, indication has already been given to the Ministry of Information and Broadcasting about the new TV stations likely to be in the Fifth Plan. He added, "There may be some changes, but advance action can be taken on the basis of the latest details available."

2.149. As regards the cost and details of TV schemes to be undertaken in the Fifth Plan, in the Draft Fifth Five Year Plan, it has been stated:

"The total cost of the programme included in the Fifth Plan is Rs. 130 crores, including Rs. 80 crores for television and Rs. 50 crores for broadcasting. Taking into account the

spill over of Rs. 35 crores from the Fourth Plan, the total cost of the programme works out to Rs. 165 crores. A provision of Rs. 120 crores has been made in the Fifth Plan and schemes costing about Rs. 45 crores would spill over to the Sixth Plan. In the Fifth Five Year Plan, besides completing the schemes already in progress, the television network is to be further expanded. The development of television is expected to provide much needed support to spread education and to promote social and economic development. In order to project these objectives effectively, television programmes have to be developed, technically and professionally. It is proposed to undertake a satellite experiment which is expected to provide a system test of broadcast satellite television for national development.....

After the experiment is over, the television facilities already provided in the areas covered by the experiment will be continued. For this purpose, provision has been made in the Fifth Plan for setting up three mother stations at Patna, Cuttack and Hyderabad, besides the strengthening of Delhi television centre. It is also proposed to instal 17 or 18 relay transmitters in the areas covered by satellite experiment.... The Fifth Plan also provides for the installation of community viewing sets in the villages covered by the television. A television training institute is proposed to be set up at Delhi."

2.150. Asked by the Committee whether any precautionary measures have been taken with regard to the acquisition of land for the three TV mother stations proposed to be set up at Patna, Hyderabad, and Cuttack during the Fifth Plan, the Director General, A.I.R., replied. "We have surveyed alternative sites. Difficulties arise only when we start firm negotiations with the State Governments. We have not reached that stage. In Hyderabad, we do not anticipate much difficulty even though we have reached a fairly advanced stage."

2.151. The Committee note that in May, 1972, the Planning Commission had set up a Steering Group on Communication and Broadcasting in connection with the formulation of the Fifth Plan proposals. The shelf of the projects originally prepared involving an estimated expenditure of Rs. 179 crores—Rs. 94 crores for Sound Broadcasting and Rs. 85 crores for TV was subsequently revised to Rs. 501 crores—Rs. 193 crores for Sound Broadcasting and Rs. 308 crores for T.V. Subsequently it was revised to Rs. 341 crores—Rs. 137 crores for Sound Broadcasting and Rs. 104 crores for TV for setting up 3 mother stations at Cuttack, Hyderabad and Patna and 17 relay stations. The Committee further note that in the Draft Fifth Plan, a provision of Rs. 80 crores only has been made for the development of T.V.

2.152. The Committee feel that the process of framing and finalising the proposals for T.V. schemes to be undertaken in the Fifth Plan, has taken an unduly long time. The Committee are of the view that with a more realistic approach and better coordination at all levels, the Fifth Plan TV schemes could have been finalised much earlier leaving sufficient time to initiate advance action for the implementation of the proposals according to schedule as it takes several years for a TV project to be commissioned.

2.153. The Committee are of the view that if it is desired to create a truly mass-oriented nation-wide television system in the country, a large percentage of the Outlay should take in to consideration the capital and operational cost of community viewing TV sets as the prevailing high prices of the TV sets made them beyond the reach of common man and the installation and maintenance of community viewing sets would be a formidable and expensive proposition.

2.154. The Committee therefore feel that unless this fact is recognised and taken into cognizance in the development of TV in the Seventies, television would become a conventional entertainment for the effluent sections of society and the very purpose of its introduction to achieve the national objectives in bringing about environmental changes and socio-economic developments through this powerful medium would be defeated.

2.155. The Committee, while recognising the role that television can play in social and economic development are aware of the overall constraints of the resources, and country's pressing priorities like food, employment, industrial development etc. They feel that the programme for the development of a technically complex and expensive service like TV has to be planned on long term basis and implemented in a phased manner.

2.156. The Committee, therefore, agree that the investment on TV development programme during the Fifth Plan may cover spill over schemes and such viable schemes which would further the objective of socio-economic development.

2.157. The Committee have in paragraph 7.38 of their 39th Report (Fifth Lok Sabha) observed that although 23.4 percent of the villages in the country have been electrified, there are wide disparities in the provision of electricity in the various States. While there are States like Haryana and Tamil Nadu where practically every village has been electrified there are States like Assam where only 3.3 per cent of the villages have been electrified.

2.158. The Committee are strongly of the view that if TV has to be developed in the country as a powerful medium to play a vital role in meeting the communications gap, spreading literacy and modern agricultural technology and for achieving the socio-economic objectives, the TV system in the country has to be phased as far as practicable in harmony with the programme of rural electrification as almost 80 per cent of the Indian population today lives in villages. As it may take a long time before most of the rural areas are electrified Government will have to depend largely on Transistorised T.V. sets so that the unelectrified villages coming in common area of Television Centres also benefit from the T.V. Media.

2.159 The Committee have elsewhere in this Report recommended the development and manufacture of transistorised T.V. sets on priority basis to meet the needs of T.V. Community Viewing Centres in rural areas. The Committee would like to see significant development in this field in the Fifth Plan period..

(iii) Development of Broad-band micro-wave Links for Television

2.160 The Ministry of Information and Broadcasting in their written note furnished to the Committee have stated that apart from other reasons for low priority to the introduction of television in the country, one of the major factors was absence of broad-band telecommunication links.

2.161 During evidence, the Committee were informed that the micro-wave links were actually developed by P&T. Some of the equipment are imported from abroad and some are manufactured indigenously. The P & T Department have a scheme to develop the microwave link requirements in the Fourth, and Fifth Plans.

2.162 The representative of the Ministry of Information and Broadcasting stated during evidence that the Posts & Telegraphs Department had already prepared a plan for linking the country with about 129 centres during the Fourth Plan with microwave links and the manufacture of the microwave links had started in the Indian Telephone Industries.

Asked about the areas proposed to be linked during the Fourth Plan, the Chief Engineer, AIR, replied, "We have already placed firm demands for TV microwave circuits or co-axial lines, connecting Delhi-Bombay, Delhi-Calcutta, Bombay-Madras, Delhi-Srinagar, Bombay-Poona and in Bombay itself the Videsh Sanchar Bhawan and TV Centre, Worli." He added, "The total route kilometer of the entire route would be nearly 5,000 kms. The Posts and Telegraphs Department have actually planned, in the Fourth Plan, about 7,500 kms of wide-band coverage. We have placed a firm demand for 5,000 kms already. The total annual rental for this 5,000 kms would be Rs. 190 lakhs per annum."

2.163. As regards the areas that would be linked during the Fourth Plan, the witness stated, "We do expect that the Bombay-Poona microwave link would be ready in the Fourth Plan and the annual rental for that would be Rs. 19.38 lakhs." As regards completion of all the circuits, the witness added that as these were engineered by the Posts and Telegraphs Department, they had their own programme of development and they have arranged for the procurement of equipment. If these circuits were not ready by the end of the Fourth Plan, these would be ready within a year or so thereafter.

2.164 Asked by the Committee whether any exercise had been worked out by the Posts and Telegraphs Department in consultation with the Ministry of Information and Broadcasting regarding the proposal to give microwave linkage to the proposed TV Stations, the Chief Engineer, AIR replied, "The Posts and Telegraphs Department in the Fourth Five Year Plan to engineer about 7,500 route kms of wide-band network. In the next plan i.e., in the Fifth Plan, they are proposing to engineer about 14,000 kms on such wide band network. What we are doing is this. At every stage, we liaise with the Posts and Telegraphs authorities and then try to see that they engineer their circuits in such a manner that the microwave link passes through the areas where we are likely to put in our own television relay centres of television mother centres, so that, by mutual adjustment, it is possible for us to have as many centres as possible on the Posts and Telegraphs microwave link". He added, "We have found out by actual working that as many as 45 relay centres could be covered in the Fourth Five Year Plan with Posts and Telegraphs microwave link and about 57 relay centres in the Fifth Plan schemes. Thus, about 102 relay centres will be on microwave itself leaving about 20 or 22 to be engineered by us either by off-air link or by using the Satellite connections."

2.165. In 169, the UNESCO Commission in their Report had recommended as under:

"A decision should be taken nor to equip the Delhi-Lucknow coaxial cable link being installed in the near future by the Posts and Telegraphs Department with sufficient capacity and equipment to carry a TV signal, between these two TV stations."

The Commission in their Report has also recommended that:

"Studies should be carried out without delay to determine whether minor re-routing of the microwave links sanctioned for installation by Posts & Telegraphs Department could produce additional advantage for future TV coverage and linkage which are commensurate with the additional cost that may arise from this re-routing."

2.166 Asked by the Committee during evidence the action taken on the recommendations of the UNESCO Commission, the Chief Engineer, AIR replied, "We have placed a firm demand for a wide-band circuit between Delhi and Calcutta and this passes through Lucknow. It will be possible for us to relay programme to Lucknow and take programme from Lucknow on this channel." He added, "The Posts and Telegraphs Department are engineering the circuit and this is part of the Fourth Five Year Plan Scheme and we do hope that they will be able to complete it very shortly". The witness added, "we expect the Delhi-Lucknow link to be available to us by early 1975."

2.167. Asked about the reasons for delay in the completion of the link, the Chief Engineer, AIR replied. "This was sanctioned in the Fourth Plan. It takes sometime for the posts and Telegraphs to engineer the circuit. The microwave or the co-axial net work mean a number of installations en route."

As regards re-routing of microwave links, the witness stated, "There is close liaison, particularly from this angle, viz., on the question of re-routing the microwave in such a manner that it will also cater to our needs. When we know that they have got a plan, we have indicated our needs and asked them whether they are in a position to meet them."

2.168 Asked by the Committee about the reasons for non-implementation of the work, the representative of the Ministry of Communication (Department of Posts and Telegraphs) stated that the Posts and Telegraphs Department had drawn up a micro-wave broad band link plans for All India Radio TV network. Orders for the equipment for the first lot of 4,300 kms for connecting Delhi to Bombay, Bombay to Calcutta and Calcutta to Delhi were placed with the help of C.I.D.A. loan on a Canadian firm. There had been slight slippage in the supply of equipment from Canada. Another order for Bombay, Madras, Mangalore, Trivandrum routes of 2,000 kms was subsequently placed on a Hungarian company.

2.196. As regards attaining self-sufficiency in manufacturing indigenous equipment, it was stated by the witness that so far as they had undertaken developmental work as regards production of indigenous equipment in the country with the help of Telecommunication Research Centre and I.T.I. They expected to make the micro-wave and channelising equipment entirely from the indigenous production, only micro-wave frequency measuring equipment would have to be imported which formed a small portion of the total equipment.

2.170. As regards an observation made by the Committee that the Forum Plan targets were not likely to be achieved, the witness stated, "Unfortunately, it is so" and added that out of 5,000 kms. about 3,000 kms. would be completed by the end of the Fourth Plan.

2.171. To a query made by the Committee regarding the target fixed for the Fifth Plan for broad-band micro-wave links and whether they would be able to achieve the target, the representative of the Ministry of Communications (Department of P. & T.) stated that the target, as tentatively proposed in the Fifth Plan was about 15,000 kms broad-band and narrow-band microwave system (Broad-band from 10,000 to 12,000 kms) including the spill over of 2,000 kms from the Fourth Five Year Plan.

As regards achieving the target, the witness stated that they had got over the initial difficulties in evolving indigenous design and production, that they have got staff and know-how and they hope to achieve the target of 15,000 kms of micro-wave links.

2.172. Asked by the Committee whether there would be any difficulty regarding implementation of the Fifth Plan programme of television in view of the fact that micro-wave scheme was not going through as desired so far, the Chief Engineer, AIR replied, "If the microwave circuit between Delhi and Lucknow and Delhi and Calcutta is made available by 1976, it may not affect our programme." He added, "Both the Calcutta and Lucknow TV Centres will be on board by that time."

2.173. The Committee note that the Fourth Plan envisaged completion of 5,000 kms of broad-band microwave links for TV network connecting Delhi to Bombay, Bombay to Calcutta, Calcutta through Lucknow to Delhi and down from Lucknow towards Jabalpur. In the Srinagar side, Delhi-Jullundur-Srinagar were anticipated to be connected with broad-band microwave links. In terms of achievement, however, only 3000 kms microwave links are likely to be completed by the end of the Plan period and the remaining 2000 kms would be spilled over to the Fifth Five Year Plan. The Committee further note that a tentative target of 15,000 kms of broad-band and narrow-band microwave system (Broad band 10,000 to 12,000 kms including spill-over of 2000 kms from the Fourth Plan) has been proposed during the Fifth Plan period.

2.174. The reason for not achieving the target of 5000 kms of broad-band microwave is mainly attributed to slippage both as regards indigenous development and in placing orders on firms in Canada and Hungary for supply of equipment from abroad. The equipment from Canada would only meet the part requirement for connecting Delhi-Bombay-Calcutta-

Delhi routes while another order for supply of equipment for Bombay-Madras, Mangalore and Trivandrum routes has been placed with a Hungarian firm.

2.175. The Committee are constrained to observe that the whole planning as regards laying down the targets and drawing up the programme and completing formalities for supply of equipment has been unrealistic.

2.176. The Committee stress that there should be close coordination between the AIR and the Department of Posts and Telegraphs so that the requisite broad-band microwave links are available for extending the range of coverage as soon as the planned TV stations are commissioned. The Committee would like Government to prepare an integrated plan for the purpose and take concrete measures to implement the same.

2.177. The Committee feel that high priority should be given to development and manufacture of broad-band microwave equipment within the country to meet the ambitious targets laid down in the Fifth Plan.

(iv) Satellite Instructional TV Experiment (SITE)

2.178. An agreement was signed in September, 1969 by the Indian Space Research Organisation (ISRO) with the U.S. National Aeronautics and Space Organisation for a Satellite Instructional Television Experiment (SITE) at an estimated cost of Rs. 6.36 crores for the purposes of gaining experience in the use of Satellite for television propagation.

Under the Agreement NASA will make available to India the satellite for a period of one year for conducting the experiment. The satellite will be used for relaying Instructional Television Programmes to six selected clusters of 400 villages each in different parts of the country. The satellite TV Experiment which was due to commence in 1972-73 is now expected to commence in 1975.

2.179. During evidence, the representative of the Planning Commission informed the Committee that in the Fifth Plan, the Satellite experimental programme will be taken up. Six clusters of villages will have direct reception from the satellite experiment which will be between 1975 and 1976 for about a year. These six clusters of villages are distributed in six States.

2.179A. As regards the reasons for delay in the commencement schedule of SITE, the representative of the Department of Space stated during evidence:

“Originally the NASA had planned to launch this satellite in 1972 and after keeping it over the United States for six months to

move it to India. The NASA had some slippage in the schedule for two reasons. One reason was that the grant of contract for building this very costly satellite was under considerable discussion within the NASA and USA and they took more time. Secondly, having decided to build such a costly satellite, there was a demand inside the United States that similar experiment should be conducted in the USA itself to see whether the experiment similar to what is going to be tried in India, cannot be tried over USA to cover some of the backward areas in Alaska and the Rocky Mountains for spreading education. They have also some relatively backward areas. They wanted to utilize it for that. For these reasons, the launching of the satellite has been delayed for nearly one year and it is going to be kept over USA for a little longer period. It would be moved to India something by May/June 1975....."

2.180. In reply to Unstarred Question No. 7505 answered in Lok Sabha on 13-4-1973 it had been stated that the cost of the SITE originally sanctioned was Rs. 6.36 crores but it was likely to be revised.

2.181. Asked by the Committee the reasons for the escalation in the cost of the SITE, the Department of Space in a written note has stated:

"The initial estimate of Rs. 6.36 crores was made in 1970 and approved by the Atomic Energy Commission in February 1971. At that time, SITE was expected to begin in 1974. Also at that time, estimates for various items were necessarily tentative in view of the fact that some equipment—like the front-end converters required for direct reception and the specially ruggedised TV sets—was at that time yet to be developed. The number of front-ends required has been increased from 1700 to 2640. Also, the Dehra Dun OCS Earth Station which was to be used for SITE will not now be available in time and a new earth station is being set up at Delhi.

Apart from the increase due to these changes and the more precise cost-estimates now available, there has also been some increase in cost due to delay (SITE will now begin in mid 1975). There has been increase in cost of materials—particularly aluminium and steel required for the 10' antenna etc. Some new items not originally budgeted for have also been added. These include micro-wave links from the earth stations to the TV transmitters in Delhi and Ahmedabad and a couple of new experiments which have great relevance to future satellite broadcasting systems.

Because of these factors, the total estimate for SITE has increased from Rs. 6.36 crores to Rs. 9.00 crores. Of this increase, Rs. 1.28 crores is due to escalation and changes in additional items."

Satellite T. V. System

2.182. Asked to state whether the SITE agreement was in jeopardy at apprehended in certain quarters due to (i) instability of a technology that is not suited for a country of our diversity; and (ii) international constraints on power and radio bandwidth on telecommunications on account of which not more than five TV channels can be available from a single satellite, the representative of the Department of Space stated during evidence:

"The advice available to the Government of India is that the satellite technology is not only unsuitable, in fact it is the only technology which will enable us to cover the country as a whole by TV in the foreseeable period. For an undeveloped country of our magnitude and size, if we attempt to cover the entire country by a terrestrial system—not that the terrestrial system is not known, it is a known proved system—it will be very costly. The studies have shown that a hybrid system is an ideal via media for a large country like India.... The second question refers to the international constraints in respect of radio and tele-communications. I do not know how this can be a constraint in respect of the satellite which we are thinking of as a possibility. Subject to our resources we are capable of getting at least 4 or 5 channels. Even a country like the USA has only three channels in its nationwide TV net-work. We are a country with many languages. This is something which poses certain technological problems and we have to get over this problem."

2.183. As regards the Indian capability of Launching a Satellite, the representative of the Department of Space expressed the view that if it was decided on a Satellite based system TV, the country did not have the industrial infra-structure to build a satellite and to launch a satellite within the time frame of the Fifth Plan.

Explaining, the witness stated:

"There are two things involved in getting a satellite into a 40,000 kms. geo-stationery orbit above the earth. This will require a Satellite of one tonne capacity. Then launching a satellite into the geo-stationery orbit would require a very huge launcher. There is, at present..no indigenous capability for launching this kind of satellite."

The witness informed the Committee that the Task Force set up by the Planning Commission has submitted its report to the Commission which was under scrutiny and that, subject to the national constraint on resources, whatever maximum could be achieved would be included in the Fifth Plan.

2.184. Asked to state whether any cost effectiveness studies of the three systems have been made by Government, the representative of the Ministry of Information and Broadcasting stated during evidence:

“One can compare the cost in various ways. One thing is certain that the satellite is the only way by which you can almost immediately attain nation-wide TV coverage provided you can get the ground segment ready. Otherwise, one will have to slog on in the next twenty years putting up mother stations, transmitters, relay transmitters etc. But if one could get the satellite and a hybrid system and mix it in careful proportion with the terrestrial system, one could attain total national coverage.”

2.185. The Committee were also informed that three comparative studies of these three systems were made as early as 1969. As it was a very old study, at the instance of the Committee, the Ministry of Information and Broadcasting furnished the following information regarding comparative cost effectiveness studies of the possible alternative viz., satellite system, hybrid system and pure terrestrial systems of TV:—

“(a) Pure terrestrial system

According to the details worked by All India Radio, about 25 Mother (programme producing and transmitting) Stations—one each at State Capital—and 128 relay transmitters are required to be provided for coverage of 88 per cent population of the country by television on single programme channel basis. The power of each transmitter has been taken as 10 kw with an antennae gain of 4 for VHF band I and 10 for VHF band III and the height of antenna tower has been assumed as 200 metres. Accordingly, the range of each transmitter works out as about 80 km. Out of 153 transmitters envisaged above, 104 will be situated on the microwave routes to be provided by P&T Department as per their Fourth Plan and draft Fifth Plan proposals and remaining 49 will be connected through single/ double hop ‘off-the-air’ links. The capital cost of 128 relay transmitters excluding about 25 mother stations, as per latest estimated figures, works out to Rs. 208.64 crores at the rate of Rs. 1.63 crores per transmitter.

Since the software requirements of each State are different on account of distinctive cultural entity of each State, it is reported to have one mother station at each State capital (21 States +4 Union Territories—Delhi, Goa, Arunachal Pradesh and Mizoram). Each mother station will feed its TV programme to the relay transmitters connected mostly through P&T wide-band microwave links etc. in the State concerned. However, all the mother stations will be connected to Delhi using P&T microwave links to facilitate the relay of news and programmes of national importance. About 25 programme production centres will be absolutely essential whether the system is pure terrestrial, INSAT or Hybrid in view of the software requirements indicated above. It will also be necessary to have a TV transmitter at each programme production centre in order to have adequate TV signal to overcome the High grade man-made noise prevalent in these cities. The capital cost of 25 mother stations works out to Rs. 134.50 crores at the rate of 5.38 crores each (Rs. 3.75 crores per programme production centre plus Rs. 1.63 crores per relay transmitter). The total cost of terrestrial system, therefore, works out as Rs. 224.14 crores.

(b) *Satellite system*

At a seminar held at Ahmedabad in August 1972, ISRO put forward a scheme to provide TV coverage almost to whole of the country by INSAT system using 5 spot beams to cover 5 different regions of the country. Each specific beam could transmit only one picture programme in different languages to a specified region. ISRO has informed that the various cost figures have been worked out on the basis of 15 years programme as envisaged in the ISRO report on the above Seminar.

	Rs. crores
4 satellites and 4 launch vehicles with station keeping facilities for a 15 year programme of 3 operational satellites.	94.00
5 transmit and receive earth stations, one for each region at the rate of Rs. 1 crore each.	5.00
25 receive only each stations at the rate of Rs. 30 lakhs each to receive programme from the Satellite at each mother station when required.	7.50
	<hr/> 106.50

The system proposed by ISRO as stated above, envisaged only 5 transmitter and receiver stations situated at Delhi, Bombay, Calcutta, Madras and Gauhati to feed programme to the 5

transponders housed in the INSAT proposed to serve 5 spot beam regions in the country. In this system, it is proposed to have one video and more than one audio for each spot beam to serve a particular region constituted by different States. This perhaps may not meet the software requirements of each State which would like to have its own video and audio programme. Accordingly, 25 mother stations would be necessary—each catering to the programme requirements of each State. The total cost of 25 mother stations works out to Rs. 134.50 crores as indicated above. As such, the total cost of the INSAT system would work out to Rs. 241 crores. In this context, it may be further clarified that whereas each mother station and area around it within a range of 80 km will have a programme for whole time, areas covered by INSAT will serve each State in each of the spot beam region on a time-sharing basis.

(c) Hybrid System

At the same Seminar ISRO worked out a Hybrid system using both VHF ground based transmitter and the INSAT system with a view to providing TV coverage to whole of the country with an adequate signal to the city areas which will be constituted by the mother station and other important cities connected by the microwave link proposed, by the P&T Department in their Fourth Plan. These ground based transmitters number 73 including about 15 at mother stations.

The capital cost figures are given below :

	<i>Rs. crores</i>
73 TV ground based transmitters including about 15 at mother station to be connected through micro-wave links at the rate of Rs. 1.63 crore each.	118.99
200 limited rebroadcast stations at the rate of Rs. 5 lakh. each.	10.00
	128.99

The total cost of the system including Rs. 134.50 crores on account of 25 mother stations comes to Rs. 263.49 crores.

The cost of various items in INSAT system and Hybrid system have been collected from ISRO estimates as no other cost figures are available. Only a cost of Rs. 5 lakhs on account of each limited Rebroadcast Station (LRB) envisaged in the Hybrid system appears to be on low side. The equipment itself, excluding the cost of land, building and airconditioning, costs

on an average about Rs. 2.5 lakhs. Apart from that the LRB system proposed by ISRO is mostly rural oriented as indicated by them. An LRB transmitter provides a coverage to an area of about 50 sq.km. using a 100 w. transmitter and 150' high antenna with 5 10 gain. A VHF 10 kw transmitter proposed by AIR would cover an area of 20,000 sq. km. This would mean that about 40 low power transmitters will be needed to cover as much an area as possible by a single VHF 10 kw transmitter. The cost of 40 LRB stations would work out as Rs. 2 crores as per ISRO estimate, which is certainly higher than the cost of one 10 kw transmitter envisaged by AIR. Apart from this, comparatively much more staff will be required to maintain 40 LRB stations. A service area of 20,000 sq. km. of a 10 kw. TV transmitter proposed by AIR, leaving out a small area of about 500 to 1000 sq. km. on account of city, will mostly provide service to the rural areas. So, there is a note of caution in the use of LRB transmitters in preference to 10 kw VHF transmitters envisaged by AIR.

The cost of terrestrial system seems to be higher by Rs. 100 crores and 80 crores as compared with the INSAT system and Hybrid system respectively. But, this additional cost is balanced by the increased in the number of TV receivers in the area to be served by INSAT system. In areas served by INSAT system, augmented TV receivers will be required to receive the signal directly from the satellite whereas in case of service areas of VHF ground based transmitters, conventional TV receivers will be able to pick up the signal. Taking an additional cost of about Rs. 2000 on account of the augmentation of a conventional TV receiver which costs about Rs. 3,000/- the difference of Rs. 80 crores to Rs. 100 crores as indicated above will be made up when the number of augmented receivers goes up to 4 lakhs or so. Taking about one augmented receiver per village, the total number of receivers required for the service area of a 10 kw transmitter, on an average, works out to about 3500. Taking the total number of villages in the country as about 6 lakhs, the number of villages served by INSAT system works out to about 5 lakhs excluding about 90,000 villages to be served by 25 VHF ground based transmitters at the mother stations. In Hybrid system, the number of villages to be served by augmented TV receivers comes to about 3.5 lakhs—remaining 2.5 lakhs being served by the conventional TV receivers in the service area of 73 transmitters. It would appear from this analysis that the additional cost on account of purely Terrestrial system is almost balanced by the additional cost of augmentation of TV receivers both in purely INSAT system and Hybrid

system. It can, therefore, be concluded that the costs involved are almost comparable."

2.186. The Committee are unable to appreciate the circumstances in which an agreement for a Satellite Instructional Television Experiment (SITE) was signed in September, 1969 with the US National Aeronautics and Space Organisation for the purpose of gaining experience in the use of Satellite for television propagation.

- (i) The whole technology of receiving signals direct from the satellite into television receiver is untried.
- (ii) The cost on this experiment is estimated at Rs. 9 crores.
- (iii) Even if the experiment is successful, the satellite will be available for one year only.
- (iv) The possibilities of having our own satellite are very remote as the costs of launching a satellite are prohibitive.
- (v) The TV receiver sets required for receiving programmes from satellites are costlier and it is not certain whether the same could be used for terrestrial receiving programmes from the normal TV transmitters.

2.187. It is a moot point whether in the present developmental stage of the country, the financial constraints as well as the requirements of resources for other priority items, it was a wise step for the Government to have gone in for this experiment. Since the whole programme is in an advanced stage and the satellite is expected in 1975, the Committee would like Government to exercise utmost economy in the implementation of this programme and to ensure that maximum benefit is derived from the scarce financial resources that are being spent on this costly experiment.

2.188. The Committee are of the view that the comparative costs, as indicated by the Ministry of Information and Broadcasting, do not decisively favour any one particular type of TV system in the country. Before making any choice among the TV technologies, important factors like (i) speed at which the technology can help in establishing a nationwide TV system subject to national constraint of resources; (b) the extent to which the system can offer flexibility in building the TV system and (c) the extent of the risk of failure involved in a particular technology will have to be taken into consideration.

2.189. The Committee are strongly of the view that considering the magnitude of the expenditure involved, the complexity of the hardware and software involved, the question of developing a nationwide pure satellite system, terrestrial system, hybrid system or a mix of the three system

of TV would require critical evaluation in its entirety in consultation with the Departments of Space and Communications and other authorities concerned after evaluating the experience gained during one year's SITE experiment and keeping in view the following aspects in respect of Satellite system:

- (i) The suitability of the new untried technology and its economic viability for the country having wide language and cultural diversities;
- (ii) International constraints on power and radio band width on telecommunication;
- (iii) Scope and possibility of using a nation-wide satellite system for other communication purposes;
- (iv) Availability of the regional or state TV sub-stations for a nation-wide satellite system.
- (v) The extent of self-reliance and self-sufficiency in ground and space technology and in software development.
- (vi) Manpower requirement for production, transmission and maintenance of the specially designed TV sets for direct reception from the satellite and recurring and non-recurring expenditure involved.
- (vii) Vulnerability of the Satellite during enemy hostility as compared to terrestrial TV and security problems relating to its operation and the possibility of using one or more channels of the satellite by an unfriendly country for propaganda purposes.
- (viii) The extent of benefits as compared to the cost.
- (ix) Limited life of the Satellite necessitating investments at intervals of 5 to 7 years.

2.190. The Committee would like Government to examine the recommendations of INSAT Task Force in depth keeping in view the above-mentioned aspects as also the economic viability of the Satellite system and also Indian capability of launching a Satellite.

2.191. The Committee note that the Satellite experiment (SITE) which was due to commence in 1972-73 will now commence in June, 1975. The reason for delay in the launching of the Satellite has been attributed to the slippage in the NASA schedule in granting the contract for building the Satellite and subsequent decision to conduct a similar experiment in USA. The Committee also note that the cost of the Satellite originally estimated at Rs. 6.36 crores has been revised to Rs. 9 crores because of delay in

launching the Satellite, earlier estimates being tentative, rise in the cost of material and the additional items which were not originally budgetted for.

2.192. The Committee feel that since it was known as early as January, 1971 that there would be a delay of about 18 months in the availability of Satellite to India, it should have been possible to frame a more realistic estimates for the Satellite programme keeping in view the various factors that were likely to result in the escalation of overall cost. The Committee cannot but reiterate that the whole process of framing and scrutinising the estimates should be streamlined with a view to framing estimates on a more realistic basis.

SITE experiment coverage

2.193. With regard to the broad areas to be selected for satellite communication, it has been stated in the Annual Report of the Department of Space for 1972-73:

“.....To gain the widest possible experience which could be used in future nation-wide system, the clusters will be located in regions having different culture, linguistic and agricultural background. The criteria for cluster selection are (1) backwardness of the region; (2) availability of sufficient inputs and infrastructure facilities so that adoption of techniques suggested in the programme is possible; and (3) the possibility of continuity of service after the satellite experiment. Based on these criteria, the selection of broad areas has almost been finalised.”

2.194. Asked by the Committee during evidence with regard to the progress made in the selection of broad areas for SITE, the representative of the Department of Space stated:

“The cluster selection is yet to be formally finalised. The recommendation of the Department have been given to the Government for final selection of the districts. They will shortly be finalised. Various districts have been finalised and the villages will be selected.”

Asked about the criteria for selection of the cluster areas, the Director (Satellite) TV replied:

“.....The important considerations in selecting the cluster areas are backwardness, infrastructure available on the ground as a support to the programme and maximum common agro-economic-socio conditions in the regions to be served with a common picture in two different languages.”

He added:

"It was decided to select the backward areas so as to study the potentially of television as medium of development in those areas. The areas selected are Bihar, Orissa, Madhya Pradesh, Rajasthan, Andhra Pradesh and Mysore. For selecting these backward areas the Planning Commission's definition of 'backwardness' has been adopted. Falling under this definition are two States which had to be left out; these are: West Bengal and U.P."

Elaborating further about more and criteria for selection of villages, the witness stated:

"The selection of the actual villages where these sets will be located is being done jointly with ISRO and All India Radio along with active collaboration and cooperation and consultation with the State authorities. There will be thousands of villages in a particular State out of which we have to select 400 villages. A certain criterion was laid for the selection of villages, as for instance to name, only some of the factors, like availability of electricity, distance from the maintenance centres, availability of the health and family planning infrastructure, educational infrastructure, agricultural infrastructure etc. Data has been collected from most of the States, fed into the computer and is being worked in such a way that computer will throw up 500 villages which fall within the field of selection. Those five hundred villages will be visited physically with representatives of the State Governments to be able to select 400 out of 500 villages. This process of physically visiting the villages has not yet started, but for some of the States, the processing of the data has been completed. We are working to a predetermined schedule to be able to be in time when the experiment begins."

Explaining the reasons for leaving out the States of West Bengal and U.P., the witness stated:

"We had to leave out these two States because we felt that by 1975 when we would be starting this experiment, the normal transmitters in those regions would be functioning and these two States would be covered by ordinary television."

2.195. As regards the districts or parts of districts proposed to be covered in the six States, the witness gave the following information to

the Committee:

Bihar	Districts of Champaran, Darbanga, Saharsa and Muzaffarpur.
Rajasthan .	Jaipur, Sawai Madhopur and Kotah.
Orissa	Dhenkanal, Sambalpur and Phulbhanı.
Madhya Pradesh	Raipur, Durg and Bilaspur.
Andhra Pradesh	Kurnool, Mehboob Nagar and Medtek.
Mysore .	Raichur, Bijapur and Gulbarga.

2.196. The Committee note that out of 500 villages tentatively selected in each of the six States viz., Bihar, Rajasthan, Orissa, Madhya Pradesh Andhra Pradesh and Mysore, only 400 villages in each of these States would be finally selected for the SITE experiment by physically visiting these villages.

2.197. The Committee hope that final selection of the villages would be completed well in advance of the SITE experiment and in order to gain widest possible experience, the cluster of villages to be covered with SITE experiment, would be selected taking into consideration the backwardness of the region, their culture, linguistic and agricultural background.

2.198. The Committee desire that efforts should be made to ensure the availability of sufficient inputs and infrastructure facilities to the selected villages so that the techniques suggested in the programmes are adopted in those villages and full benefit of the experiment is derived.

Site programme and Community TV Receivers

(i) *Programmes:*

2.199. Asked about the American involvement in the SITE instructional programmes, the representative of the Department of Space stated:

“As far as satellite experiment is concerned we are totally dependent on them for the satellite and not anything else. We have asked for a substantial amount of money to develop our own capability in building our own satellite and for launching it. For this purpose, two requirements must be fulfilled. One is that we must be able to make our own satellite and we must be able to put it in space. We are developing this as far as we can subject to the constraints of the country in both the areas.”

So far as instructional programmes are concerned, the witness stated that they were not dependent on U.S.A. for these programmes.

2.200. The Committee desired to know the steps taken to develop the programmes for SITE within the country with a view to reducing foreign dependency and to have continuity of programme. The Ministry of Information and Broadcasting in a written note have stated:

“Soft-ware segment of the SITE, *i.e.* production of programmes to be telecast from the Satellite, is primarily the responsibility of A.I.R. who will specially produce programmes for the SITE. For this purpose, three Base Production Centres at Delhi, Cuttack and Hyderabad are being set up by A.I.R. These Centres will produce programmes in Hindi, Oriya, Telgu and Kannada to cater to the languages of the cluster areas chosen for the Satellite Experiment. It is not intended to buy any programmes for the purpose, particularly from abroad.

To provide effective support to developmental efforts, programmes must be oriented to local needs and the picture must have relevance to local requirements. In order to do this, AIR has located film field units in each of the direct reception cluster regions. These field units in turn will provide film inserts etc. for programmes that will be put together in the Base Production Centres being set up by AIR at Delhi (for Rajasthan and Bihar), Cuttack (for Orissa and Madhya Pradesh) and Hyderabad (for Andhra Pradesh and Karnataka). These Base Production Centres are expected to be operational by April, 1974. Meantime, production has begun in Delhi using the existing TV studio facilities on a part-time basis. The staff required for Delhi Centre is already in position. Staff required for Hyderabad and Cuttack is now being trained at the TV Training Centre.

A studio is being set up in Ahmedabad as a part of the ESCES Expansion Project, being aided by UNDP. This studio is primarily meant as a presentation studio attached to prime earth station for SITE. However, it will also be used for production of prototype and other programmes by ISRO and AIR.

A small educational TV Studio is being set up by ISRO in Bombay. This will be mainly used for production of prototype ETV programmes. Both the Ahmedabad and Bombay studios are intended as facilities that could be used by appropriate outside agencies or individuals for production of programmes connected with SITE. The Bombay studio is expected to be operational by March 1974, and the Ahmedabad Studio by October, 1974.

The total number of programme hours required for the Experiment is approximately 1500 hours, out of which 360 hours will be for viewing by Children in schools and for teacher training. Out of the remaining 1140 hours, there will be a common programme of 180 hours between all direct reception clusters and rebroadcast centres, including 10 minutes (*i.e.* 60 hours over the year) of news per day. The news will be put out live. There exist a number of agencies like the Films Division; Ministries of Health and Family Planning and Education; National Council of Educational Research and Training; State Governments and other private film makers, whose out put can be used in the programmes either independently or as inserts in studio-based programmes. About 200 hours of ready made material from these sources may be available. This means that the actual precanning to be done would be approximately 900 hours of general programme and 360 hours programmes for schools and teacher training. Since the production is to be divided between different Base Production Centres, the actual production will thus be: for Delhi about 600 hours, Hyderabad and Cuttack about 300 hours each.

Though the work schedule is based on the above requirements, in actual practice, there will be a number of programmes for which visuals etc. and basic scripts will be common. It is visualised that in order to make the learning process more effective, a number of programmes, particularly those directed to children in the morning transmissions will be repeated. This would reduce the production load by at least 5—10 per cent.

It is planned that by 15th May, 1975, there should be 400 hours of capsuled programmes pre-canned, and by 1st January, 1975 approximately 15—20 per cent of the total hours of original production will be ready *i.e.* approximately 210—230 hours.

2.201. The Committee desired to know whether any study has been conducted with regard to the target audience and the language problem to solve programme requirements of local and regional needs. The Director (Satellite) TV stated during the course of evidence:

“Obviously we must know what the audience likes and what are the requirements of the audience. For this purpose we are conducting audience profile studies in production of their programmes. Some of the factors which we would like to know are, for instance, the agricultural practices, food habits, social habits, social customs, superstitions, cultural patterns, economic and trade conditions, widely used symbols, occupational break-up, the language that is being used and which are the

common words between the two words like Andhra and Mysore, availability of infrastructure in the fields of agriculture, health, hygiene and family planning. These are some of the factors which we are trying to determine in the audience profile studies."

He added:

"We appreciate that language is a very important factor. And that is why....in the Mysore region, the whole of the audience profile has been entrusted to the Central Institute of Indian Languages. We want to determine, particularly in the areas where there is a common picture on two different languages, the maximum commonality."

Subsequently in a written note, the Ministry of Information and Broadcasting informed the Committee:

"The study for Andhra and Mysore region has been completed and the report is expected in the next week or so. Audience Profile studies in other regions are at present under way."

2.202. To a query made by the Committee regarding availability of TV channel from a single satellite due to international constraints on power and radio band-width on telecommunication, the representative of the Department of Space replied:—

"Subject to our resources we are capable of getting 4 or 5 channels. Even a country like the USA has only three channels in its nation-wide TV net-work. We are a country with many languages. This is something which poses certain technological problems and we have to get over this problem. Technologically speaking these five channels can be made to cover 25 languages and these 25 languages can be used by this process."

He added:

"We would be in the process of putting up the second satellite in the Eighties and the third one probably in the end of the Eighties. The problem relating to more and more channels, that is, voice channels, would have been more substantially solved so that keeping in viewing both the unity of the country and the diversity of the country, we can very well use the regional languages also."

2.203. Asked about the continuity of SITE programmes after the experimental period of one year, is over, the representative of the Ministry of Information and Broadcasting stated:

“After this American Satellite which comes in 1975 goes away and suppose by that time your own satellite is not ready, then what we have decided as our first priority is that in those areas where you have already installed the television sets, we will set up television terrestrial (mother) stations in those areas which we can take in from the said experiment and continue TV broad-casts. These areas are Patna, Cuttack and Hyderabad....”

The representative of the Planning Commission added:

“The Planning Commission at this stage is thinking that in the Fifth Plan we should see that once these facilities are available to these six clusters of villages, they should not be withdrawn.”

He added that:

“With the help of these three mother stations (Hyderabad, Cuttack and Patna) supported by the microwave links, which are mostly sanctioned in the Fourth Plan, it would be possible to maintain continuity of programmes in these cluster of villages.”

2.204. Asked by the Committee regarding man-power requirement for production, transmission and their training, the Director (Satellite) TV replied:

“Man-power requirements to the minutest detail, in each category have been worked out and the staff is in the process of being recruited according to pre-determined schedule keeping in time with our production dates. For instance, the staff that we need for Rajasthan and Bihar, or most of whom will be located either in Bihar or Rajasthan or Delhi, has been recruited and trained already. In fact, they have already made out about 12 hours of programme. Some staff for other areas has been recruited and others will be recruited by the middle of next month.”

Subsequently, in a written note, the Ministry of Information and Broadcasting informed the Committee that the staff has been selected and is, at present, under training. The staff has been selected for the work in the Base Production Units at Hyderabad and Cuttack to make programmes for Karnataka—Andhra Pradesh and Orissa—Madhya Pradesh regions respectively.

2.205. The Committee note that for the SITE instructional programmes, the AIR is primarily responsible for the software segment i.e. production of the programmes for the SITE for which Base Production centres are going set up at Delhi (for Rajasthan and Bihar), Cuttack (for Orissa and Madhya Pradesh) and Hyderabad (for Andhra Pradesh and Karnataka).

2.206. The Committee also note that a total number of programme hours required for the SITE experiment is estimated to be 1500 hours, of which 360 hours will be for viewing by children in schools and for teacher training.

2.207. The Committee further note that about 200 hours of ready made programme would be available and that the actual programming required to be done would be approximately 900 hours of general programme and 360 hours of programme for school and teacher training.

2.208. The Committee desire that concerted efforts should be made to ensure that the required number of hours of capsule programme is ready in accordance with the requirements of the various regions, keeping in view their language, agricultural practices, food habits, social customs and culture and economic conditions etc. well in advance of the launching of the Satellite in close coordination with the State Government concerned and other agencies like Ministries of Education, Agriculture, Health and Family Planning, National Council of Agriculture Research, Film Division etc. to derive the maximum benefit from the SITE experiment.

2.209. The Committee note that the audience profile studies for Andhra and Mysore region have been completed and that studies in other regions are under way.

2.210. The Committee desire that concerted efforts should be made to complete the audience profile studies in the remaining regions to ensure that the programmes are formulated in accordance with the requirements of the various regions.

2.211. The Committee note that the man-power requirements for the production, transmission and training for the SITE programme have been worked out and that some staff has already been recruited and others are in the process of being recruited. The Committee trust that the staff would be in position in time for the assigned task to implement the SITE programme.

2.212. The Committee note that during the Fifth Plan itself, it would not be possible to launch our own Satellite for continuing the programme of SITE. The Committee, therefore, consider it imperative that the three

mother stations at Hyderabad, Cuttack and Patna with necessary micro-wave links required for continuing the SITE programme are established and are operational before June, 1976 at the latest to feed the programme to the six clusters of villages being selected for the SITE programme after the Satellite moves away after a year.

Community Viewing TV Sets and their Maintenance

2.213. The Annual Report for 1972-73 of the Department of Space on satellite communication stated as under:

“The Satellite Instructional Television experiment involves the broadcasting of Indian instructional TV programme to about 5,000 villages in different parts of the country. About 2,000 sets will be of the direct reception type capable of receiving signals directly from the satellite. The remaining sets will be located in villages around the cities of Delhi, Srinagar, Ahmedabad and Bombay/Poona where regular VHF TV transmitters are existing or are being set up. TV signals from the satellite will be received in these cities by Earth Stations and then re-broadcast by conventional TV transmitters for reception by the sets located in the villages around. In order to get statistically significant data from the experiment and to facilitate maintenance, the sets will be located in clusters of 300 to 400 each.....”

2.214. In reply to U.S.Q. No. 4865 answered in Lok Sabha on the 29th August, 1973 it had been stated that details of the exact number of receiving sets and the location of their deployment were being worked out. The TV sets will be costlier as they would have to be ruggedised for operation under rural conditions and the suitable for direct reception from the satellite.

2.215. Asked by the Committee during evidence about the number of TV sets to be provided in the cluster of villages and how it was ensured that the sets were made cheaper, the representative of the Department of Space stated:

“The number of sets to be provided will be in six cluster of 400 villages each, viz., 2400 villages. These sets are being specially designed, in order to withstand the difficult conditions of our villages. They are being rugged. Where necessary, they are being made capable of being operated on battery. Our electricity is subject to violent fluctuations. As such, the sets are being made completely transistorized.”

He added:

"Atomic Energy have also done considerable work in this regard. The best results of both their work are being combined and the selection of a design has been made...."

As regards the cost of the TV sets, the witness stated:

"In the first lot when we are making 2000 sets suited to our village conditions, I submit that the first lot cannot be cheap. But cheapness can be ensured when we go in for 500,000 sets or such larger quantities to have economy. But initially when we make 2000 customs-built sets, they cannot be cheap."

2.216. The Committee desired to know what steps have been taken to ensure the electrification of villages selected for the Community Viewing TV Sets. The representative of the Department of Space stated:

"As far as the availability of power supply is concerned, the TV sets which have been developed are capable of operating both on mains and on batteries and can be easily switched from batteries to mains if and when the power supply also becomes available to the selected villages."

He added:

"We have provided 3½ lakhs for batteries in the budget. It is we had selected only electrified villages we would not have covered the backward areas. Majority of the villages which are proposed to be selected will have electricity. The maintenance cost etc. will also be less. Where it is battery operated, provision has been made in the budget for the provision of batteries."

2.217. To a query made by the Committee regarding maintenance cost of TV sets with batteries, the representative of the Department of Space replied:

"We have provided 3½ lakhs for batteries in the budget. It is costlier. The point is, in our experiment we want to cover at least 10 per cent unelectrified villages. Some of these are very backward."

2.218. Asked by the Committee regarding development of low power TV transmitters to cover areas where either high power TV transmitters nor direct reception from satellite would be effective, the representatives of the Department of Space informed the Committee that the lower power 50

watt transmitter had, in fact, been developed and built at Ahmedabad by the Indian Space Research Organisation and it was tested during the last cricket test match at Kanpur. He added:

“As far as the possibility of increasing the power capability is concerned, we propose to increase this to 100 watts and our scientists and engineers are already engaged in this and we are quite confident that with a very little import content, we shall be able to develop and keep a small number of low power transmitters.”

The Chief Engineer, AIR added that the Research Department of AIR had already developed a low power translator which will be useful in covering the shadow areas which lie within the normal service area of a television transmitter. The transmitter developed by the Indian Space Research Organisation is called Band I transmitter and the low power translation developed by the Research Department of AIR was band III and there was no duplication. Explaining, the witness added:

“We have been thinking of half-air relay centre within a surface area. On the fringe of the surface area of a mother station, we put up another transmitter to expand the coverage. These transmitters will necessarily have to be of different band, of a different frequency within a mother station.”

Maintenance of Community TV Sets

2.219. As regards maintenance and operation of these 2400 TV sets, the representative of the Department of Space during the evidence before the Committee stated:

“As far as the 2400 village sets which are going to be established in the six clusters are concerned, a very detailed programme for the maintenance and operation and availability of the sets, has, in fact, been worked out. What we have provided in the project itself is that, in addition to the 2400 sets, there will be ten percent of the sets on stand-by. These sets will be kept at the cluster headquarters to be used for replacement, when a set develops a major defect. These sets are being made and supplied by Electronics Corporation of India. Each set has 5 modules which could be slipped in or slipped out. A number of workers are going to be recruited who will be trained in just this business of slipping in and slipping out these modules.

When a module is taken out, the worker will send it to the cluster headquarters, who will send the same to the suppliers, i.e., the Electronics Corporation of India—they are going to be under contract with us and they have agreed that they will keep adequate spares—and there, completely skilled technician will examine and determine what replacements are necessary for the module. The other thing which goes into the village set is the front-end converter. Signals received from the satellite have to be converted in order to be able to be received in the television set. For this again, there are going to be spares kept in the cluster headquarters. A semi-skilled worker will be trained in this job of replacing the Converter with another and it is an extremely simple operation. We are going to identify the workers—some village level worker or even a school teacher can be identified—who can learn this business. We are going to provide each cluster headquarters with its own jeep, which can go round the villages and make sure that these are no defective sets, etc. They will also carry spare television sets with them and they will replace the sets, if necessary, change the module, if necessary and carry out repairs."

The representative of the Ministry of Information and Broadcasting added:

"These are most complicated sets and the ISRO has to develop a special ground organisation for the maintenance of these sets during the SITE experiment. It is an experiment which we are launching with international cooperation and therefore, it will become all the more our duty to see that the organisation which maintains these sets is efficient and neglect of community receiver do not take place. The ISRO is taking very good care that these 2400 sets are maintained at the highest level of efficiency.

The witness further added:

"When we extend our own net-work for the ordinary community receivers, we will have to develop systems by which various authorities have a stake in their maintenance. For instance, we have not quite decided as to what will be the contribution of the Centre, the role of the States and the role of the local authorities in the maintenance of these sets."

2.220. The Committee note that a detailed scheme has been worked out for the maintenance and operation and availability of specially designed TV sets which would be working on a module system.

2.221. The Committee hope that availability of sufficient spares as also of adequate number of spare TV sets as stand by for replacement as and when necessary would be ensured for smooth and efficient operation of the community viewing sets in the cluster areas.

2.222. The Committee suggest that a suitable machinery might be evolved to maintain a close coordination with the State Governments concerned and to ensure proper functioning of the TV sets in the six cluster areas.

2.223. The Committee elsewhere in the Report have suggested that suitable guidelines should be laid down for the upkeep and efficient maintenance of the community viewing TV sets.

(v) TV Studio and Transmission Equipment

2.224. The Ministry of Information and Broadcasting in the preliminary material furnished to the Committee had stated that one of the major reasons for low priority for the development of television in the country was the State of Electronics Industry which, at present, cannot meet the demand of a large scale of indigenous equipment for broadcast reception.

2.225. Asked by the Committee during evidence what concrete steps have been taken in this regard, the representative of the Ministry of Information and Broadcasting stated:

“As far as the state of electronics industry is concerned, I would broadly say that it is rapidly moving towards greater indigenous capability and production, transmitters and other items of equipment are being made by Bharat Electronics, that the capacity for fabrication of transmission towers already exists in two large firms in the country, that quite a large number of other items of equipment like camera equipment and telecine equipment etc. are being made in the country.”

He added,

“It is easy to import transmitters and receiver sets, and of course, a great deal of foreign expertise and set up television station. There are countries in the Middle East and South East Asia, which have gone ahead of us and have done it. In our country, it has coincided with the development of a great deal of indigenous capability, side by side, in the electronics industry.”

The Chief Engineer, AIR, added,

"As far as this equipment (Transmitter and studio equipment, some of them are being manufactured by Bharat Electronics Ltd., in collaboration with the foreign firms. At present we find that the total amount of imported content in a transmitter is of the order of about 40 per cent. Whereas in the case of studio equipment, this is not manufactured by the Bharat Electronics Ltd., but parts are imported from abroad. The total foreign component extent is nearly 80 per cent. We find that in the process of indigenisation from year to year, the indigenous contents go on increasing as a part of the collaboration programme. Very soon we shall be able to reduce its foreign content to a considerable extent."

2.226. The UNESCO Commission on TV Development & Training in their Report had recommended as under:—

"The Government of India should decide to waive the custom duty on imported studio and transmission equipment. Such a duty is justified if the capital equipment can be partly or wholly replaced by labour-intensive production techniques. This is not the case with TV studio equipment and the present practice observes the true cost of the TV operation by adding this 'accounting' element."

Asked by the Committee what decision has been taken on the above recommendation of the Commission the D.G., Air replied,

"There has been no exemption and as a matter of fact the customs and excise duties on the equipment have gone up in the last budget."

2.227. Asked whether the possibility of manufacturing the equipment and spares etc., to meet the requirements of TV Stations in the private sector had been considered, the representative of the Department of Electronics stated that the private sector does not really come into the picture very much in this area. He added:

"As far as transmitter is concerned, it comes under the Industrial Policy Resolution. They are not allowed to be made in the private sector. In regard to the Studio equipment, the requirement is so small and the quality so high that commercial companies are not interested."

Asked about standardisation of the equipment, the Chief Engineer, AIR, stated,

"We are getting a part of our transmitter and studio equipment from Bharat Electronics Ltd. They have entered into collaboration with some foreign firms and are supplying equipment to us. To that extent all our transmitter and studio equipment have been standardised. He added that out of 80 per cent of imported equipment for studios, 45 per cent happens to be the import content of the equipment manufactured by Bharat Electronics and 35 per cent for non-B.E.L. items."

He added:

"We shall keep in mind the necessity to standardise the equipment not only from the point of view of ease of operation but also from the point of view of inventory control of spares."

2.228. The Committee desired to know the percentage of self-reliance in the indigenous equipment. The Ministry of Information and Broadcasting furnished the following information regarding the development of know-how of TV and studio equipment and transmitter etc., in the country at present and the future plans for achieving self-sufficiency in this regard:

"The broad details of the equipment required for a TV Centre are as given below:—

- (i) Studio Video equipments comprising electronic cameras, video switching, master control and monitoring equipments;
- (ii) Telecine equipment;
- (iii) TV transmitter along with antenna and other associated equipment;
- (iv) Video Tape Recorders;
- (v) Sound mixers for programme and announcer studios;
- (vi) 16 mm film equipment comprising of film camera, sound transfer equipments, editing tables and projection equipment along with sound synch;
- (vii) Microphones and professional quality transcription turntables;
- (viii) Microwave link equipment for telecasting of programmes from an outside location and for Studio transmitter links;
- (ix) Film processing plant;
- (x) Studio lighting equipment;
- (xi) Film projectors for preview purposes;
- (xii) Towers for TV antenna.

The studio video equipment comprising electronic cameras, video switching, master control and monitoring equipments, telecine equipment and TV transmitter equipments along with antennas and other accessories are now being produced by M/s. Bharat Electronics Ltd. indigenously. Certain amount of foreign exchange is however, required by them also for import of kit components and raw materials.

The percentage of studio equipment being supplied by M/s. Bharat Electronics and that imported from other sources is 45 per cent and 33 per cent respectively. The total amount of foreign exchange required varies with the type of studio centres. On an average it is of the order of Rs. 43.00 lakhs.

The percentage cost of the transmitter equipment being supplied by M/s. Bharat Electronics Ltd. and that at present imported is of the order of 35 per cent and 2 to 9 per cent respectively. The total foreign exchange involved for transmitter project is of the order of Rs. 11 to Rs. 13.00 lakhs.

The following progress has been made towards self-reliance:—

- (a) Items (i), (ii) and (iii) in para (1) above are now being progressively manufactured by BEL under collaboration agreement with foreign firms. From 1970 onwards the equipment is being exclusively supplied by BEL;
- (b) Items (iv), (v), (vi) and (vii) continue to be imported for the present;
- (c) Item (viii) is imported but is currently under development;
- (d) Items (ix), (x), (xi) and (xii) are wholly indigenous.

In the case of imported equipment, efforts are being made by B.E.L. to progressively indigenise the equipment as far as possible. Details of BEL's programmes in this context are not available."

2.229. The Committee note that, at present, the import content in T.V. transmitter is of the order of 40 per cent while in the case of studio equipment, it is 80 per cent.

2.230. The Committee also note that the electronics industry is rapidly moving towards greater indigenous capability and production and that part of the transmitter and studio equipment is being supplied by BEL and to that extent the equipment has also been standardised.

2.231. The Committee further note that items like video type recorders, sound mixers for programme and announcer studios, 16 mm film equipment etc. are still required to be developed and produced indigenously and that they account for significant foreign exchange.

2.232. The Committee are of the view that in order to establish indigenous production of the items being imported, it is necessary that a developmental plan should be drawn up and intensive efforts made to accelerate the pace of research and development to yield the maximum results in the shortest possible time.

2.233. The Committee would like the Department of Electronics to prepare an integrated plan in consultation with the Ministry of Information and Broadcasting so that our country can become self-reliant in this sensitive mass media of communication at the earliest. The Committee would like to be informed of the concrete measures taken in pursuance of the above recommendations within six months.

2.234. The Committee desire that a film assessment of hardware requirements for the developmental programme of T.V. during Fifth Plan period should be urgently made. Orders for the same should be placed on the suppliers well in advance keeping in view the lead time required for production and delivery so that the equipments etc. are available in time for proposed T.V. projects.

(vi) Role of Film Production in the development of T.V. Activity

2.235. The UNESCO Commission on Television Development and Training in India (1969) in their Report had observed as under:—

“At present virtually all television activity in other countries is based upon

- (a) Live Production
- (b) Video tape recording, and
- (c) 16 mm film technology.

In the case of 16 mm film however some conspicuous gaps in 16 mm technology will present operational problem to the new television stations.

Since the programme making potentialities of a new television station would be greatly limited if restricted only to the studio it follows that in order to range throughout the city and the surrounding districts for story material, it would be necessary to draw upon 16 mm film coverage. This, therefore, would require an efficient 16 mm film technology to be available fully responsive to the needs of the television stations.”

The Commission had further observed:—

“The physical means of providing news film coverage should be (in due course would necessarily be) in 16 mm Film forat, for

economy of filming operations, convenience of handling and storage, cost of stocks and processing. There is no question that 16 mm film is essential. There is a serious lack of adequate 16 mm laboratory facilities for this purpose at the moment.... The subject of 16 mm laboratory services and facilities will arise frequently. It is a fundamental factor in planning for film work related to the needs of national television."

2.236. Asked what progress has been made for the development of 16 mm technology, the Director, T.V. Training Centre stated during evidence that all TV stations were undertaking live production and studio production and video tape production and personnel were being trained for that. As regards 16 mm, film technology he stated:—

"In 1969, there were some conspicuous gaps according to them (The Willings Mission) in the film technology. They suggested that these gaps ought to be removed. That is being done through the training in the Training Centre, where we are teaching the 16 mm film technology as applicable to TV. All India Radio is also proposing to establish a number of film production centres."

The Director, T.V. Centre further stated:—

"Although we would like to increase the film content in our television stations, yet because of the problems of equipment like editing table and imported raw stock of film, we are having about 60 per cent of the programme which are either studio-based or video-taped.... The rest of programme is film based."

He added that:—

"In the film technology, the help of outside agencies has been taken at various places. The main problem is in 16 mm equipment where we have to depend on import and if the import of the equipment increases the participation of outside talent or contribution to the T.V. programmes will increase."

Director General, A.I.R. added:—

".....One very major gap which needs to be filled up is to enable people from outside to be self-contained in the matter of equipment also because that will increase the national capacity. In that connection, in collaboration with the Films Division we put forward a proposal to have four 16 mm production units at the metropolitan centres which will not only enable the production of documentaries and short films which

will be useful for both the T.V. and the cinema circuit but we would also be able to offer the use of this facility outside the A.I.R. studios."

He added:—

"This proposal has been approved by the Planning Commission and is awaiting the proposal of the Finance Ministry."

The Secretary, Ministry of Information and Broadcasting added:—

"The growth of television culture in the whole country depends on the existence of a large number of 16 mm cameras. In Europe hundreds of young people are playing with 16 mm cameras. There are a lot of 16 mm processing laboratories and therefore a lot of young people can make television programmes and later put them up to the television authorities for approval. Here the number of private people are limited. Therefore, we are pressing the import control authorities to liberalise the import of 16 mm cameras and wherever applications are made to us by the private parties for the setting up of 16 mm processing laboratories we also support them from the foreign exchange angle".

2.237. Subsequently the Ministry of Information and Broadcasting furnished the following information regarding 16 mm film production centres proposed to be set up by A.I.R. in collaboration with the Films Division:—

"No provision for the setting up of T.V. Film Production centres had been originally included in the Fourth Five Year Plan. However, the Planning Commission subsequently agreed to the proposal for the establishment of four T.V. Film Production centres at New Delhi, Bombay, Calcutta and Madras by Films Division provided the expenditure would be met out of the overall provision of Rs. 40 crores allotted for Broadcasting and T.V. Each Centre will be self-sufficient in terms of technical facilities namely camera equipment, cine recording equipment, editing and mixing equipment and film processing equipment. All the tasks including editing will be done in 16 mm gauge. The proposal is under submission to the Public Investment Board for approval. The project will require foreign exchange of Rs. 17.20 lakhs per centre.

Subject to the proposal being approved early by the Public Investment Board, it is proposed to initiate action to put the scheme into operation in the year 1973-74, and continue it during the Fifth Plan.

Each of the 4 T.V. film producing centres will involve an outlay of Rs. 118.16 lakhs during the first six years, *i.e.*, part of the current year and five years of the Fifth Plan. A total outlay of Rs. 472.64 lakhs will be required for all the four centres during this period. The tentative break-up of outlay is as follows for each centre:—

(a) Non-recurring expenditure on equipment (with the foreign exchange component of Rs. 17.20 lakhs).	Rs. 36 lakhs
(b) (i) Recurring expenditure on staff, accommodation and other miscellaneous items during 1973-74.	Rs. 2.00 lakhs
(ii) Raw stock, tapes and expenditure on processing @ Rs. 3 lakhs per year for 5 years.	Rs. 15.00 lakhs
(iii) Expenditure on rent, production work and other miscellaneous items @ Rs. 3,40,000 per year for five years.	17.00 lakhs
(iv) Pay and allowances for 5 years. (details of staff required for each centre).	Rs. 48.16 lakhs
	Rs. 118.16 lakhs

(c) The establishment of 4 centres has been proposed to cater to the local requirements of the area and cultural and linguistic needs of the region. It is intended that the regional character of these films should be maintained.”

2.238. Asked whether there is any proposal to bring out 8 mm films also the Director T.V. Training Centre replied in the affirmative and added, “The cost of storage, handling and footage used is much less.” The Director (Satellite) TV stated:—

“In collaboration with various agencies and also the Indian Space Research Organisation, we propose to experiment with the use of Super-8 and also $\frac{1}{2}$ ” Video-tape recorders. But to build a Super-8 film movement some bottlenecks like import restrictions that are being faced in popularisation of 16 mm film movement will have to be removed.”

The witness added,

“We are making a provision to import some units of Super-8 film and $\frac{1}{2}$ ” Video-tape equipment in collaboration with some other agency.”

The Director General, AIR, added:—

“35 mm equipment because of the very large demand of the film industry is to a great extent being met indigenously. 16” and Super-8, because of lack of demand from the film industry and lack of any other demand like ours, if it proves successful, this equipment has to be imported.”

To another query made by the Committee, the Secretary, Ministry of information and Broadcasting replied,

"Initially, we will have to start with liberalised import policy in the matter of this equipment and then go on to the manufacture."

2.239. The Committee are in agreement with the observations made by the UNESCO Commission in their Report on Television Development and Training in India that with the coming up of the TV Stations into operation, there would be extensive requirement of inputs of film material for which it would be necessary to draw upon 16 mm film technology fully responsive to the needs of the television stations.

2.240. The Committee note that four TV Film Production Centres for producing TV films and documentaries are proposed to be set up by the Films Division at New Delhi, Bombay, Calcutta and Madras involving an outlay of Rs. 118.16 lakhs each during the first six years.

2.241. The Committee have dealt with this subject in detail in paras 1.66 and 1.67 of their 59th Report (5th Lok Sabha) on Films Part-II.

2.242. The Committee note 60 per cent of the TV programmes are at present either studio based or video-taped. There is need to diversify the programmes, with greater accent on covering subjects of interest, outside the studio not only to meet the cultural, linguistic and socio-economic requirements in the regions but also to ensure larger participation of the people. The Committee would urge Government to take necessary action to achieve the above objectives at the earliest and use the production technology which may be best suited to achieve optimum results.

CHAPTER III

(i) Development of Education T.V.

3.1. In 1958, AIR approached United States Information Service (USIS) for some aid to its television enterprise. The USIS made a nominal 'loan' of some film transcription equipment, Studio Vidicorn Cameras, mobile orthicon cameras etc. Soon afterwards, UNESCO made a contribution mostly in the form of 20-inch receiver sets and some portable generators. With this aid, AIR made a beginning in the programming and production of programmes. Receiver sets were distributed to various social, educational and community centres. Around these sets, "tele-clubs" were formed which met regularly for viewing the programmes.

3.2. Later, in 1960, at the request of the Government a Ford Foundation Expert Team visited India to study the feasibility of educational television and to make constructive contribution in its development. The Team visited various kinds of schools in Delhi, held discussions with leaders and principals and high Government officials and drew up the "Report of Ford Foundation Television Team" (March 1, 1960) which eventually led to the creation of Delhi School Television Project that set the framework for the future development of Educational Television in India.

3.3. In 1964-65, Delhi had 367 Higher Secondary Schools of which 227 (62 per cent) had television sets. In addition there were TV sets in 6 Middle Schools in connection with the teaching of English to Middle Classes thus making a total of 233 schools with television sets. By December, 1966, 289 schools had TV sets.

3.4. The Ministry of Information and Broadcasting furnished the following information to the Committee regarding the number of TV sets at present installed in the Higher Secondary and Middle School in Delhi.

"Although the Delhi Administration had made no specific provision for the supply of TV sets to schools in their Fourth Plan, they have been trying to find as much funds as possible for the purchase of new sets for schools which have not yet been provided with such sets. The present position in regard to supply of sets both in the high and higher secondary schools

and the middle schools, is as under:—

	Total No. of schools	Schools provided with TV sets	Schools no provided with TV sets
High & Higher Secondary Schools	549	424	124
Middle Schools	395	90	305

“...only Delhi had so far a regular school TV service. The programmes broadcast from this station are directed to students of the secondary schools. Maharashtra has also recently started enrichment programmes for secondary level. They propose to introduce regular school programmes from the next academic session. The other States have not yet started school TV services.”

3.5. As regards installation of education TV sets in the rural areas the Ministry of Information and Broadcasting have stated that 49 TV sets have been provided in the rural areas. The Ministry have further stated:

“Children who are physically and socially handicapped and are studying in the Television Schools, are benefitted from these sets. However, sets have been provided at four Community Centres catering essentially to such children.”

With regard to the introduction of educational TV programmes in Bombay, the Director, TV Bombay informed the Committee during evidence that the school TV programmes are of enrichment type and are telecast twice a week. He added:

“With the establishment of the second studio which will be in operation from the middle of next month, we hope to start producing specific programmes for the Sixth and Eighth classes in new Mathematics, in English and in general science.”

3.6. To a query made by the Committee about the percentage of such programmes in total television programmes, the Director TV, Delhi replied:

“These lessons are prepared in relation to a particular syllabus and their duration is 20 minutes. Then there is a introduction by the teacher and it is followed by the lessons. After that, there is a kind of discussion. That way there is a full utilisation of these lessons in those classes. There are nearly

500 schools which have TV sets and they are supposed to be watching classes to which lessons are transmitted."

He added:

"We are telecasting programmes not for the public schools but for Delhi Administration schools. Now, how far we have been able to help is another matter.... But we do have full co-ordination in working out the syllabus and preparing lessons. The programmes are being prepared by the reputed teachers. First of all, the Producers of our TV cell have a background of education, they come from teaching institutions. Secondly, the people who prepare these lessons are from the teaching faculties from various institutions."

3.7. To another question whether the TV periods are designed to produce maximum of continuity between successive lessons and whether the present arrangement including the time allocation for school TV is adequate to meet the requirements of both the teachers and the students, the Ministry of Information and Broadcasting in a written note have stated:—

"The TV schedule for the whole year is prepared in advance by a committee of experts. This ensures the continuity, not only between the successive TV lessons, but to the entire teaching process including the class-room teaching."

As regards the adequacy of the time allocation for school TV, the Ministry of Information and Broadcasting have stated that it was met within the limited resources of the TV centre.

3.8. To a query made by the Committee whether the present lessons are best fitted into the class room syllabus, the Ministry of Information and Broadcasting, in a written note, have stated:

"The present TV lessons are fitted into the class room syllabus to the extent possible. Continuous efforts are made to improve the quality of these lessons and to relate them to the school syllabus as much as possible."

3.9. Pointing out that, according to certain reports, there is lack of coordination between educators and the producers, the Committee desired to know the allocation of responsibilities between the TV Centre, Directorate of Education/Ministry of Education and the schools of designing TV syllabus and the machinery for proper and close coordination to make the school programmes a success. The Ministry of Information and

Broadcasting in a written note have stated:—

“Close coordination and liaison exists between the Education Department of Delhi Administration and the Delhi Television Centre. Appreciating the importance of school television, the Directorate of Education have set up a full-fledged Television Section to deal exclusively with school TV Programmes. The Section which is a vital link between TV producers and teachers[educationists, is headed by an Assistant Director of Education. The Section is also supervising the viewing-end and provides the Television Centre with necessary feed-back from the schools. The Section in collaboration with the Television Centre organises periodical meetings and seminars of teachers and Head Masters on subjects relevant to school television.

A Committee consisting of Producers from the TV Centre, representatives of the Directorate of Education (TV Section) and other eminent educationists is responsible for preparing the television syllabus for the whole year. Before the syllabus is finalised by the Committee, the draft is also discussed in Zonal meetings of subject teachers.

In the beginning of the academic year, wide publicity is given inviting teachers for auditions who may like to participate in presentation of programmes. The lessons are prepared by teachers who are experts in their own subjects. The scripts are scrutinised by a subject expert who is booked on the basis of his expertise. Periodical analysis of programmes by eminent educationists invited to Special previewing of some of the lessons helps to improve the quality of programmes.

It would thus be seen that there is a close coordination between the Directorate of Education and the Television Centre and Co-operation of eminent educationists is available in planning and presentation of programmes.

In the Radio programmes for schools, a similar cooperation is available between Radio Stations and the Educational Administrators. The planning of broadcasts is done mostly class-wise and is closely coordinated to the syllabus so that the broadcasts might be of immediate use to the teachers and students, especially in those subject areas which are normally beyond the access of an average school. This is done by means of specialists and new techniques and updating information which are all not possible for an average school.

Attempts have been and are being made to bring the educational administrators and broadcasters closer so that educational broadcasting can be a joint effort of both the agencies. Directorate of Education have been asked to evolve a State Council of School Broadcasting consisting of the school educational administrators, educational experts, broadcasters and subject experts and representatives of parent-teachers associations to guide educational broadcasting and to take up the organisation of listening and feed-back and evaluation. Wherever the utilisation is indifferent, it has been due to the pressures of educational situation of those regions like over-crowding, lack of accommodation and funds for equipping schools with listening facilities. Another cause for indifferent utilisation has been the traditional obsession with examinations which is a characteristic especially of the higher classes of a school. Perhaps this may not be remedied for some years to come. That is why it has been proposed to go in for a much larger service to primary schools in the matter of educational broadcasting. The primary schools which are more flexible in the matter of syllabus and are free from obsession with examinations, stand in need of much larger media support today, since for several reasons primary education is dull and the quality of learning and teaching is indifferent leading to wastage and stagnation. It has been suggested to the Planning Commission to provide funds to equip primary schools with radio sets and listening facilities. With a view to develop a systems approach in Education involving Radio, TV, cassettes, tape-recorders etc. besides the traditional class-room aids, Education Ministry with the help of the State Governments, is organising Educational Technology Cells in all the States to ensure proper use of mass-media in Education."

As regards maintaining liaison between the class-room teacher and TV teacher the Ministry of Education have stated:

"Liaison between class-room teacher and TV teachers is being maintained as follows:—

- (a) The teachers who present the TV lessons are themselves class-room teachers.
- (b) Teachers working in the TV Branch pay regular visits to the schools, meet the class-room teachers and discuss the programmes with them.
- (c) Regular weekly meetings are held with the subject teachers to discuss a specific lesson after viewing it in the actual class-room situation.

- (d) Annual meetings of subject teachers are held before planning the syllabus in each subject for the following session. The class-room teachers and TV teachers are also included in the subject syllabus Committee that finalise the annual as well as the week-wise syllabus and also the topics for TV lessons in each subject.
- (e) The lesson is presented by the TV teachers whereas the pre-telecast and post-telecast discussions are held by the class-room teacher. Thus both work jointly to make the lesson effective and useful."

3.10. In a Memorandum submitted to the Committee it had been suggested that besides entertainment, TV ought to involve itself with the following educational broadcasts:

- (i) Primary School level.
- (ii) Secondary School level.
- (iii) College or University level.
- (iv) Continued education for people who work during the day, and;
- (v) Handicapped children.

3.11. Asked to comment, the Ministry of Information and Broadcasting, in a written note have stated:

"At present, school TV broadcasts are prepared for secondary level only. The Ministry of Education are in full agreement with the view that besides secondary level, TV broadcasts should also be prepared for primary school level, college or University level, non-formal education and for handicapped children."

As regards introduction of educational TV at primary school level, the Ministry of Information and Broadcasting in a written note have stated:—

"Although the question of introducing Educational TV at primary school level was discussed with the concerned authorities but taking into consideration the physical limitations by way of studio facilities, etc. no firm commitment regarding the introduction of such programmes was made. However, the Corporation went ahead with the purchase of 200 receivers for primary schools. With the present facilities, it has not been possible to introduce programmes for primary schools in addition to programmes for Higher Secondary classes. The number of lessons at present broadcast for higher secondary classes are 16 per week and Delhi Administration are not prepared to reduce the number of these lessons. However, in view of

the emphasis on the need to strengthen primary education, the question of introducing lessons for primary Schools on Delhi TV is being examined further in consultation with the Ministry of Education, Director of Education, Delhi and Municipal Corporation of Delhi."

3.12. As regards the suggestions made are the seminar of all Head Masters of the Delhi Schools held on 3rd February, 1973 and the improvements made in the educational TV service as a result thereof, the Ministry of Information and Broadcasting furnished the following information to the Committee:—

"A meeting of the Heads of TV viewing schools was held on 3.2.1973 in which the following points concerning TV programme were brought out:

- (a) Sometimes the school timings and school time-table are changed without any intimation to the TV branch.
- (b) In some cases the key of the TV set is not always readily available for viewing the programmes.
- (c) Pre-telecast and post-telecast discussions are not always conducted by the subject teacher.
- (d) Check-sheets are not received back from the schools regularly.
- (e) Lesson-notes and the printed TV booklets do not reach the schools in time.
- (f) The defective TV sets are not repaired promptly.
- (g) The number of TV sets given to the schools is not sufficient to meet their requirements.

Regarding (a), (b), (c) and (d) the Heads of the schools assured that they would do the needful and there has been improvement on the score in the current session. Regarding (e) and (f) Director, TV Centre, AIR Delhi is endeavouring to take all possible measures to improve the position. A repair and maintenance workshop has been set up by the Education Department to repair the defective sets given by the Education Department. In regard to (g), actually Delhi Administration had made no specific provisions for supply of TV sets to schools in their IVth Plan, they have been trying to find as much funds as possible for the purchase of new sets for schools which have not yet been provided with such sets."

3.13. The Committee wanted to know whether educational TV programmes were being produced with a view to exchanging these programmes

with other TV stations and whether such programmes would help in reducing the cost of production, the Ministry of Information and Broadcasting in a written note have stated:

“In view of the linguistic and curricular problems, large scale exchange of programmes between different TV Stations is difficult. However, it is hoped that with the expansion of the TV network, there will be some programmes that could be exchanged in the same linguistic areas. With the expansion of TV, we hope it would also be possible to exchange scripts dealing with broad concepts. This experiment is going to be tried out to an extent in SITE.”

As regards reduction in the cost of production the Ministry of Information and Broadcasting stated as under:—

“There is no doubt that exchange of programmes between TV Stations would help in reducing the cost of production but the exchange of necessity has to be limited because of the constraints mentioned above.

It is, however, felt that kits and visuals for some programmes can, however, be produced centrally and sent to the stations to be used in their own programmes. This project visualises programmes on common concepts but in different languages.”

3.14. The Committee desired to know whether any study has been conducted either by AIR or the Directorate of Education/Ministry of Education to evaluate the utilisation and effectiveness of school TV programmes and what steps had been taken to bring about improvement as result of the study conducted. The Ministry of Information and Broadcasting in a written note stated:

“Neither the Directorate of Education nor the Ministry of Education have so far conducted any study to evaluate the utilisation and effectiveness of school TV programmes. However, AIR has conducted one or two studies on actual physical operation of sets in the schools. As a result of these studies, the Delhi Administration were asked to look into the various bottlenecks and wherever necessary a re-orientation was also given to the programmes.

Dr. Paul Neurath conducted an evaluation study of the school Television project in 1964. This evaluation was a part of the Ford Foundation agreement on School TV project in Delhi. Recommendations of the report have been implemented to the extent possible.

The staff of the TV Branch of the Delhi Directorate of Education is, however, carrying out continuous evaluation of the utilization of school TV programmes through:—

- (i) their visits to the schools,
- (ii) on-the-spot meetings, and
- (iii) questionnaires issued to students and teachers.

An analysis of the feed-back through these sources has revealed that the lessons telecast from Delhi Station have generally proved useful not only to the students but also to the teachers. The analysis also helps in improving the programmes.”

3.15. As regards the periodicity of the school visits and the nature of the improvement effected in the school programmes as a result of these visits to the schools and the reports given by the school authorities, the Ministry of Education in a written note stated:—

“The schools are visited regularly by the staff of the TV branch. Efforts are made that each TV viewing school should be visited at least once during an academic session. During 1972-73, 491 visits were made by the staff of the TV branch.

As a result of these visits and the reports received from the schools, the following improvements were made in the TV programmes:—

- (a) Week-wise syllabus was revised in each subject as suggested by the class-room teachers.
- (b) Class-wise syllabus was planned and prepared according to the suggestions received from the class-room teachers.
- (c) Topics for TV lessons were selected as suggested by the class-room teachers.
- (d) Faults in production were brought to the notice of the TV Centre and AIR authorities for rectification.
- (e) Utilisation of the programmes at the school level by the teachers and the students has improved.
- (f) The subject teachers have been given guidance to make proper use of the programmes for the benefit of the students.
- (g) The knowledge about the requirements and reactions of the students and the teachers has helped in preparing need-oriented programmes.”

3.16. The Committee desired to know whether there is any machinery for close and continuous liaison between the Ministry of Information and Broadcasting, the Ministry of Education and the National Council of Educational Research and Training with regard to:—

- (i) future policy for educational programmes.
- (ii) responsibility of each Ministry in respect of programming.
- (iii) Programme priorities at the national level.
- (iv) In-service work with teachers regarding programme utilization.
- (v) "Feed-back" and evaluation regarding programmes, and
- (vi) Guide preparation for teachers.

The Ministry of Information and Broadcasting furnished the following information to the Committee:—

"Liaison between the Ministry of Education and the Ministry of Information and Broadcasting and NCERT is maintained through an Inter-Ministerial Coordination Committee which was set up in September, 1972 for the use of mass media in education. The Committee consists of the Ministers incharge of Education and Information and Broadcasting; senior officers of the two Ministries, their associated finance and NCERT. The functions of the Committee are as under:—

- (i) to coordinate the policies and programmes of the two Ministries to facilitate efficient use of mass media of communication and modern educational technologies for education, including school and college education, open school and open universities, literacy, further and continuing education, and scientific, cultural and technological education of those already employed in various sectors of the economy.
- (ii) (a) to lay down guidelines for educational programmes on radio and television; and (b) to prepare a plan for producing films for all stages of education and for out-of-school informal and adult education and teacher education, particularly, for work experience programmes and for craft education at the school level;
- (iii) to draft a programme for training of personnel required to carry out the above-mentioned programmes.

In addition to this Committee, the Ministry of Education, the Ministry of Information and Broadcasting and NCERT, are also represented on the Managing Committee of the Centre for Educational Technology. Programmes of training, production, research and evaluation, proposed to be

taken up by the Centre, are finalise by this Committee after taking into account the views of the two Ministries and the NCERT.

It would not be out of place to add that the Centre for Educational Technology is working in close collaboration with AIR and particularly for the immediate project—SITE. Teacher Training Workshops and Script-writers Workshops having jointly organised by the Centre and AIR, one such workshop in connection with SITE is being organised from 10th to 17th December, 1973. The Minister of Education have agreed to appoint a whole-time specialist to work with AIR in SITE. He will not only act as a liaison between the Centre, the States and AIR but will also be over all responsible for production and distribution of background material and also for proper utilization of programmes. Programme priorities for School TV in SITE have been determined in consultation with special Committee set up for the purpose by the Ministry of Education. Subject matter contents of programmes in SITE will be determined by different Subject Committees. It may, however, be added that the appointment of the whole-time specialist referred to earlier has been delayed for some technical and financial reasons in the Ministry of Education.

3.17. THE UNESCO Commission on TV Development and Training in India (1969) had recommended that a Special Branch/Department might be set up in the Ministry of Education to:

- “(i) direct national policy with regard to school broadcasts.
- (ii) consult with regional departments regarding their individual curricular needs.
- (iii) define these aspects of the curriculum for which common resource material could be produced centrally and distributed to TV Stations within the various regions to be used in local production.
- (iv) direct the production of such common resources material in conjunction with the curriculum development department and the audio visual service of the NCERT.”

3.18. Asked by the Committee to what extent the Department, if set up, has achieved the above objectives, the Ministry of Education, in a written note furnished the following information to the Committee:—

“A special Unit know as the Educational Technology Unit, was established in the Ministry of Education and Social Welfare in 1970. The Unit has developed a programme of integrated audio-visual instruction by making full use of films, radio broadcasts, the expanded television coverage of the country and the

new educational techniques such as video/audio recorders, programmed learning etc. Under this programme, a Centre for Educational Technology has been set up this year as an Institute of the NCERT. The Centre is concerned with the development of curricula, preparation of basis scripts for films, radio and television lessons, preparation of graphics, multi-purpose films, models and production of audio-visual instructional materials including 16 mm films. The material produced at the Centre will be used either via television transmitter in institutions equipped with television sets or through films projectors in institutions which do not have television receivers, as well as through tape recorders and closed circuit television. The Centre will provide regular courses in educational technology (software) as also in the utilisation of educational mass media. It will also provide orientation courses for administrators and planners and complementary courses for the trainees at the Television Production and Studio Technical Operations Training Centre, of the All India Radio. Side-by-side with these activities, the Centre will also do some experimental work on the innovational uses of the educational media.

Besides the Centre for Educational Technology all State Governments have been requested to establish Educational Technology Cells in their States for which hundred per cent central assistance is being provided during the Fourth Plan period. Maharashtra has already established such a Cell. J. & K. and Punjab which are the other States having TV coverage, have also proposals to set up similar Cells in other States. The State Cells would prepare printed literature required for the broadcast lessons, train user (i.e. class-room) teachers who will give pre-broadcast instructions and conduct post-broadcast discussions in the class-room, coordinate the class time-tables with the AIR-Television and Radio Broadcast programmes, produce certain programmes of a local nature, some of which may be live broadcast programmes, make use of all audio-visual and other modern techniques to improve education and do the necessary liaison work vis-a-vis Government of India and the Ministry of Education on the one hand and the State Governments and the Education Departments and the schools, on the other hand.

Maintenance of School TV Sets

3.19. Asked by the Committee regarding the maintenance of the school TV Sets the Ministry of Information and Broadcasting in a written note

have stated:

"TV Centre is maintaining sets installed by it in various schools. As the maintenance of TV sets forms an integral part of the 'Maintenance of Plant' for the entire station, it is not possible to separate this expenditure. Under the latest arrangement, replacements and provision of sets to new schools is the responsibility of the Directorate of Education, Delhi. The responsibility for maintaining these sets is also that of the Directorate of Education.

The AIR maintenance staff goes round to check the TV sets. In case of any complaint, the TV centre ensures that they are attended to within 48 hours."

3.20. Asked whether Government have any programme for the development of close circuit TV educational programme, the Ministry of Information and Broadcasting, in a written note have stated:—

"Closed-circuit TV is proposed to be used for teacher training purposes. A suitable programme for its development will be designed by the newly-created Centre for Educational Technology of the NCERT. A few institutes like the IIT Kanpur, already have closed circuit television. The cost for the development of CCTV systems is being worked out by the AIR at the request of some of the Institutes. The cost will differ as per requirements of these institutions."

3.21. During evidence before the Committee, the Director TV Centre, Delhi, stated:—

"Education through TV at the moment is done only in Delhi and we are doing 17 lesson a week for the Higher Secondary classes in one shift. We repeat them in the second shift. There is a certain arrangement by which these programmes are planned and the programmes are organised. The Delhi Education Department has a TV cell and we have a section in the TV Centre. Our TV cells consist of producers and other programme staff and the Delhi TV Cell consists of educators and teachers. These two groups sit together to plan the programme and work in coordination before the presentation of the production and so on...."

3.22. The Committee note that out of a total of 549 Higher Secondary Schools and 395 Middle Schools in Delhi, 424 Higher Secondary Schools and 90 Middle Schools have been provided with educational TV sets leaving 125 Higher Secondary Schools and 305 Middle Schools still uncovered with TV service. The Committee further note that only 4 community TV

centres have been provided for the benefit of physically and socially handicapped children.

3.23. The Committee feel that the progress made in providing educational TV sets particularly to the Middle Schools and for the physically and socially handicapped children since 1964-65 has not been satisfactory.

3.24. The Committee hope that in the Fifth Plan period, every endeavour will be made by the authorities concerned to provide TV sets in all the Higher Secondary and Middle Schools and the institutions of the physically and socially handicapped children.

3.25. The Committee regret to note that while an expert had recommended as early as 1960 gradual extension of TV service to primary schools and that while there has been an increasing realisation of the need for much larger TV media support for the primary schools for several reasons, nothing has been done to provide TV service in these schools so far and this matter is still being examined in consultation with the various authorities concerned.

3.26. The Committee need hardly emphasise that the first four to five years of schooling of a child are the most important formative years for him, during which he needs every motivation and encouragement. There is, therefore, a greater need for paying special attention to the primary school level education as compared to others.

3.27. The Committee, therefore, recommend that the question of introducing educational TV at primary school level should be decided expeditiously and that a time bound programme be chalked out to provide TV service in all the primary schools as far as possible at a very early date.

3.28. The Committee also suggest that the State Governments of Maharashtra and Jammu and Kashmir, which have already started TV service, may be urged to consider the question of introducing educational TV at the primary level in a phased manner in consultation with the State Education Departments and the AIR. It may also be stressed upon the State Governments where TV service is likely to be started during the Fifth Plan period that the State Education Department in consultation with AIR should plan the educational TV programmes for schools including primary schools, well in advance of the commissioning of TV Stations in those States.

3.29. The Committee note that with a view to developing a systematic approach in education, an educational technology cell is proposed to be set up in all the States with Central assistance to ensure proper use of mass media education.

3.30. The Committee note that apart from the establishment of a Centre of Educational Technology at Delhi, the State Government of Maharashtra have already established an Educational Technology Cell and that the State Governments of Punjab and Jammu and Kashmir propose to set up similar cells.

3.31. The Committee suggest that the State Governments concerned where TV Stations are proposed to be set up during the Fifth Plan period, be requested to take expeditious steps to establish Educational Technology Cells well in advance of the setting up of these stations so that audio-visual instructional materials are ready in time to feed TV education programmes.

3.32. The Committee are surprised to note that no study to evaluate the utilization and effectiveness of school programmes has so far been conducted either by the Directorate of Education or the Ministry of Education excepting one or two studies conducted by AIR on actual physical operation of T.V. sets in schools.

3.33. The Committee are given to understand that continuous evaluation is being carried out by the staff of TV Branch of Delhi Directorate of Education by visits to the schools, on-the-spot meetings and questionnaire issued to the students and teachers.. While such an evaluation is welcome, it cannot be considered a substitute for an objective evaluation which should be carried out jointly by the Central and State Ministries concerned on a systematic and scientific basis periodically to identify the deficiencies and to suggest improvements for better utilisation of the media, with a view to achieve best results.

3.34. The Committee hope that the proposed State Council of Schools broadcasting, consisting of representatives from the Centre and Directorate of Education and educational experts and broadcasters etc. would be set up soon for feedback and evaluation of the educational programmes.

3.35. The Committee suggest that the proposed Council should inter alia evaluate the quality and presentation of the Educational TV programmes and the improvements that can be made by incorporating other devices such as pictures, films, slides, graphic material and the like and selection and preparation of the TV lessons in relation to the syllabus and adequacy or otherwise of the duration of these lessons on TV and the extent to which the present time allocation has served the intended purpose.

3.36. In this connection, the Committee would like to emphasise that besides making continuous efforts to improve the quality of E.T.V. programmes and enrichment of its contents it should also be ensured that educational TV programmes are fully integrated with the school syllabus and are a real aid to class room teaching. The programmes should be such

as kindle a thirst for knowledge among the student audience and raise their mental horizon and dimensions. In this context, the Committee would like that a critical study of educational TV programmes in other advanced countries may be made to benefit from their experience in drawing up our educational programmes.

3.37. The Committee note that some functional and operational deficiencies and the points for improvements in educational TV were brought out at the seminar of Headmasters of Delhi schools held in February, 1973. The Committee would like suitable steps to be taken to rectify the shortcomings and effect improvement in the TV programmes, in the light of suggestions made at the Seminar.

3.38. The Committee note that an interim Ministerial Coordination Committee was set up in September, 1972 inter-alia to lay down guidelines for educational programmes on radio and television and to draft programme for training of personnel required for the purpose. The Committee would like to be apprised whether the aforesaid guidelines, and draft programmes have been formulated and the action taken to implement them.

3.39. The Committee recommend that with a view to attaining maximum results and maintaining close and proper coordination between the various agencies responsible for ETV i.e., AIR, Director of Education/Ministry of Education and the schools, there should be frequent and regular meetings between the representatives of the Ministry of Education, Director of Education, AIR and the schools to discuss matters of policy and educational problems evolve meaningful programmes and to secure effective co-operation between them in the implementation of these programmes.

3.40. The Committee are of the view that if the medium of ETV is to be used efficiently and economically, it should also be ensured that there is no avoidable duplication between programmes produced by the various T.V. Stations.

3.41. The Committee recommend that the educational TV programme/ scripts should be so produced that it is possible to exchange these programmes not only within the same linguistic regions but also with other TV stations as far as possible. This would also help in reducing the cost of production of programmes considerably.

3.42. The Committee note that closed circuit is proposed to be used for teacher training purposes. The Committee have no doubt that the cost of production of these programme would be carefully gone into vis-a-vis the expected benefit before implementing it.

(ii) Rural Programmes and Community viewing TV sets

(a) *Rural Programmes*

3.43 In January, 1967, the Agricultural Television Pilot Project was initiated in India with the inauguration of a special television programmes "Krishi Darshan". The object was to tap its potential, and to assess the effectiveness of television as a medium of agricultural information for the cultivators and for raising the agricultural productivity and living standards of the farmers. The project was a joint venture of the Department of Atomic Energy which provided 80 TV sets for community viewing; AIR providing telecasting of the programmes; the Indian Agricultural Research Institute providing information and advice to the farmers and the Delhi Administration organising groups for community viewing.

3.44. In February, 1967, regular telecasts of "Krishi Darshan" programme was commenced by AIR with a frequency of one per week which was extended to twice a week from March, 1967. The frequency of the programme was further extended to thrice a week from July, 1970 with thirty minutes duration on each day. The programmes are mainly designed to bring home agricultural practices of topical interest to the farmers.

3.45 The following programmes specifically meant for community viewing are, at present, being telecast:

DELHI TV

- Krishi Darshan (90 minutes duration per week).
- Ghar Pariwar (30 minutes duration per week).
- Nagar Nagrik (30 minutes duration per week).

BOMBAY TV

- Amchi Mati, Amchi Mansa rural programmes—(30 minutes duration per week).
- Sunder Maze Ghar family programmes—(15 to 20 minutes per week).
- Cityrama (10 minutes duration per week).

SRINAGAR TV

As regards rural programmes being telecast by the Srinagar TV the Ministry of Information and Broadcasting have stated:

"Srinagar TV Centre also telecast such programmes, which have involvement of the people to the largest extent possible."

3.46 With regard to programmes telecast by Bombay TV, the Director TV Station, Bombay, informed the Committee during evidence that so far as rural people were concerned, an Agricultural Unit inside the Agricultural College in Poona has been established and that the Unit had already started functioning. The Unit has a Producer Cameraman and a Production Assistant. A full party of the unit was touring the rural areas around Poona to make a full-length documentary on agricultural topics.

3.47 The UNESCO Mission on TV Development and Training in India (1969) had recommended the following programme for the cultivators audience:

- (i) General Farm Programme to widest possible audience.
- (ii) Farmer Training TV short courses, and
- (iii) Teleclub broadcasting in those areas where community decision and action is important to development process.

3.48 Asked by the Committee to what extent such programmes have been introduced on TV and the frequency and duration of these programmes, the Ministry of Information and Broadcasting in a written note stated:—

“We agree that higher priority should be given to the information and entertainment needs of the rural and working people, ensuring their active participation. Unfortunately, Planning Commission did not approve inclusion of any provision for Community Viewing Scheme in the Fourth Plan and advised that the State Government should be asked to provide TV sets for Community Viewing in their service zone. This however, did not materialise as the State Government expressed their inability to meet heavy expenditure on the purchase of Community Viewing sets. Therefore, to achieve this objective in the 5th Plan, we have proposed to the Planning Commission that an allocation should be made in the AIR's Fifth Plan for 3500 community receivers around each transmitter. The implementation of this scheme would, however, depend on the funds to be made available by the Planning Commission for this scheme.”

3.49 In a memorandum submitted to the Committee it had been suggested that for India where TV is to play its primary role as developmental and educational tool, the objectives in infrastructure terms would mean:—

- (i) concentration on rural areas where most of the sets need to be located.

- (ii) urban areas need to take second place.
- (iii) programming needs to be based on rural development.
- (iv) city based urban oriented programmes have to be kept to minimum.
- (v) studios and transmitters should be so located that all village clusters that are being serviced, can receive telecast.

3.50 Asked by the Committee whether TV programmes are designed for the uplift and benefits of rural areas and whether any study has been conducted in the rural areas with a view to developing the programme conception on the basis of the needs of rural population, the Ministry of Information and Broadcasting in a written reply stated:

“All these points were discussed in the Seminar on software objectives of Indian television. In fact, recommendations of this Seminar were on these very lines.

TV programmes are planned and produced with the objective of utilising this powerful medium of mass communication for giving effective support to developmental efforts in the fields of education, agriculture, health and family planning and generally to educate and motivate people in participating in these sectors of national activity in urban and rural areas, besides imparting entertainment to them.”

3.51 It was brought to the notice of the Committee that there is lack of communication between AIR and the State Bodies, in Agriculture, Education Community Development, Family Planning etc., regarding designing and telecasting TV programmes which implied waste of enormous amount of funds and foreign exchange. Commenting, the Ministry of Information and Broadcasting in a written note stated:

“As far as education and agriculture are concerned, there is coordination and cooperation through consultative committees and subject matter committees on which State authorities are duly represented. Programmes in Educational TV and Agricultural TV are planned by these committees. Similarly on programmes relating to Family Planning and Community development, consultations are often held with the concerned authorities, both at the Centre and in States. To quote an example, all campaigns are supported through appropriate TV programmes on the basis of material and expertise provided by the respective departments. If such departments have some key officials with adequate understanding of the media including television and supply suitable material (including visual material), cooperation can be more beneficial to the cause.”

3.52. Various research studies to determine the relative effectiveness of radio and television in dissemination of agricultural information, to evaluate the effectiveness of television in transfer of agricultural know-how to the farmers community, to judge the attitude of rural a people towards TV programmes etc. have been made by various Researchers. A study conducted in 1968 established TV as a much superior medium to radio with respect to gain in knowledge and its retention after 15 and 30 days of broadcast and development of favourable attitude towards the recommended practices. The study indicated that the farmers retained 19.08 to 31.72 per cent of gained knowledge with an average of 24.04 per cent fifteen days after exposure and after 30 days of exposure the average retention of knowledge was 18.84 per cent. Farmers in the age group of 30-39 were found to have gained and retained significantly more knowledge than those in the lower or higher age groups. According to this study, 93 per cent of the respondents found 'Krishi Darshan' of great benefit to the farmers whereas 7 per cent derived little benefit out of these programmes. Various studies conducted with relation to the association between the socio-economic status of the farmers and their gain in knowledge after viewing agricultural telecast indicated that the gain in knowledge of the farmers was independent of their economic status and there was no significant association between the size of holding and gain in knowledge.

3.53. Another study conducted in 1969 indicated that about 82 per cent of the respondents found the agricultural telecasts useful whereas the remaining 18 per cent did not find these programmes useful because of (i) difficulties in understanding technical words (ii) not being used to metric system of expressing weights and measures and (iii) lack of resources to implement the suggestions of 'Krishi Darshan' Programmes.

3.54 During the various studies conducted it was observed that some farmers viewed 'Krishi Darshan' programme more regularly than the others. In 1971 an attempt to find the factors which retarded or stimulated the community viewing and the situations or circumstances which encouraged or discouraged the viewing was made and the study conducted revealed that among various factors, as much as 81 per cent of the variation in the viewing of Krishi Darshan Programme was due to (i) distance of residence from the place of TV installation, (ii) education, (iii) age, (iv) size of holding, (v) attitude towards Krishi Darshan programme, (vi) attitude towards TV and (vii) relationship with the TV custodian. In 1967, NCERT made its first evaluation study to measure the gain in knowledge of the viewers as a result of watching 'Krishi Darshan' programmes. The adoption of the improved practices viz. chemical control of the weeds, chemical fertilizers was studied in respect

of experimental and control groups. The findings indicated that the experimental group gained more knowledge about the recommended practices than the control group, and that the farmers in the experimental group were more inclined to go in for the adoption for chemical control weeds, high yielding varieties of wheat and foiler application of fertilizers than those in the control group. As regards understandability of the programmes, it was observe that the impact of TV on the gain of knowledge was irrespective of the level of education of the viewers and that eighty three per cent of the respondents in the experimental group, had no difficulty in understanding the programmes whereas the remaining 17 per cent experienced that language of the telecast was technical and needed elaboration for proper comprehension.

3.55. Size of the audience is considered to be fair index to judge the popularity that a particular medium or a particular programme enjoys. A few attempts have been made to measure size of the audience of 'Krishi Darshan' programmes by adopting different methods. Indian Space Research Organisation (ISRO) analysed the feed-back reports of the conveners of the teleclubs to determine the size of the audience. The following observations were made:

"(A) By grouping all the available attendance data for the period from January, 1967 to August 1970, it was found that on a average nine members out of 15-20 members comprising of teleclubs, seventeen others (including women) and nineteen children attended each Krishi Darshan Programme.

(b) The number of persons viewing Krishi Darshan Programme progressively declined every year as shown below:

Year	Average size of attendance at Krishi Darshan Programme		
	Member	Others	Children
1968	10.11	19.52	20.24
1969	9.85	15.27	19.36
Up to Aug., 70.	8.64	14.6	17.45

3.56. In 1970, NCERT conducted a study to look into the reasons for the low attendance of the farmers in 'Krishi Darshan' programmes and a survey of opinions of 132 village leaders in 19 selected teleclubs was

made. The findings of the Study are as under:

Reasons for low attendance	Percentage of response
(1) Time consideration : Too tired to watch TV after day's hard work in the fields	46.97
(2) Social factor : (i) Strained relations with TV custodian	25.74
(ii) Children make noise	15.91
(3) Technological Consideration : (i) Technology suitable for irrigated areas only shown on TV. Hence farmers with rain fed areas do not get interested	9.02
(ii) Non-availability of recommended inputs	14.39
(4) Organisation Considerations : (i) No proper sitting arrangements	12.88
(ii) Lack of certainty of the operation of the TV set due to its irregular operation	5.30
(iii) Convener is not present regularly	6.82
(iv) Time of telecast not convenient	10.60
(v) TV set is not conveniently located	15.91
(5) Programme understandability: General difficulty in comprehending what goes on TV	16.66
(6) Programme Treatment: (i) Programme usually repeated and lack newness	7.67
(ii) Programmes are mostly dull	1.51
(iii) Most of the practices telecast are already known to the farmer	8.33
(7) Miscellaneous : (i) Farmers want entertainment rather than education	29.54
(ii) Farmers prefer to listen to Krishi Jagat	12.88
(iii) Farmers feel lazy and do not come to attend the programme	10.00
(iv) Farmers having no faith in improved practices and do not come to view the programme	6.82
(v) The Convener not liked by the people	2.27

3.57. In a similar study conducted in 1971 it was observed that absence of entertainment appeal of the programmes designed for the rural viewers was the most prominent idea in the minds of the viewers. The farmers expected entertainment and relaxation from TV rather than the hard work of learning alone.

3.58. Another important factor for low attendance in the programmes related to the technology shown on TV and treatment of the message. It is alleged that technology most suited to the optimum conditions was shown and recommended inputs are not always available. It is also argued by some that tall claims are made on TV and parallel yields were not obtained under farmers' conditions even when entire package of recommended practices is adopted. Farmers are also critical about the language used by the Communicator which is not always understandable and felt that the programmes are repetitions, monotonous, dull and lacked newness.

3.59. During the study it is also observed that the Farmers talked differently while expressing themselves about TV *vis-a-vis* children. Almost 81 per cent of the farmers felt that the young boys and girls of the villages see many things on TV which they should not. About 71 per cent of the villagers deposed that they are afraid about the corrupting influence of TV on their children. Opinion is also expressed that some of the programmes other than 'Krishi Darshan' are hardly of any interest and adversely effected their social environment. Apart from sex and its unhealthy influence on the children, objections are also raised with regard to the detrimental effect of TV on the studies of the children though it was recognised that TV helps children and teenagers to broaden their outlook and that TV viewing children possess more knowledge and information about many things than others.

3.60. With regard to the functioning of community viewing TV sets it has been observed that TV sets did not operate regularly on Krishi Darshan days. Based on the analysis of 5236 feed back reports received from conveners over the period from January 1967 to August, 1970, ISRO found that TV sets did not operate on 706 Krishi Darshan days which meant a loss of opportunity of viewing the programme in about 13 per cent of the cases. In another study conducted in 1971 it was found that TV sets did not operate on about 11 per cent of the scheduled days during the test period of two months.

3.61. The following main reasons have been given by ISRO for non-functioning of the TV sets:

Sr. No.	Reason for non-functioning of TV Sets	Percentage
1	Electric failure	5.40
2	Set out of order	5.23
3	Operator not available	2.90
4	Death of some one in the village	0.49

3.62. The Committee regret to note that no progress has been made to introduce the following programmes for the farmer's which was recommended by the UNESCO Commission as far back as 1969:

- (i) General Farm Programme;
- (ii) Farmer Training TV short courses; and
- (iii) Teleclub/broadcasting in those areas where community decision and action is important to develop desired agricultural practices.

3.63. The main reasons for non-implementation are the non-inclusion of community viewing scheme in the Fourth Plan and the inability of the State Governments to meet the expenditure on the community viewing TV sets. These objectives are now proposed to be achieved in the Fifth Plan period.

3.64. The Committee wish that a beginning on an experimental basis had at least been made in the Fourth Plan so that it could be improved upon in the light of experience for more extensive implementation in the Fifth Plan.

3.65. The Committee regret to note that the objective of utilising the TV media of mass communication for giving effective support to developmental efforts in the fields of education, agriculture, health and family planning and generally to educate and motivate people in participating in these sectors of national activity in rural areas in particular, has not so far been achieved to a great extent. The very fact that the number of viewers of Krishi Darshan Programme primarily meant for rural people, has been declining progressively every year from 49.87 per cent to 40.69 per cent during the period from 1968 to 1970 (upto August) goes to indicate that it has not had the desired impact.

3.66. The Committee note that various factors are responsible for this declining trend; more important among them are the programme treatment and content viz., repetitions, monotonous, dull, stale nature of programmes, programmes understandability; organisational deficiencies like lack of sitting arrangements, irregular operations of TV, unsuitable location of TV etc., social relationship between the TV custodians and the people, lack of entertainment programmes and adverse and unhealthy effect of programmes on the social environment and minds of children.

3.67. The Committee feel that the present TV programmes mostly cater to the urban audiences with heavy emphasis on amateurish entertainment.

3.68. The Committee need hardly stress that TV has to fit in harmoniously with the needs and aspirations and social environment of those for whom the programmes are intended. The Committee would, therefore, like to emphasise that the reasons for the declining trend among the viewers of the rural programme mentioned in paras 3.52—3.61 of this Chapter, should be examined thoroughly and in depth and suitable remedial measures taken expeditiously to rectify these deficiencies, particularly as regards timing, frequency, length, format, content and treatment of the programmes.

3.69. The Committee are strongly of the view that

- (i) urbanised programmes should be kept to the minimum.**
- (ii) Programmes should be based on rural development.**
- (iii) Programmes, besides being entertaining, should be aimed to improve agricultural practices, contribute to national integration and vocational guidance and ensure active participation of the rural audience.**
- (iv) Programmes should be integrated with other programmes for community development planned by various Ministries like Education, Agriculture, Health and Family Planning, Social Welfare etc. to make them more intensive and coordinated.**

3.70. The Committee consider that programmes for rural women should receive high priority and should deal with subjects such as, child care, nutrition and sanitation, food preparation and storage, family planning, personal and environmental hygiene, and the like. The programmes should be in simple language which could be easily understood by rural people.

3.71. The Committee would also like to emphasise that follow-up action on the agricultural practices and family planning programmes is very necessary so that farmers could be enlightened on the use of practices and programmes by practical demonstration. With this end in view, the assistance and collaboration of the Ministries concerned viz. Ministries of Agriculture and Health and Family Planning should be actively sought on a regular footing. The services of extension workers in rural areas should also be enlisted in this regard.

3.72. The Committee are surprised to note that no attempt has been made so far either by the Department of Agriculture or by AIR to evaluate the usefulness of otherwise of the rural programmes particularly 'Krishi Darshan' programme. The evaluation of 'Krishi Darshan' programme has been done by outside Researchers only.

3.73. The Committee are of the view that the various factors brought out by the Researchers as a result of the studies conducted by them, need serious thinking with a view to taking effective remedial measures to develop the rural programmes on sound lines so as to achieve the maximum results.

3.74. The Committee recommend that rural programmes should be periodically evaluated by a small team comprising of the representative of A.I.R., Departments of Agriculture, Health and Family Planning, Education and other experts in the field having full understanding of the rural requirements, so as to assess their usefulness and suggest measures to improve them and develop a sense of participation in the rural audience by giving them programmes that are not only entertaining but are also stimulating and help in the development of attitudes, values, motivations and social patterns which are most appropriate for their all round progress and development.

Community Viewing Sets

3.75. Asked by the Committee the number of Community Viewing TV sets provided for in the Fourth Plan, the number of TV sets that are likely to be provided at the end of the Plan period and the reasons for not providing the remaining TV sets, the Ministry of Information and Broadcasting in their written note has stated:

“The Planning Commission had not approved any provision for Community Viewing in the Fourth Plan, as they thought that this should be the responsibility of the concerned State Governments. However, as the various concerned State Governments showed their inability to meet this expenditure proposals for the installation of a total 59,400 TV community sets in the various States in the service areas of the TV transmitters being installed under the Fourth Plan or likely to be installed during Fifth Plan were made in the draft Fifth Plan of A.I.R. at a cost of Rs. 46.83 crores. While the Planning Commission has now recognised the principle that provision of Community Viewing Sets is an essential part of setting up New TV Stations, they have drastically reduced the provision for the proposed Rs. 47 crores to Rs. 17 crores.

In the service area of TV transmitter at Srinagar, however, the installation and maintenance of TV sets is the responsibility of A.I.R. from the very beginning. 660 TV sets costing Rs. 17.41 lakhs have been ordered for community viewing

and monitoring. Of these, 550 sets will be installed at Community Viewing Centres. 40 sets at a cost of Rs. 91,000/- approximately have also been installed in Delhi area. No additional expenditure is likely to be incurred during the current Plan period."

3.76. Asked about the present policy with regard to providing of subsidised TV sets for teleclubs and community viewing centres, the Ministry of Information and Broadcasting in a written note has stated:

"The question of providing certain minimum number of Community Viewing T.V. receivers in the service area of the T.V. Stations has been under the consideration of the Government. Proposals for installation of such sets in the service area of the T.V. Stations under the Fourth Plan and the service area of those suggested in the Fifth Plan have been included in the Fifth Plan proposals. If these proposals are approved, it is proposed to install one T.V. receiver in every village. In the Urban areas it is proposed to install 15 TV Sets per town. It is also proposed that (i) the initial capital cost on the purchase of the sets and their installation will be borne by the Central Government; (ii) the maintenance of the sets will be left entirely to the State Government; and (iii) the Central Government will, however, assist in establishing training Centres for technicians and bear 50 per cent of the initial cost of maintenance workshops."

3.77. With regard to the maintenance of the Community Viewing sets the Ministry of Information and Broadcasting furnished the following information to the Committee regarding the scheme for the installation and maintenance of these sets:

"This scheme envisages the installation of conventional Valve type TV Receivers in the Community Centres located in electrified villages.

The Community viewing could either be in the open space when weather permits or in a covered area protected from inclement weather. In any case, it will be necessary to provide a trolley with a shutter so that the TV set could be rolled out for the viewing session and rolled back into a room for safe keeping.

Maintenance Organisation

Base on our experiments of the Community Receivers installed in the service zone of the Delhi Transmitter, it is anticipated that each installation on an average would need 4 service calls in the course of a year. This would mean approximately 4000 calls per year for maintenance of 1000 Receivers.

Depending upon the location of the Receiver, on an average one mobile party should be able to attend to 3 service calls per day. We would, therefore, need 4 mobile parties to look after 1000 receivers.

The Maintenance Organisation would comprise of (a) a Maintenance and the Repairing Unit and (b) 4 Mobile Parties.

The staff at the base maintenance Centre will be responsible for repairing of defective sets brought back from the fields, while the mobile parties will attend to service calls and make routine checks and on the spot repairs, whenever possible. It is envisaged that each installation should be inspected at least once every quarter by the mobile party and a proper inspection of log will be maintained as a matter of routine.

Each Centre will maintain 10 per cent spare sets. When attending to service calls or making routine checks, the mobile parties will carry a good spare TV set with them. In case the defective set cannot be repaired on the spot, it will be replaced by the good one, and the defective set brought back to the Maintenance Centre for attention.

The maintenance Centre will be under the charge of an Engineer qualified in maintenance and repairs of TV Receivers. It is envisaged that 10 Technicians will be required for maintenance of 1000 Receivers on the basis of one Technician for every 100 Receivers. One qualified Engineer or A Foreman would be necessary to guide, help and supervise the work of the Technicians. Of the 10 Technicians, 6 will work at the base Maintenance Centre and 4 will constitute the 4 mobile parties. When at Headquarters, the Technicians of the mobile parties will also help in the work at the base set up.

Since maintenance of TV Receiver is a work of specialised nature, the technical staff will have to be recruited 6 months in advance and 'put through a 3 months course at AIR's staff Training School (Technical). The technical staff will also be given practical training in the field at one of the already existing TV centres.

The above scheme has not yet been finalised or circulated to the State Governments pending scrutiny of the scheme by the Ministry and examination of the financial outlays envisaged and the final picture of the allocation which would be available during the Fifth Plan for Community Viewing sets."

3.78. The Committee are surprised to note that no provision for Community Viewing TV sets was made to cover the service areas of TV transmitters to be installed under the Fourth Plan.

3.79. The Committee, however, note that a provision of 59,400 Community viewing sets costing Rs. 46.83 crores was made in the Fifth Plan proposal which has been reduced to Rs. 17 crores by the Planning Commission.

3.80. The Committee, hope that within the financial constraints, every attempt would be made to provide community viewing sets to as many villages as possible.

3.81. The Committee need hardly stress that greater emphasis has to be laid on the maintenance of community sets and their efficient functioning if the benefit of television is intended to be extended to rural areas as the present cost of T.V. sets is too high for an ordinary farmer to afford.

3.82. The Committee note that a scheme for the repair and maintenance of the Community viewing TV sets is under the examination of the Ministry of Information and Broadcasting. The Committee desire that this scheme should be finalised expeditiously in consultation with the State Governments concerned.

3.83. The Committee, however, desire that the whole scheme should be carefully examined and drawn up keeping in view the experience gained in the maintenance of the Community Radio receivers, the staff required etc. Care should be taken to avoid overstaffing and keeping the expenditure to the minimum. Arrangements for the maintenance of Community T.V. sets should be made so as to synchronise with the installation of these sets with the commissioning of new TV stations.

3.84. The Committee also desire that in the scheme, the sphere of responsibility of the Central Government and the State Governments should be clearly defined so that there is no ambiguity in the matter of repairs and maintenance of community viewing TV sets which should be kept in perfect working condition so as to fulfil the purpose for which these sets are provided.

(iii) Urban and other programmes

3.85. The TV Centre, Delhi, (General Service) is on the air for 3-1/2 hours on week days and for 4 hours on Fridays and Sundays. The Centre telecast a variety of programmes which include folk, light and classical music and dances, interviews and discussion on cultural and literary topics, news and comments on current affairs besides programme for children,

farmers and youth, dramas, Chitrahar (films depicting musical scenes) and feature films in regional languages on Saturdays and in Hindi on Sundays. The main language used in Delhi TV programmes is Hindi but programmes are also telecast in English and Urdu.

3.86. Bombay TV station telecast for 3 hours a day whereas Srinagar TV station experimental service is on the air for one hour on Tuesdays, Thursdays and Saturdays and two and a half hours on Sundays.

3.87. Asked to state whether any evaluation of the effectiveness and popularity of each programme has been made, the Ministry of Information and Broadcasting furnished the following information to the Committee with regard to the survey under by the AIR's Audience Research Unit in this regard:

“During a survey undertaken by AIR's Audience Research Unit among the TV licence holders of Delhi city during October, 1972, informants were asked to indicate their preference for different (broad) types of television programmes. Results obtained are given below:—

Programme	%
Chitrahar .	92.3
News in Hindi	89.6
Feature Films (Hindi)	88.5
News in English	75.8
Plays .	72.4
Feature Film (English)	70.8
Variety	56.1
Dance	55.9
Quiz in English .	53.2
Quiz in Hindi	52.3
Documentary films	50.0
Short TV films.	49.9
Music .	47.9
Interviews/Discussions (Hindi)	47.2
Programme for Homes .	46.9
Interviews/Discussions (English) .	45.9

Programme	%
News commentary (Hindi)	43.9
Children's programmes	43.6
Civic Forum	43.3
Feature films (regional languages)	42.6
Programme for youth (Hindi)	37.6
Programme for youth (English)	37.2
Magazine programme (Hindi)	36.4
Magazine programme (English)	35.3
Programme for teenagers	31.7
Replies to viewers' letters	22.5
Programme for farmers	16.6

3.88. During evidence before the Committee an expert on the subject of T.V., while dealing with the programmes on TV has expressed the views as under:—

“The programmes have to be, theoretically speaking, such that they give a sense of values, to the youngsters, information to adults and opportunities for education and learning something new and exciting for the rest of the people. In Delhi, the most important programme is 'Chitrahar'. The kind of movies which are coming popular in the theatres are certainly not providing any sense of values to the youngsters.... This kind of films should not be shown on the TV and TV should thus not be made an extension of the cinema theatre in the country.”

He added:—

“Bombay films are bad enough and to bring them into TV is worse.... It was found that the films on the TV were inculcating in the minds of youngsters in villages, a sense of indiscipline towards elders and they were becoming fashion conscious.”

3.89. Asked about the criteria followed for selecting the features films shown on TV and the average cost per feature film telecast, the Ministry of Information and Broadcasting in their written note have stated:—

“Only those films which are approved for universal showing are taken for T.V. Under the present arrangement, films are taken from the Distributors who have the copyright for the telecasting of films. Therefore, the choice becomes restricted to those films which are available with the Distributors and

can be spared by them. Naturally the Distributors spare only those films which they can offer at rate structure which has been informally agreed upon between the Distributors/organisations and the TV Centre.

From among the films thus available efforts are made to select the best possible film both for the artistic expression and in respect of its suitability for viewing in a family situation. It must, however, be conceded that the results are not always what we would like them to be. This matter has been receiving the attention of the Ministry of Information and Broadcasting and it is hoped that more satisfactory arrangements would be possible."

3.90. As regards the 'Chitrahar', the Ministry of Information and Broadcasting have stated:—

"Here again, the sequences are taken from 'U' certified films and they are reviewed in respect of their suitability. The films and song sequences are previewed by an Assistant Station Director and a Senior Programme Officer."

3.91. The Director TV, Delhi, informed the Committee during evidence that the Government have formed a Committee which would screen the films which are suitable for showing on the TV circuit. He added:—

"Efforts would be made to have special arrangements for showing them on TV circuits not only in Delhi, but Bombay, Kashmir and so on. This is one of the steps contemplated for the future."

The Secretary, Ministry of Information and Broadcasting added:—

"So far producers have given TV rights to distributors in various areas and they have to negotiate with the distributors for this purpose. . . . Now, we are trying to have direct negotiations with the producers so that they can take films separately and give them to us."

3.92. Asked by the Committee whether any critical examination has been made of the research studies in other countries regarding impact of TV on the minds of children and adolescents, the Secretary, Ministry of Information and Broadcasting replied:—

"The situation in this country is substantially different from the situation in the West. For instance the TV in Western Countries starts blaring from morning and continues till late at night. We have only three stations so far and the programme run

between three and four hours. Therefore it has not that kind of impact on social life and family life as it has in the West."

He added:

"An effort is made in any case to see that our basic social values are maintained, almost in everything we show. On films, we have taken a strong stand of discouraging violence. Of course there is hardly any violence in programmes that are produced by the TV stations themselves. The television stations abroad, their society being more permissive than our society is, have far greater licence than our TV stations have. So, I do not think that we will ever allow that situation which prevails in Western countries, as regards the impact of TV on society, to happen here."

3.93. In a memorandum submitted to the Committee it has been suggested to change the format of the TV programmes to focus attention on the problems such as

- (i) Problems of urban living.
- (ii) Civic problems.
- (iii) Communication problems.
- (iv) Self-employment problems.
- (v) Job Training.
- (vi) Education problems.
- (vii) National integration/communal harmony.
- (viii) Building up national character in the youth.
- (ix) Eradication of untouchability.
- (x) increasing production and productivity.

3.94. Asked whether TV media is being used effectively to achieve the above national objectives, the Ministry of Information and Broadcasting, in a written note have stated:

"It can unhesitatingly be stated that the medium of television is being used to achieve the above-mentioned national objectives through various programmes put out from TV Stations. In the wider context, the social philosophy of this medium, in our conditions, is to instil attitudes in persons rather than bring out literacy; to stimulate thinking rather than merely prescribing lessons; to impart studies in humanities than mere vocation; and generally speaking to teach how to live beautifully."

3.95. Asked by the Committee about the participation by Cultural and Dramatic Societies in TV programmes, the Ministry of Information and Broadcasting in a written reply have stated:

“Persons engaged in planning and production of programmes associate themselves with and maintain constant contact with various activities of different cultural and dramatic societies from where talent is tapped for TV Programmes. Such activities as lend themselves for direct incorporation in TV Programmes are also inducted into the service.

Ballets, operas, Music and Dance performances conducted by various cultural activity groups have figured in TV Programmes suitably modified for the specific requirements of the medium as against the normal stage presentation in Halls and Theatres. Similarly theatrical performances of dramatic groups are also frequently adapted and presented on TV. The activities of various cultural and dramatic groups of College Societies figure in TVs’ Programmes for Youth. Similarly activities in Schools and amateur societies of youth and children are adapted for Children’s Programme on TV. The Community Viewing Centres (Teleclubs) are also encouraged to contribute their own cultural and dramatic activities periodically.”

3.96. Judging from the data regarding audience preference furnished by the Ministry of Information and Broadcasting, it is evident that ‘Chitrahar’ (92.3 per cent) and Hindi feature film (88.5 per cent) are the most sought after programmes. The study regarding audience preference also indicates that most of the other programmes find a low place in it. It is thus evident that either the audience is indifferent to these programmes or these programmes are poorly presented.

3.97. The Committee are of the view that there is need for serious thinking on the part of the authorities concerned to strike a balance between “education” and “entertainment” and to take effective and remedial measures to use this powerful medium as a tool for national development.

3.98. The Committee need hardly stress that as the T.V. programmes are seen by the whole family, including the children and as the mind of the children is very impressionable, there is greater need for designing and producing healthy programmes on T.V. having educative value. ‘Chitrahar’ and feature films are popular for obvious reasons. But the effect of such programmes on the minds of children and adolescents cannot be ignored.

3.99. The Committee feel that TV entertainment programmes should not merely depend on the film industry. The Committee desire that dependence on feature films etc. should be moderated by producing more

TV films suited to the special requirements of the medium and the needs of the viewers.

3.100. The Committee note that Government have set up a Committee to screen the films to judge their suitability for showing on TV. They would like the Committee set up by Government to prescribe suitable norms for selecting films for screening on T.V.

3.101. The Committee need hardly stress that while the films selected for T.V. should be entertaining; these should be free from sex, nudity, violence and crime and should be such as would help to inculcate our cultural and moral values and socio-economic objectives etc. among the viewers. The programmes would do well to focus attention on problems like urban and civic living, self-employment, vocational training, increasing productivity etc.

3.102. The Committee regret to note that at present no programmes are being telecast for the benefit of industrial workers. The Committee feel that as industrial workers form a sizable part of population in metropolitan and other industrial cities where TV Stations are in operation or are proposed to be installed, suitable programmes of their interest should be drawn up in consultation with various institutes concerned with the Workers' Education Programmes and presented on T.V.

3.103. The Committee would like Government to examine the feasibility of constituting a Programme Planning Board to lay down guidelines for the production and presentation of various T.V. programmes keeping in view the basic objective that TV is meant to be used in the developmental process as an instrument for social change and national cohesion.

News presentation

3.104. In a memorandum submitted to the Committee it has been stated that the News given on TV is a total farce. The visual presentation is poor. News should be associated with men of mature age and on TV, newscaster should become secondary to visuals. It has been suggested that the newscasters should be well experienced and mature with knowledge of Journalism and that stringers should be encouraged to produce news films for TV to have better visual presentation.

3.105. In this regard, the Director-General, AIR, stated during the evidence before the Committee that having more stringers or not would not overcome the central difficulty. He added:—

“We are a vast country and we have to give news for all over India. The arrangements that exist simply do not permit any visuals

except for Delhi or nearby places, it is difficult to reflect any visual in the news at all."

The Director, TV, added:

"This is a situation where there has been some steady improvement and when we have some more equipment for collecting and presenting news, we hope that it will further improve."

3.106. As regards the news readers, the Director, TV, stated:

"We have senior announcers who do the newscasting in Hindi. We do not have a separate category. For English, we are still working out the details but we have made a selection from among the people available on our staff and outside....."

He added:

"It is our attempt that among the people who are doing English news, most of them should have a background of Journalism and others good understanding. But it is true that we have not yet got full-fledged news readers."

3.107. According to recent surveys made by the Union Ministry of Information and Broadcasting's Indian Institute of Mass Communications, T.V. news broadcasts are by far the most popular shows with Delhi viewers. However, news-watchers are far from satisfied with the quality of the news broadcasts and complain that there is little of difference between A.I.R's radio news bulletins and the TV news, except that TV sometimes uses visuals, which are often irrelevant. Viewers also found it strange that many of the films clips used were not accompanied by sound, or that when there was commentary, it did not run together with the picture, leaving long awkward periods of silence. According to the Institute's findings, the basic shortcoming of Delhi's TV news programmes is the lack of visual emphasis essential to effective TV programming, which is ascribed to a failure to recognise the importance of TV as a visual medium in its own right rather than just radio with pictures tacked on.

3.108. The Committee are in agreement with the findings of the Indian Institute of Mass Communication that the basic shortcoming of Delhi's TV news programme is lack of visual emphasis essential to effective TV programming.

3.109. The Committee are strongly of the view that for the purpose of making the news on TV more interesting there is greater need for visual presentation relevant to the news than the reader. For this, the Committee feel that there is need for close coordination between the Newsreel Unit of the Films Division and TV service for pooling their manpower and production resources to give a new look to the news presentation on TV.

3.110. The Committee are also of the view that in the context of the Indian situation, TV news should have its own format, style and distinctive role to play. The Committee, therefore, desire that there should be constant endeavour to help it to develop its own character in the collection, reporting, editing, production and presentation.

3.111. The Committee note that there are senior announcers doing the newscasting in Hindi and that the selection of news readers in English is to be made from amongst the staff and outsiders for which details are being worked out. The Committee would like this to be completed expeditiously.

Documentary Films on TV

3.112. In a memorandum submitted to the Committee it has been stated that more foreign documentaries which have no relevance to the Indian set up are shown on TV than Indian documentaries depicting Indian way of life and culture and achievements made in the field of science and technology and in other areas.

3.113. During the course of the evidence before the Committee an expert on the subject of Television expressed the view that private film makers should be encouraged to make short films for TV for half-an-hour or one hour duration. He further expressed the view that many private film makers would be able to make short films for TV provided they were given encouragement as well as enough money to make some profit out of it.

3.114. Expressing his views during the evidence before the Committee, another witness stated that the greatest influence of TV was in its news and documentary programmes. The news and documentary programmes of BBC are extremely good.

3.115. With regard to the encouragement being given to other organisations and film makers to make films for TV apart from the Government agency, the witness expressed the view that "this sort of free lance work is extremely important because Government agency alone cannot produce these things and we should allow film makers to make films for TV". He added that this would help in improving the quality but it would be very difficult to get their service if we insisted on very strict rules of copyright.

3.116. Expressing his view regarding interviews etc. on the TV, the witness stated that often such interviews etc. were erased out to record fresh programmes on the video tape. He suggested that interviews etc. recorded of important and eminent persons should be recorded permanently and go into the library. Citing an example of BBC the witness stated that there were more recordings of Indian leaders like Mahatma Gandhi and Pandit Nehru than the AIR had.

3.117. Asked by the Committee to what extent the Indian documentaries shown on TV fulfil the objectives and which are the official agencies responsible for producing these documentaries, the Ministry of Information and Broadcasting in a written note have stated:

"By and large documentaries shown on Indian TV are those which are produced by the Films Division and those persons who have been commissioned by the Films Division. Documentaries produced by other individual producers are also shown on TV but such documentaries are not many because TV Centre only plays hire charges for the showing. Films and documentaries produced by the boys of the Film Institute of India, Poona, are also being shown on TV. It can be said that the documentaries thus selected for telecast truly depict the way of Indian life and progress achieved by the country in the various fields of development.

The Films Division, Bombay, is at present the only official agency producing documentaries. Since TV does not commission package documentaries like the Films Division, the only way Television encourages individual film makers of short movies is by engaging them as Directors where the equipment, raw stock, etc. is approved by the TV Centre and the individual producer directs the film. In this connection, the names of M. F. Hussain, K. A. Abbas, Salil Chaudhry etc. could be mentioned."

3.118. With regard to the showing of Foreign documentaries on TV, the Ministry of Information and Broadcasting in a written note have stated:

"All documentaries and programmes obtained from foreign sources are strictly screened with the sole purpose of increasing the horizon and giving information on matters which would educate and inform the viewers. The use of foreign films is to accelerate and enhance the educational process as much as possible. To give one example, foreign films that have been or are being shown on TV are (i) History of the 'Great War', (ii) 'Face-to-Face-interviews' with well-known personalities of the world such as Bertrand Russell, John Houston, Martin Luther King etc., (iii) Mirror of the world containing informative and educative programmes on scientific developments and new developments in any other spheres of life etc. Foreign classics such as plays of Shakespeare, Maupassant, Dickens, Alexander Dumas etc. are shown, which provide entertainment also."

3.119. The Committee note that by and large documentaries shown on TV are those which are produced by the Films Division and by other individual producers.

The Committee also note that foreign documentaries obtained are strictly screened and only those documentaries which have educative value and provide entertainment, are shown on TV.

3.120. The Committee feel that whereas showing of foreign documentaries on T.V. may help to enhance knowledge about other countries, there is greater need to show more documentaries depicting Indian way of life, culture, art etc. and historical events and on other subjects like achievements made in the field of science and technology which would help greatly in increasing the horizon and knowledge of the viewers about the advancements made in the country.

3.121. The Committee suggest that larger number of persons should be encouraged to produce T.V. shorts and films dealing with subjects of vital and absorbing interest to public.

3.122. The Committee recommend that efforts should be made to make full use of the untapped valuable material in the National Archives and the National Library Museums for making short documentary TV films in close coordination and collaboration with the Central Ministries and the State Departments concerned.

3.123. The Committee recommend that the interviews etc. with eminent personalities recorded for telecasting may not only be widely shown on TV but should also be preserved permanently for future use. The Committee desire that suitable guidelines should be laid down for the purpose.

Children's Films/Programmes

3.124. To a query made by the Committee regarding showing of children's film on TV, the Director, TV replied that the Children Film Society produced a number of films and these films are shown on TV at least once a month.

3.125. Asked by the Committee whether there is any arrangement for the exchange of films and video tape recording on the subject like drama, sports and children films and matter of scientific and cultural interest with other countries, the Ministry of Information and Broadcasting furnished the following information to the Committee:—

“India has cultural agreements with a number of countries. Some of the items under these agreements pertain not only to Television but to Sound Radio also. We have such agreements with USSR, Bulgaria, Romania, Yugoslavia, Mongolia, France, German Democratic Republic, Federal Republic of Germany, Poland, Czechoslovakia, Hungary, Arab Republic of Egypt and Afghanistan.

Besides this, All India Radio has entered into direct agreements, protocols with the Radio and Television organisations of Yugoslavia (for Radio and Television) G.D.R. (for Television) and U.S.S.R. (for Radio and Television).

3.126. The Committee note that apart from the films produced by the Children Film Society, children films are also obtained from other countries under cultural agreements and these films are shown on TV once a month.

3.127. The Committee feel that the present rate of showing children's films only once a month is on the low side. The Committee consider that there is need for telecasting more children's films during a month. The Committee would, however, like to stress that extreme care should be exercised in choosing films for child audience. The Committee have given concrete suggestions for improving the number and quality of children's films in their 59th Report on Ministry of Information and Broadcasting—Films (Part II).

Commercialisation of TV

3.128. In a memorandum submitted to the Committee it has been suggested that TV should be commercialised as it would not only increase TV population but will also yield some revenue to the Government.

3.129. Asked by the Committee during evidence regarding commercialisation of TV, the Secretary, Ministry of Information and Broadcasting replied:

“For the present, we have already set our face against commercial television.”

He added:

“Now, whenever, Commercial TV is allowed, I am sure, Parliament will be consulted and Parliament's approval will be taken, as was done when we introduced commercial programmes on AIR. We are not realising any money from the Commercial side. Actually what we get from the Commercial side goes back to the Government.....”

The witness expressed the view that:

“Refusal to have commercial TV is a very good safeguard for our TV that we will not go the way of Western TV. Generally, if the TV organisation has to draw its income from people who want to sell their goods, then, they naturally insist on the

maximum entertainment value for the programme they sponsor. So long as sponsoring of programme on TV is not allowed, we can say, there will not be commercial TV in our country."

He added:—

"There is fair amount of certainty that even if the hours of telecast time are increased in this country it will be used for good social and national purpose and not for mere pointless entertainment."

3.130. To another query made by the Committee, the witness replied:

"I would not say that in a sense the quality of programmes goes up if we have commercial TV merely because more money would be available for this. The big firms would be sponsoring programmes in the TV while in TV we have a better quality of programme at present. If TV is able to sell advertising time then we will have to say good-bye to the present philosophy of TV."

The Director-General, AIR, added:

"Any commercialisation must be made with some purpose. The obvious attraction is earning money. In commercialisation, the first condition should be that the money must come back for the improvement of the programmes and it should not disappear in the Exchequer as the Commercial Radio revenues have done. Second point is that any commercialisation should not influence the content of the programme or the total structure of the transmission. In the present stage and in the foreseeable future the only possibility where it can be considered with some safety is the feature film. For example, there is really a good feature film which is good by way of content but if the producer, or the distributor is demanding a fee which is much more higher than the normal rating, then no TV centre should allow it because all the film producers will ask for similar rate."

3.131. The Chanda Committee in their report on Broadcasting and Information Media had observed as under:—

"In the United States of America and Latin American countries as also in Iran, Lebanon, Thailand and the Philippines, television is in the hands of private interests who finance their operations, including the setting up and expansion of their existing networks, from revenues derived entirely from the sale of time to advertisers. In the United States of America and most of

these countries, the advertisers not only buy time but also provide programmes of their choice which go with the advertisements. In Australia, Japan and Canada, this system has been adopted by a number of comparatively small television stations which operate in competition with the national organisations which are maintained out of licence revenues. The acceptance of commercial programmes, known as 'sponsored programmes' has resulted in the largest and most prosperous television network in the world being built up in the United States of America and it has also given impetus to the growth of television in the countries mentioned and in Latin America and some countries of Asia. The major undesirable feature of this system is that the television organisation has very little control over the programmes put on the air with the result that they are often in questionable taste and have a demoralising effect on impressionable and immature minds. It has even been suggested that the increase in the rate of child delinquency in the United States of America is attributable to these programmes.

Benefiting by the experience of the United States of America, countries which entered the television field later, more particularly the European countries, evolved a new system. While accepting commercial advertisements as inescapable for supporting the growth of a sound television system and also the U.S. practice of selling time, they safeguarded the quality and standard of the programmes by refusing to allow the advertisers to produce them or even to have a say in the programmes which would include their advertisement material. By this method commonly known as 'spot advertising' or 'spot announcements', the organisations retained full control over their programme policy. An additional safeguard was also introduced, by statute where necessary but mainly by a code of conduct voluntarily agreed upon by the organisations and the advertisers, to control the make-up of the advertisements. Italy went a step further and set up a corporation to handle and produce all advertisement shorts."

3.132. The main objective of TV is to help bring about desirable social and economic changes in the country. While commercial services on T.V. may bring in some money by way of advertisements etc., the business interest cannot be expected to have the same commitments. It is true that benefiting by the experience of U.S.A. certain countries have tried to safeguard, by statute where necessary, control over the programme policy but

there is no gain saying the fact that it would intimately affect the contents and style of programme.

3.133. The Committee are convinced that commercialisation of TV at this stage of development is not called for.

(iv) Evaluation

3.134. The Ministry of Information and Broadcasting furnished the following information to the Committee regarding evaluation of the programmes:

"To evaluate programmes put out by the Delhi Television Centre, the centre has an Audience Research Unit headed by an Audience Research Officer. He is assisted by a Tabulation Clerk for undertaking field work during door-to-door enquiries among television house-holds, Investigators are engaged on part-time basis. Television Centre's Audience Research Unit does not maintain a permanent fleet of investigators like the National Sample Survey, Programme Evaluation Organisation and other agencies engaged in large-scale sample surveys. Audience Research Units in sound broadcasting at the four metropolitan cities have been, however, provided with two investigators each. Presumably because the number of television homes was only about 2,000 at the end of 1965, when Audience Research Unit (the then Listeners Research Unit) was reorganised, no investigator was provided for the Television Centre. The situation has undergone a major change and it is becoming increasingly difficult for the Audience Research Unit to cope with the work virtually single-handedly. The need for providing a continuous feed back in terms of profile, availability, size and reaction of audiences is more pronounced in the case of the Delhi Television Centre with its rapidly changing size and composition of its potential audiences.***** The staff provided to the Audience Research Unit at this Centre is woefully inadequate. While it is hoped that the expansion of Audience Research Wing of AIR envisaged during the Fifth Plan would improve the situation so far as Delhi Television Centre is concerned, there is an immediate and imperative need to strengthen the unit by providing two investigators on par with its counterparts in sound broadcasting * * *. Broadly, the methods employed for assessing audience size and ascertaining audience reaction profile etc. could be classified as follows:

(i) Sample surveys based on door-to-door investigation.

- (ii) Panel surveys by mail.
- (iii) Analysis of viewers' letters.
- (iv) On-the-spot investigations.

* * * *

The fundamental difficulty in the study of the effects of television or of all mass media for that matter, is that the communicators of the messages cannot determine which individuals will receive them. Anyone who has access to a television receiver can, if he wishes, watch the programme put out, and no study that ignores this self-selecting feature of the situation can claim to have been a study of 'effects'. This is not to deny the value of the many clinical studies of communication which have explored the process by which information is acquired and attitudes altered. The results of each research help to determine conceptual model of the communication process. Empirical studies do not lend themselves to the normal experimental designs in vogue in clinical studies, but because of some organised viewing groups that is teleclubs (rural and urban) is possible to carry out some investigations into the effects of television. Role of television in diffusion of agricultural innovation has been studied by ICERT and many research scholars at IARI using some of these time-honoured designs. Mention may also be made of evaluation of urban-teleclubs conducted at the instance of UNESCO during 1961 and the evaluation of school television project by Dr. Paul Neurath."

3.135. It has been stated by the Ministry of Information and Broadcasting, in a written note, that the following studies were conducted or were proposed to be conducted during 1973-74:—

- (i) On-the-spot investigation to ascertain the extent and manner of functioning of urban teleclubs in Delhi.
- (ii) Survey in Delhi to find out the profile and viewing habits of youth in TV households and to assess the size and reaction of the youth to Youth Forum and Yuv Manch.
- (iii) Survey in Rohtak to find out the profile and viewing habits of youth in TV households and to assess the size and reaction of youth to Youth Forum and Yuv Manch.
- (iv) Study of rural audience profile and on-the-spot enquiry into the functioning of farm teleclubs.

- (v) Study to determine the level of preception and comprehension to moving images on television among the rural audiences.
- (vi) TV audience profile in Delhi city.

3.136. During the evidence before the Committee the Secretary, Ministry of Information and Broadcasting stated:

“I may confess that the allocation for audience research in All India Radio as a whole was extremely small during the Fourth Plan and this time at our instance, the Planning Commission has given a much larger allocation for audience research. So, we hope that our audience research will be much more intensive in the coming years than they have been so far.”

3.137. The Committee desired to know the research studies proposed to be conducted during the Fifth Plan period and the allocation proposed to be made for such studies. The Ministry of Information and Broadcasting, in their written note, have stated:

“Although no specific allocation was made in the Fourth Plan for Audience Research, a small Audience Research Unit consisting of an Audience Research Officer and a Tabulation Clerk has been set up apart from the Audience Research Organisation on the Sound side and has been functioning in the Delhi TV Centre. In addition to the ‘fan-mail’ which provides useful reaction to the Television programmes, field surveys are also undertaken through door-to-door enquiries among TV households by engaging Investigators on part time basis. No Audience Research Units have, however, been set up yet at Bombay and Srinagar T.V. Stations due to paucity of funds. Analysis of viewers letters at these Centres provides a measure of audience reaction.

During Fifth Plan, a provision of Rs. 1 crore has been agreed to by the Planning Commission for Audience Research both for Sound and TV programmes. It is proposed to undertake an annual study on audience profile for the television viewers, viewing habits of television viewers and also to gauge the popularity and acceptance of television programmes as a means of education, entertainment and information. It is proposed to apply both sample survey methods in the field as well as clinical studies under laboratory conditions. It is also proposed to study the impact of specific audience programmes such as programmes for the rural viewers, school telecast and the like.”

3.138. As regards the improvements proposed to be made to get an unbiased opinion about the programmes, the Ministry of Information and Broadcasting have stated:

“The methodology of research and the sampling procedure are constantly under review. A new Multi-tier experimental sampling design has been evolved recently to meet the specific requirements.”

Also, back-check, depth analysis and semantic scaling methods have been introduced. Sample designs have been evolved to minimise the margin of error and make the findings more dependable.”

3.139. In reply to Unstarred Question No. 3238 in Lok Sabha on 14th March, 1973 it has been stated that:—

“No survey has yet been conducted to assess the response to Bombay TV station programmes. However, judging from letters received from viewers, the programmes are quite popular.”

3.140. While in reply to another Unstarred Question No. 150 answered in Lok Sabha on 1st August, 1973 the Ministry of Information and Broadcasting admitting the fall in the standard of Bombay TV programmes have stated that:—

“Government have noted that criticism made in the newspapers report about the programmes of Bombay TV. Government are aware of the limitations of the existing TV set-up, but efforts are, however, being continuously made to improve the quality of the service to provide more constructive, informative and entertaining programme”

3.141. Asked by the Committee what are the limitations under which Bombay TV Station is working and what measures are being taken to remove these limitations and deficiencies to make the programmes popular, the Ministry of Information and Broadcasting in a written note have stated:—

“Bombay TV Station started three hours service in the evening right from its inception. The limitation under which this station works was the lack of adequate studio facilities, there being only one production studio. This fact was realised right in the beginning and as such provision was made to augment Bombay TV Centre's studio facilities by adding another studio for which most of the equipment had to be imported. This studio is likely to be commissioned in the month of December, 1973.

Bombay TV Centre, by and large, caters to the needs of metropolitan area in and around Bombay. Since the area is multi-lingual, Marathi, Hindi, Gujarati, English, Urdu, etc., the demand is not surprising that the TV programmes do not cater to all language groups in adequate measure. This limitation of programme planning will be rectified when the transmission hours are increased. With the commissioning of the Poona Transmitter on October 2, 1973 the area covered by the Bombay Station will become enlarged which will need further augmentation of resources for catering to a much larger area. This fact was also taken into consideration long before the commissioning of this transmitter and accordingly a large number of programmes have already been canned to feed this area. The improvement of the quality and variety of programmes is a continuous process and Bombay TV Station is constantly making efforts to improve its standards. Judging from the large number of comments appearing in newspapers which run TV review columns in Bombay, it can be inferred that this new Centre on the whole has done rather well."

3.142. In a memorandum submitted to the Committee it has been suggested that evaluation of the effectiveness of each programme or series of programme should be done by professionals in these fields who do not belong to the Broadcasting Directorate to get an unbiased opinion.

3.143. Asked to comment and whether any evaluation of the programme was being done at present the Ministry of Information and Broadcasting in a written note have stated:

"It is agreed that in addition to the in-house research and evaluation which is essential particularly for the short-term needs, institution of standing with proper background in this particular area of research could be involved in research especially of the long-term type. At present most of the studies are being handled by AIR's Audience Research Unit.

Evaluation of the programmes is being done at present by the Audience Research Unit at the TV Centre under the guidance of the Director, Audience Research at the Directorate of All India Radio. On an average we undertake 6 to 8 surveys and studies like audience rating, audience profile analysis and evaluation of individual programmes. As mentioned separately some studies in SITE have already been entrusted to outside professional agencies. The periodicity depends on the needs of the situation."

3.144. It has been suggested to the Committee that a National Centre for Television Research might be set up with the following objectives:—

- (i) To identify areas for explanation and experimentation on the basis of both short-term requirements of programme producers and long-range decision making requirements of policy makers for designing message, message formats and combinations,
- (ii) Initiate research and supervise research designing and management,
- (iii) Pool and coordinate research efforts being made by various agencies sponsored or not by the centre,
- (iv) Analyse and interpret implications and relevance of research studies and their results for television planning and operation, and
- (v) as a timely link between policy formulation and implementation with T.V. Directorate on the one side and various survey and research results on the other.

3.145. Asked to comment, the Ministry of Information in a written note have stated:

“These are laudable suggestions, and if implemented will greatly help the programme planning and production at the television centre. But in view of the financial stringency it may be difficult to achieve these objectives to the extent desirable. But, to make a beginning, a proposal to set up a Programme Planning and Development Department has been included in Ministry's Fifth Plan proposals.”

3.146. The Committee are surprised to note that when the Audience Research Unit was reorganised no investigator was provided for the TV Centre and the staff provided to the Audience Research Unit of TV Centre was not adequate to meet the requirements.

3.147. The Committee are of the view that Audience research and evaluation of programmes is an integral part of any broadcasting system. Without a continuous research and evaluation of programme, the telecasting system will not have a reliable basis to improve its programmes to subserve better the national objectives and improve its audience appeal.

3.148. The Committee hope that the Audience Research Wing of TV would be suitably manned in the Fifth Plan to meet the requirements.

3.149. The Committee recommend that, apart from the audience research wing which would be a part of the TV Organisation, there should be an independent and objective evaluation of the TV programmes to see whether the TV programmes are fulfilling the objectives for which television was introduced and to suggest improvements, wherever necessary. It would be desirable if the representatives of the Ministry of Education, Agriculture, Health and Family Planning as well as outside experts in the various fields, are associated with such an evaluation.

3.150. The Committee suggest that suitable guidelines for the purposes of conducting programme evaluation studies should be laid down.

(v) Cost of TV Sets

3.151. The Ministry of Information and Broadcasting in their preliminary material submitted to the Committee have stated that one of the reasons for according low priority to the introduction of TV in the country was the high cost of TV set which meant that unless community viewing was organised, television could not reach even to the lower middle income group. The position, however, was changing fast and the TV receivers were now being manufactured without imported know-how or foreign collaboration.

3.152. In a memorandum submitted to the Committee it has been brought to the notice of the Committee that the prices of TV sets are higher than the international market because of (i) high cost of components as compared to international prices, (ii) need for large inventories of components because of lack of smooth flow of inputs, (iii) high incidence of overhead, (iv) high taxation rate, and (v) high incidence of cost per set of advertising and dealer's commission.

In another memorandum submitted to the Committee the following information has been given with regard to the price structure of the TV sets manufactured in the country: "A 19" TV set price trend can approximately be defined as below:—

Ex-factory selling price	Rs. 1,700
Dealer's margin (varies 75/100) . . .	Rs. 75
	Rs. 1,625
Cost of servicing during warranty period . . .	Rs. 60
Net available to manufacturer	Rs. 1,585

Besides the cost of material and factory cost, there have to be certain marketing publicity and distribution overheads, cost of free replacement of parts during guarantee period and transport expenses etc. Then as a result of recent increase in various imports the additional impact on cost

has been of the order of about Rs. 90. If one were to knock off all these costs and added burden it is not difficult to find that there is really a very insignificant margin left for the manufacturers. To comprehend the information of cost and consumer price which are given here, the details are needed which may assist also to clarify the myth of Rs. 800 gap (Rs. 2,000 and Rs. 1,200).

Ex-factory selling price	Rs.	1,700.00
Excise Duty 10% (1700—75—Dealer's margin)	Rs.	160.50
	Rs.	<u>1,862.50</u>
Sales Tax 15% on Net Price (1625 + 162.50 Excise)	Rs.	268.13
	Rs.	<u>2,130.63</u>
Licence Fee	Rs.	30.00
	Rs.	<u>2,160.63</u>

In comparison to the above stated prices most of the makes with International Trade Mark popularity sell their 19" TV Receiver with a 12 channel VHF Tuner for about a max. of US \$ 100.00. The various black and white TV models are although available within a price range of Dollars 80 to Dollars 100, the local market prices for these are in the range of Dollars 150 to Dollars 200."

3.153. During his evidence before the Committee an eminent non-official stated that the cost of the TV receiver was prohibitive at present which was difficult for a middle class man to afford. An ordinary TV set in America would cost about 150 dollars which was 1/3 of the price here. The witness expressed the view that the price of TV set must come down to somewhat between Rs. 1000 and Rs. 1500.

3.154. To a query made by the Committee whether grant of licenses to more new entrants for the manufacture of TV sets would help to bring down the prices the witness replied in the negative and expressed the view that if the prices of main components like picture tubes and high voltage transformers fall, the TV receiving sets are expected to cost less.

3.155. Another non-official stated that when we were attempting to expand TV it may be realised that the sets here cost a lot more than what similar quality one would cost abroad. Expressing his views that reducing the excise duty would be a good idea he added:

"It should be made possible for the people to buy cheaper sets. That applies to tax and price structure as well."

3.156. The witness agreed to a suggestion made to the Committee in a memorandum that in India too TV receivers above 20" size should be treated as luxury item and attract heavy duty whereas sets below 20" should attract less taxation or no taxation at all as was done in Japan.

3.157. Asked by the Committee during evidence about the cost of TV sets, the Secretary, Ministry of Information and Broadcasting stated:

"We admit that the television receivers are costly but one happy thing that we can report is that almost total indigenous capability exists in the country for the manufacture of television receivers and a very substantial part of the manufacture of TV receivers is in the small-scale sector."

He added:

"TV receivers can be made cheaper if certain fiscal measures are taken like reduction of duty on imported materials etc., which are needed for the manufacture of television receivers. Butbecause of the policy that we are following in developing capacity in the Small Scale Sector for TV receivers, large-scale economies of mass production are not possible...."

3.158. Asked by the Committee regarding steps taken to remove the difficulties and to bring down the prices of TV sets, the representative of the Department of Electronics said that the prices of the components within the country were still higher than the international prices. Explaining the reasons the witness stated:

"One of them is that we have not yet built up the strength in the basic raw material. This is an area in which the Department of Electronics is looking into as to what type of R&D items are really required. Ultimately the basic raw material strength has got to be built up."

He added:

"We have not been able to provide continuous run of the raw material to the manufacturers so that they can plan their production well in advance."

3.159. The witness expressed the view that unless the basic materials required for making the components were developed; the prices of the components could not be brought down. The Committee was informed that the Tata Institute of Fundamental Research and other Institutions were trying to develop the new process and unless that came about there was some justification for the higher prices of TV.

3.160. The Committee was informed that the Department of Electronics in consultation with the Commerce Ministry was examining the question of setting up an Import and Export Corporation of Electronics items so that large number of items required in small quantities by the various entrepreneurs could be imported by this Corporation.

3.161. To a query made by the Committee regarding dependency on imported components, the representative of the Department of Electronics replied:

“It is being taken out slowly.”

Elaborating, the witness stated that TV receiver contained an import content of Rs. 300—400 in the initial stages but two years back it was brought down to Rs. 90, excluding the picture tube being manufactured by B.E.L. which had an import content of Rs. 120. In the current import policy it has been cut down to Rs. 60 per receiver meaning thereby that for a TV of 19" size, costing about 1600 (ex-factory) the import content is Rs. 60 only.

The witness added:

“We have already encouraged a number of parties to manufacture some of the components which are now being imported. Hindustan Aeronautics at Hyderabad, B.E.L. at Bangalore and some other Units have come forward for this. Some of them are already in the line. We hope to cut it further to Rs. 30 by the next import policy, i.e. 1974-75. There is progressive reduction in the import content of TV receivers. It will depend upon the coming up of our electronics industry.”

3.162. As regards the high incidence of overhead charges because of relatively small quantity of production per factory, the witness expressed the view that there is certain amount of economy in large volume production; it decreases the cost if it is a manufacturing process. He added:

“The Department has taken a stand about two years back that for TV receiver, small scale production should be licensed. We have issued licences for a production of 2500 receivers per annum. That means fifty lakhs per year.... Those who have come up with production and have produced quality TV sets. we would like to licence them to 5000 sets per annum. That would mean a turn over of 80 lakhs....”

3.163. Agreeing that there is a large amount of taxation on the components the representative of the Department of Electronics stated that the taxation rate today was of order of 120 per cent on all imported com-

ponents and the excise duty on TV receivers was something like 10 per cent. Elaborating the witness stated:

"The ex-factory cost is something like Rs. 1600 for 19" TV set and the customer pays Rs. 2100, Rs. 500 more by way of taxes and duties."

He added:

"There are of course things like antenna etc. which may cost another Rs. 100. We shall leave that out. On an ex-factory price of Rs. 1600 the taxes payable is something like 30 to 33 per cent. What is really worked out is in terms of dealers' commission and sales tax etc. Rs. 1600 itself has a certain amount of import component on which excise duty has been paid."

3.164. In a memorandum submitted to Committee it has been suggested that the import duty on TV equipment, components and spares etc. which are not manufactured indigenously might be exempted and that some of the major components like transistors, valves, picture tubes etc. should be supplied at reasonable rate and exempted from excise duty and sales tax.

3.165. Asked to comment, the representative of the Department of Electronics replied:

"We have been examining them in consultation with the Ministry of Finance who are naturally not very happy to consider any exemption from duty.... Ultimately this is a decision to be taken by the Ministry of Finance."

3.166. To a query made by the Committee regarding price control with reasonable profit to the private entrepreneurs, the witness replied:

"The entire cost structure of the TV receivers is being looked into so as to find out whether the set of prices prevailing now are substantially higher than they ought to be. No decision has been taken as yet. But, this is certainly an area which the Department is looking into."

As regards the price control, he stated:

"I am afraid, we have not come to the stage as yet, where a certain amount of price control can be done. We cannot do it unless we are quite sure ourselves as to what exactly the total cost structure is. In the initial stages of any industry it will be very difficult to stabilize the price, because a lot of tooling and equipment is to be done. It can be done only after the industry has been set on its feet i.e. after 2 or 3 years...."

3.167. Asked by the Committee whether any thought has been given to have cheap sets to middle and lower income group, the representative of the Planning Commission replied:

“We do not intend to lean too heavily on the index of geographical coverage of population by TV stations or broadcasting facilities.”

Clarifying the witness stated:

“When we claim that we are covering 90 per cent of the population by broadcasting, we may be really transmitting some programme in the ionosphere which can be heard by 90 per cent people. But if the people do not possess receiving sets in adequate number and unless the sets are made cheaper, it does not serve the purpose. Therefore, we have actually impressed upon them that as far as possible, they should try to make the broadcasting sets cheaper so that it can serve as a more effective mass media.”

He added:

“So far as the broadcasting sets are concerned for relatively low priced sets, we should explore the possibility of remission in excise duty, Octroi, etc. as far as possible.”

3.168. In their Report, the Committee on the Broadcasting and Information Media while commenting on the heavy incidence of customs and excise duties in the cost of receiving sets whether imported or manufactured indigenously has observed as under:—

“We consider that the general revenue should forego these levies in the interest of developing television. We are encouraged to re-affirm the suggestion we earlier made on the example of United Arab Republic which exempt all imports of television equipment, components and spares from customs duty. The remarkable growth of television and the economic manufacture of necessary equipment and sets in the United Arab Republic is in no mean measure due to the progressive policy adopted.”

3.169. Similarly, in their Report, the Technical Committee on Television (Bhagvantam Committee) had also recommended in 1965 to waive or reduce substantially the excise duty on the manufactured receivers for the first five years.

3.170. According to a press report the Union Minister for Information and Broadcasting admitting that the excise and sales tax on TV sets constituted a third of the price of each set, stated that various measures were under consideration to bring down the prices.

3.171. The Minister of Information and Broadcasting while inaugurating the seminar on the "Software objective on Indian Television" held in New Delhi in February, 1973 has stated:

"The Government reorganised that communication in an essential instrument of social change but this was contradicted by its own budgetary provision....The high tax on TV sets about 35 per cent was another instance of an ambiguous attitude."

The excise duty on TV Sets in the financial proposals for the year 1974-75 has been further increased from 10 per cent *ad valorem* to 20 percent *ad valorem* which will further escalate the price of TX Sets.

3.172. The Committee note that at present the price of TV set is around Rs. 35,00 which is high that only well-to-do families can afford this luxury. The Committee consider that if this powerful medium of TV is to benefit a large section of people it would be necessary to bring down the cost of TV receivers drastically. The Committee have no doubt that with intensified research and development efforts, the manufacturing cost of TV could be brought down considerably and a break through can be achieved as has happened in the case of radio sets. The Committee would therefore like the industry to make determined efforts by improved technology and other measures to reduce their manufacturing cost and marketing margins so that prices of TV sets are considerably brought down and TV is available at a reasonable price which is within the reach of common man.

3.173. The Committee would further urge Government to ensure that raw materials required by the TV components manufacturers and readily available to them so that the need for maintenance of large inventories by them, is obviated and production cost of TV is reduced.

3.174. The Committee note that one of the major elements contributing to the high price of TV set is taxation i.e., customs duty, excise duty, sales tax etc., which works out to about 35 per cent. of its *sale* price. They note that the excise duty on TV sets has been increased from 10 per cent. *ad valorem* to 20 per cent. *ad valorem* this year itself. The Committee recommend that Government may examine the question of rationalisation of custom duty on imported material needed for the manufacture of TV receivers, excise duty and sales tax on TV, in the interest of making available moderately priced indigenous TV sets so that a large number of house-

holders may buy TV sets and thus derive benefit from the programmes of development which are telecast. The Committee have no doubt that unless TV sets are placed within the reach of the common man, the objectives of TV as an instrument of social and economic change would not be achieved and the TV will remain a rich man's toy in a poorman's country.

3.175. The Committee note that import content in the TV receiver has already come down to Rs. 60 from Rs. 300-400 in the initial stage and it is likely to be reduced to Rs. 30 only in 1974-75. The Committee hope that it would be possible to eliminate altogether the import content of TV receivers by indigenisation within the shortest possible time, by intensifying research and development efforts in this regard.

(vi) Software development

3.176. In their preliminary material furnished to the Committee the Ministry of Information and Broadcasting has stated that two areas of weakness which have been identified in the TV expansion plan are lack of adequate capacity for the production of out of studio programme and the need for programme and audience research. The Ministry have also stated that it is proposed to develop a Television Programme Research and Prototype Production unit to realise the given objectives.

3.177. In a memorandum submitted to the Committee it has been stated that the basic components of Television are:

- (a) Hardware:** Consisting of all the electronics equipment, transmitting tower, camera; VTR, film, satellite etc.
- (b) Software:** Consisting of research designing, production and evaluation of different series of programmes.
- (c) Maintenance:** Consisting of the maintenance of TV sets placed in school and villages.

These three components are the vital part of the human body the heart, brain and kidney. Neglect of any one would damage the entire system. Nor can one take the stand to plan for one now and postpone the others for later years. While hardware is truly international and can be imported, software and maintenance would require our own ingenuity and skill.

It is now well established that any programme on series of programmes aimed to bring about behavioural change would require

- (i) The target audience**
- (ii) What to communicate**

(iii) How to work through the medium

(iv) The effect of communication and how to improve it.

This development of software is not easy. The script writers, subject experts and media men all are highly educated and urbanised people who have little or no awareness of the life, values, customs and traditions of a villager.

3.178. During the course of evidence before the Committee an expert on the subject of TV stated that there is no research centre in the country for TV. He added:

"Lot of research work is necessary before we take up large scale plans or making television productions. The training facilities are inadequate by the fact that if you go to Delhi and Bombay these two centres are just fairly able to cope with their day-to-day production...."

Asked by the Committee during the course of the evidence about the present set up involving research in the various fields of TV such as programme development, broadcast, feedback and evaluation, the representative of the Ministry of Information and Broadcasting stated:

"The programme Research Unit is already under the approval of the Finance Ministry. This will be an expansion of the TV Training Centre. The primary objectives of this unit will be to undertake a research into the techniques of programme production which includes film production. Secondly, its main function would be to undertake on the basis of the research analysis, a model production for the benefit of the TV station which are broadcasting programmes particularly to achieve national objectives. There are two specific objectives of this particular unit and we hope this unit will receive the financial approval very shortly and we shall be able to get off the ground in the near future."

3.179. To a query made by the Committee whether any long-term planning has been made for the designing and programming the software requirement, the representative of the Ministry of Information and Broadcasting replied that the main instrument for developing our software properties is going to be the TV training institute which has been set up with the assistance of UNESCO. As part of the expansion plan of this training institute, a project has been put up for the development of a programme research and prototype production division which will do research in all the software aspects of television.

3.180. The Director, TV Training Institute, Delhi stated:

"....The main function of this project would be to conduct research in programme forms and formas, particularly those which are related to the national objectives such as agriculture, national integration, family planning etc., to find out what exactly is the format which should be followed by the medium of TV to achieve the maximum possible impact. This was the research part. We will undertake the production of prototype kind of programme also which would be circulated to the TV stations."

3.181. To another query made by the Committee regarding participation of organisations outside AIR in the development of software, the representative of the Ministry of Information and Broadcasting replied:

"We do welcome the participation of organisations outside AIR, in developing TV software, but this requires that the educational institutions in the country should have TV studios. We would like this software capability to spread all over India in most institutions of higher learning in the country, but obviously the constraints would be of finance and equipment which educational institutions cannot afford."

He added:

"So far, only I.I.T. Kanpur has a TV studio and they are doing quite a lot of work in software development."

3.182. Subsequently, the Ministry of Information and Broadcasting furnished the following information regarding the nature of software developed and the likely contribution of I.I.T. Kanpur in its future development:

"The IIT, Kanpur, runs a CCTV station, mainly for entertainment of its students and staff residing in the Campus area. A group of about 75:80 students from the production crew every year. They transmit their productions which are live or videotaped or films. The programmes consist of interviews, plays, games and quizzes, music and dance, both in English and Hindi. For the last three years, the I.I.T. has engaged itself in experimenting with software development in science education through video tapes and films.

Two films "Mass Measurement and Let's Watch Motion" have been made for Higher Secondary students. The second film has been approved by Film Advisory Board for release in English theatres of the country. Both have been made with

a view to be useful for screening in theatres as well as TV. A third film "The World of Atoms" is under production in collaboration with the Films Division Bombay, to be distributed in Cinema Houses all over the country.

TV Centre has made several productions with different formats at the Primary School level. Teaching of scientific concepts with the participation of children, teacher or 'puppet' have been tried out. Indian Space Research Organisation has given a grant for production of twelve video tapes on **BASIC SCIENCE FOR VILLAGE CHILDREN**. Two educationists are being hired to carry out the research and evaluation required in the project. The Centre for Education Technology, Delhi has shown interest in carrying out a project at IIT, Kanpur, on problem of drop-outs and mass media.

The Education Ministry has set up a Centre for Educational Technology as an institution under the NCERT. The Centre is intended to promote the use of modern educational technology in an integrated manner in the country. The Centre will conduct research and training programmes and will, *inter alia*, produce prototype educational films, TV lessons, and programmed instructional materials.

In case the Centre for Educational Technology asks the IIT, Kanpur, to produce TV programmes for its use, and some of them are considered to be of general interest, these can be found handy for the use by the TV Stations or during the Satellite Instructional Television Experiment."

(Base on the information furnished by IIT Kanpur)

3.183. The Director TV (Satellite) stated during evidence that the Audience Profile studies are being carried out in various regions. The audience profile study in the Andhra and Mysore region has been entrusted to an inter-disciplinary group--the nucleus being the Central Institute of Indian Languages and the Mysore University--and the study is almost complete. In Rajasthan and Bihar the same kind of study has been entrusted to the operational Research Group from Baroda. These Audience Profile studies are being made to determine the type of audience and their requirements in that particular area taking into consideration, language etc. The witness added that since TV will be coming for the first time in many of the areas, it is necessary to pre-test the programmes. A beginning has been made in Rajasthan where certain programmes of different types are proposed to be pre-tested to determine the most acceptable techniques and also to know whether the language that is being used is understood or not.

3.184. In a memorandum submitted to the Committee it has been stated that in determining the software objectives on the Indian TV, language has not received due consideration and it is necessary to analyse the role of 'language' in fulfilling the national objectives.

3.185. Asked to comment the representative of the Ministry of Information and Broadcasting stated:

"We recognise the fact that the TV has essentially to be a medium of local interest and must deal with local problems. Therefore, the language in the TV must be spoken language of the area."

3.186. Asked about the audience research in the rural areas and their requirements and witness replied:

"That is the very purpose of this audience profile study. In the audience profile study, we are trying to determine the requirements of the rural audience. I do agree that the urban producers may not even know the food habits of these areas. It is entirely with this object in mind that we are conducting the Audience Profile studies. It is very necessary that the urban producers should know and understand the requirements of the rural audience."

The Director AIR, added:

"If the word 'language' is used in the pure linguistic sense, no specific study has been made. But, on the kind of continuous studies, we are trying to spend our limited resources on them. There has been considerable expansion...."

3.187. Asked about the inter-change of programme the representative of the Ministry of Information and Broadcasting stated:

"We are actively promoting it."

3.188. The Committee feel that with a view to gaining knowledge and insight into the ways and means by which TV can be effectively used as a tool in the national development it is essential to conduct intensive research in the programme formats particularly those related to the national objectives.

3.189. The Committee are of the view that because of the language diversity, it is necessary to design and plan research for the software development keeping in view the local interests and requirements so that the viewers of the region/area may identify the programme with their needs and develop a sense of participation. Designing a programme for the software development would, therefore, imply some fundamental research

and understanding about the people in that area, method of execution with the participation of local people and evaluation and feedback to design the next programme.

3.190. The Committee suggest that an analysis of the present and projected capability of producing the software requirements should be made and necessary steps should be taken in advance for the development of the programme in close coordination with the Central and State authorities.

3.191. The Committee suggest that software development should take into account the programmes requirements of the weaker sections of society and should be tailored keeping their needs in view.

3.192. The Committee note that the Ministry of Information and Broadcasting propose to set up a Television Programme Research and Prototype Production unit to undertake research in programme forms and formats particularly those which are related to the national objective and that the proposal is under the consideration of the Ministry of Finance.

3.193. The Committee desire that the proposal should be finalised expeditiously and the Committee apprised of the progress made in implementing it.

3.194. The Committee note that the audience profile study in the Andhra and Mysore regions is almost complete and that such studies in Rajasthan and Bihar have already been completed.

3.195. The Committee desire that efforts should be made in close co-ordination with all concerned to complete the studies expeditiously so that the programmes could be designed produced and protested to determine their suitability in accordance with the requirements of the regions/areas well in advance of the TV service in these areas.

3.196. The Committee suggest that a phased programme to undertake audience profile studies in other regions where TV service is likely to be extended during the 5th Plan period should also be drawn up in consultation with the authorities concerned and necessary steps taken to ensure that such studies are undertaken and completed according to schedule.

CHAPTER IV

TRAINING

(i) T.V. Training Institutes, Delhi and Poona Training Programmes

4.1. In pursuance of the decision taken by the Government of India to extend television broadcasting with a view to use this medium for both school and out-of-school education with special emphasis in the field of agriculture, development, health and family planning, the UNDP was requested for assistance under the Special Fund Sector for the establishment of a Television Production and Studio Technical Operations Training Centre. In response to the Government of India's request, a UNDP/UNESCO Mission visited India in 1969 and prepared a report analysing All India Radio's Development and Training needs in the field of TV broadcasting. This report led to UNDP's Special Fund Project creating the Television Training Centre to train All India Radio's personnel in television production and studio technical operations. The Plan of Operation for this project was signed by the Government of India and UNDP/UNESCO on 15th July, 1971 and became effective from the 10th August, 1971.

4.2. The collaboration of the Government with UNDP/UNESCO is for a period of three years with the Ministry of Information and Broadcasting as Government Cooperating Agency and UNESCO, in association with ITU, as the participating and Executing Agency. After three years, the Training Centre will be a continuing responsibility of the Government of India.

4.3. During the three year collaboration period (10.8.1971 to 9.8.1974), the contribution of UNDP is in the form of experts, fellowships and foreign equipment whereas the Government contribution is in the form of providing local staff, buildings and indigenous equipment for the Training Centre.

4.4. Six UNESCO experts are working in the Training Centre in collaboration with their Indian counterparts as follows:

UNESCO Experts	Indian Counterparts
Chief Technical Adviser	Director, Training
Expert TV Production	Head, TV Production Training Department
Expert Technical operation	Head, Technical operations Training Department.
Expert TV films	Lecturer Films
Expert ETV Production	Lecturer ETV Production
Expert Design/Graph c	Head, Department of Design.

4.5. The TV Training Centre provides training in TV production and TV studio technical operations with following principal sub-divisions:

(i) *TV Production*.— General Production, Educational TV Production, TV Film Production, TV Design and Graphics, TV Administration/Management, TV outside Broadcast Production.

(ii) *TV Studio Technical Operation*.—TV Camera, lighting, TV Audio, TV recording, outside Broadcasting Telecine operations and Technical Management.

4.6. The main objective in the establishment of the TV Training Centre is to provide trained manpower for running the new TV Stations in India. The training programme started almost immediately after the Plan of Operation was signed on 10.8.71 by the Government and UNDP/UNESCO. The first training course commenced on 6.9.71 and by the end of August, 1973 four courses have been completed producing a total of 257 trained personnel. As a result it has been possible to open new TV Centres in Bombay, Srinagar and Amritsar and to augment the existing staff at Delhi TV Centre in addition to providing staff for the Delhi Satellite Base Production Unit. The Fifth Course started on 12.11.1973 and will end on 10.5.1974. In this course staff for the Cuttack and Hyderabad Satellite Base Production Units are being trained.

4.7. On completion of the present course, the TV Training Centre is intended to move to its permanent site in Poona, where a large intake of trainees for the Basic Courses as well as Specialised Courses and Seminars for Senior TV Staff will be possible.

4.8. The Committee had been informed that, at present, the centre was not open for training to outsiders and training was imparted to AIR employees only as the present capacity was inadequate even to meet the AIR requirements. The training centre was not fully equipped for imparting training in the various fields of TV. However, the Poona TV Training Centre would be fully equipped and would provide training to over 200 personnel per year.

4.9. It was also stated that it was proposed to further equip the training centre by constructing minimum technical areas like Film Studio, editing room, processing room printing room and air-conditioning plant room as an expansion to the existing TV Training Centre building.

4.10. It was further stated that out of the sanctioned strength of 26 of the professional staff, only 19 were in position and there were 7 vacancies in the following categories:

"Instructor Film	.	.	1	Vacant for the last 2 years. Matter has been referred to the U.P.S.C.
Instruction production	.	.	2	
Head, Department of TV Designing/Graphics			1	
Lecturer, Staging/Designing			1	
Maintenance Technician	.		2	
			7	

Posts of Head of Department of TV Designing/Graphics and Lecturer, Staging/Designing were advertised through U.P.S.C. Candidates for these posts had since been selected by the UPSC and the Commission had requested to expedite finalisation of certain terms of appointment offered by the selected candidates."

4.11. The Committee desired to know the total expenditure estimated to be incurred by the Training Centre at the end of the Fourth Plan as against the allocation and the reasons for variations, if any. The Ministry of Information and Broadcasting, in a written note, have stated:

"The expenditure figures to be incurred towards the creation of the TV Training Centre during the Fourth Plan period are as follows:

UNDP contribution: US \$ 1.14 million (to meet the costs of experts, fellowship and foreign equipment).

Government contribution (Capital costs), estimated Rs. 130 lakhs of which Government's sanction to the extent of Rs. 100 lakhs have already issued.

Recurring expenditure upto the end of the Fourth Plan: Rs. 18.80 lakhs.

No substantial variation is expected."

4.12. The Ministry of Information and Broadcasting furnished the following information regarding the training being imparted at the Delhi Training Centre:

"The training in the field of T.V. is imparted by the TV Training Centre, which is temporarily located at Delhi and will move to Poona as soon as its permanent buildings are constructed there. Each television course is for a duration of 24 weeks approximately. In fact two courses run simultaneously—a television production course and a television technical operation course. Without compromising on the amount and complexity of theory required for a thorough technical understanding of the medium, the courses are designed with the emphasis on practical training. This is to ensure that by the time the trainees leave the Training Centre, they would have acquired enough competence in an actual broadcast operational situation to enable them to take up assignments at their TV stations.

Out of the total training period of 24 weeks, approximately 25 per cent is spent on class room lectures while 75 per cent is spent on studio production exercises, television film production and outside location exercises.

The course are divided into three phases of approximately 4, 9 and 11 weeks each.

Phase I begins with general orientation and covers the basics with which all television personnel should be familiar. Both production and technical operations trainees attend the same lectures and undertake production exercises jointly.

During phase II, the two categories of trainees attend separate lectures. Production exercises continue to be held jointly.

Phase III of the training programme is devoted entirely to practical production work. A number of production units are formed with trainees assigned those duties which they are expected to perform upon completion of their training. Productions, executed in actual professional broad-

cast situations, include studio work, outside broadcasts and television film productions.

In the four courses completed so far the number of TV trainees was as follows

First Course	47
Second Course .	68
Third Course .	68
Fourth Course .	74
	<hr/>
	257

This works out to an average of 64 trainees per course. In the Fifth Course which has began on the 12th November, 1973, a total of 78 trainees are expected.

An average of 100 trainees per course is expected when the Training Centre has its own permanent facilities in Poona with a turnover of 200 trained personnel in a year. It was the UNESCO mission's estimate that in order to implement the present and projected plans for the development of television in India, a training centre capable of producing 200 personnel per annum over the next fifteen years will be required.

4.13. With regard to average expenditure per trainee, the Ministry of Information and Broadcasting have stated:

"The average expenditure per trainee works out to Rs. 5,500/- approximately. This does not include the salaries of the trainees for the period of training (24 weeks) as they are employees of All India Radio. Nor does the estimate of (Rs. 5,500/-) include the component of capital investment by UNDP and by the Government of India.

After the trainees complete their course, they are posted by All India Radio to various TV Stations which are under its control."

4.14. The UNESCO Mission in their Report on the Television Development and Training in India (1969) had recommended that training under different categories should be carried out in the following existing institutions which should be adapted to accommodate the new courses required:

(ii) AIR Engineering Training School	TV electronics, engineering and maintenance.
(iii) AIR Training School	TV planning and management
(iv) Indian Institute Mass Communication	Audience Research Method
(v) State Institutes of Education	Utilisation Training

4.15. Asked whether any training is being imparted at the Poona Institute and what action taken by Government on the above recommendations of the UNESCO Mission, the Secretary, Ministry of Information and Broadcasting stated during the course of evidence:

“There is no training being imparted in TV at the Poona Institute because the Poona Institute is still giving training in film technology. The TV Training Institution is in Delhi. Eventually, it is the intention to shift this to Poona where a new building is getting ready and then TV Training Institute will be in Poona.”

He added:

“The first part relates to the establishment of training centre for TV production and operation. This was established in 1971; so this is already being done.

The second part is in regard to Engineering Training. The All India Radio has facilities for television and electronics training and maintenance and will perhaps extend the scope of the training still further.

Regarding the next point, a suggestion was made to the Television Management at the time of the UNESCO Mission made its study in 1969 for having a Planning Cell in the Directorate General of the AIR either on the engineering side or on the programme side. By this time, the Director General of All India Radio has appointed an Engineer and Programme Officer for planning and development of television in the country.”

As regards the Television Management Training, the witness stated:

“We are already in our Television Training Centre carrying out training of officers upto the Assistant Station Engineer's level and these are the people who get the managerial jobs later.”

As regards audience research method at the Indian Institute of Mass Communication, he added:

"It was the feeling of the Mission at that time that there might be a body whose services could be utilised in conducting research on the use of television in the country. That suggestion still holds good and probably the Institute of Mass Communication can assist in this. But at the same time, the Information and Broadcasting Ministry has developed its own research organisation and the Director General of All India Radio is extending its scope to television audience research."

4.16. The UNESCO Mission in their report on the TV Development and Training in India had recommended the following revised Departments in the Film and TV Institute of India:

- (i) Film Direction and TV film production.
- (ii) Film and TV script writing.
- (iii) Film and TV acting.
- (iv) Film Editing.
- (v) Film Photography.
- (vi) Sound recording and sound Engineering.
- (vii) Audio-visual communication.
- (viii) TV Production.
- (ix) Educational TV Production.
- (x) TV Technical operation.
- (xi) Film and TV Design.

4.17. The Committee desired to know whether the Institute was redesigned to meet the above requirements and if not, to what extent the recommendation of the UNESCO Commission has been implemented, the Ministry of Information and Broadcasting in their written note stated:

"When the UNESCO Mission prepared their report in 1969, their assumption was that extensive resources such as buildings and equipment already existed to adapt the Film Institute for TV Training. These assumptions were not found to be correct and new buildings and equipment had to be located for TV Training.

Further, television has to develop as a distinct discipline. It is therefore necessary to run separate television courses designed to meet the in-service needs of the television broadcasting authority.

At present, the Film Institute and TV Training Centre have been functioning separately and a Commission under the Chairmanship of Mr. Justice G. D. Khosla has been appointed to investigate the area of co-ordination, if any, between the TV Training Centre and Film Institute when the TV Training Centre moves to Poona next year."

4.18. Subsequently the Ministry of Information and Broadcasting furnished to the Committee the following information with regard to the terms of reference of the said Committee:

- (i) to study in detail the implications of the proposed integration of the film and TV wings of the Institutes.
- (ii) to identify areas of academic study and practical work which could be included in common course conducted at the Institute.
- (iii) to study the impact of integrated study on curricular pattern of the two wings and in particular on the diplomas and ordered in different fields; and
- (iv) to examine in depth the question of constituting an integrated.

The Committee has been asked to submit its report by the 31st March, 1974.

4.19. The UNESCO Mission in their Report on TV Development and Training in India (1969) had observed that the following types of training were necessary to realise the full effectiveness and potential of Educational TV:

- (i) Training of educational planners in the application of 'mass' media to educational system.
- (ii) Training of professional staff in the techniques of production method of the media.
- (iii) Training of production personnel in the special methods which are applied to educational programmes and materials.
- (iv) Training of selected educators, extension officers and other specialists in the organisation and management of media based system of education and extension.
- (v) Training of all those field workers and teachers, monitors and group leaders, directly concerned with the utilisation of media, which prepared them to take their place as effective components in the system."

4.20. As regards the steps taken to train the persons in the aforesaid fields so that sufficient number of persons become available as T.V. educational system develops, the Ministry of Information and Broadcasting in a written note have stated that under the Educational Technology Project of the Ministry of Education, a Centre for Educational Technology has recently been set up in New Delhi as an Institute of NCERT which will, *inter alia* undertake training programmes for a wide variety of personnel who will be responsible for promoting, organising and raising the quality of the production and utilization of mass media for education at both the Central and State levels.

4.21. Besides, the Centre for Educational Technology at Delhi, the Ministry of Education are also setting up Educational Technology Cells in various States, in a phased manner, under the Educational Technology Project. Such a Cell has already been established in Maharashtra. The functions and responsibilities of these Cells would, *inter-alia* include arranging the training of script-writers etc.

4.22. In a memorandum submitted to the Committee it has been suggested that for maintenance of studies and transmission, AIR may have training school for technicians. Specialised courses on servicing television sets etc. can also be started in various polytechnics and Engineering colleges.

4.23. Asked to comment, the Ministry of Information and Broadcasting in their written note have stated:

"All India Radio has a staff Training School (Technical) at Delhi. Some basic lectures on Television are given as part of the training programme for lower grade operational staff in the general field of broadcasting engineering. The West German Government have agreed to gift some Television equipment for this School. When this arrives, regular courses of maintenance training in Television will be instituted for relevant staff. The training courses on servicing of television receivers have been started to meet the growing demand of personnel to handle television receivers and picture monitors in All India Radio Television network. Requests for training the Police Wireless personnel of the Ministry of Home Affairs and also State Government personnel in servicing and maintenance of Television sets were also received. It has also been decided to extend maximum possible training facilities to personnel of State Governments and Police Wireless. Keeping in view the facilities currently available at Staff Training School (Technical), six to eight seats were earmarked to outside personnel for each of the courses conducted so far. The duration

of each session is approximately 4½ months including theoretical and practical work. The details of the sessions held so far are as follows:

Total number of students		
Ist Session	From August 1972 to December, 1972	12 (This includes 2 from Govt. of Maharashtra)
2nd Session	From February, 1973 to July, 1973	10 (This includes 4 from Police Wireless, Ministry of Home Affairs)
3rd Session	Now going on from August, 1973 onwards.	There are 14 students. (This includes 8 from the States of Punjab, Tamil Nadu and Maharashtra).

It is agreed that the institution of Television receiver servicing courses is necessary. A number of private institutions have instituted such courses in Delhi and possibly in Bombay. Some Television receiver manufacturers also arrange training courses for their dealers."

4.24. The Committee desired to know how many AIR persons, if any, were sent abroad for training in TV technology, the basis for their selection and how many of the trainees, trained at TV Training Centre and abroad in TV have gone back to their original cadre in AIR and those who are continuing on TV side. The Ministry of Information and Broadcasting in a written note stated:

"During the last ten years, 70 members of AIR staff were sent abroad for training. The training lasted for periods varying from four to six months. In almost all cases, the expenditure on board and lodging was met by foreign agencies who offered training facilities while cost on air travel both ways met by the Government of India."

4.25. As regards the basis for the selection of trainees, the Ministry of Information and Broadcasting stated:

"The trainees are selected on the basis of their suitability. Generally, younger officers who have an aptitude for the TV medium and whose service would remain available to AIR for a number of years are preferred. A Committee consisting of official and non-official members has now been constituted to make selection of the trainees on the basis of their aptitude and past background."

4.26. With regard to the persons who have gone back to their original cadre in AIR after training and those who are continuing on TV side, the Ministry of Information and Broadcasting furnished the following information to the Committee:

“Of the 70 persons trained abroad, 61 are working in the TV setup; 8 are no longer in service; and one has been transferred to Sound Broadcasting temporarily; his services will be utilised on the TV side as soon as possible. Of the 255 persons trained at the TV Training Centre, 251 are still working in the TV setup; 2 are no longer in service and 2 are working on the Sound Broadcasting side. The services of the 2 remaining officers will be utilised on the TV side as soon as possible.”

4.27. The Committee desired to know the present job opportunities in respect of TV personnel as compared to the films and how can this be improved. The Ministry of Information and Broadcasting in their written note stated:

“Television and films are two separate media and the training requirements as also the job opportunities are totally different. Employment opportunities in Television are limited to the requirements of the Television Centres of All India Radio and would depend on the extent of future expansion of TV in the country, whereas film industry is of vast magnitude and the employment opportunities are obviously much more. It is because of this that the entrance to the film wing of the Film and TV Training Institute is through open competition whereas the television wing takes in only those who have already been selected for specific jobs in Television. In other words, the television training at present is confined only to the staff of All India Radio. The job potential in Television will naturally increase as new Stations are opened.”

In view of the position explained above, it is not considered advisable to turn the TV Training Wing of the Institute into an open training school as in the case of Film Wing.”

4.28. With regard to the trained and untrained staff at Delhi TV Centre, the Ministry of Information and Broadcasting have furnished the

following information.

Trained at Mandi House

<i>Category of Staff</i>	<i>Trained</i>	<i>Untrained</i>
Producer Gr. II.	5	8
Cameramen Gr. II	6	14
Floor Managers.	3	5
Scenic Designer	1	1
Film Editors	1	5
Sound Recordists	1	5
Art Assistants	1	7
Production Assistants.	1	20
Sr. Engg. Assistants		7
Engg. Assistants		30
Sr. Technician		12
Technician		17

Trained Abroad

Director	1	..
Engineer-in-Charge	1	..
Asstt. Station Director	2	
Programme Executive	5	8
Assistant Station Engineer	1	7
Producer Gr. II	3	..
Assistant Engineer	..	13

4.29. The Committee note that the existing TV Training Centre, Delhi was set up in 1971 in collaboration with UNDP/UNESCO with the main objective to provide trained man-power for running the TV stations in the country. In terms of the collaboration agreement which is for a period of 3 years (10th August 1971 to 9th August 1974) the UNDP contribution will be in the form of experts, fellowships and foreign equipment to the tune of 1.14 million dollars whereas Government will provide local staff, building and indigenous equipment estimated to cost Rs. 130 lakhs.

4.30. The Committee further note that the training centre is, at present, imparting training to the staff of AIR only and after the completion of the training, the trainees are posted to various TV stations by the AIR. The average expenditure per trainee works out to Rs. 5,500 approximately (excluding salary etc. of the trainees).

4.31. The Committee also note that the existing training facilities in the Training Centre at Delhi are limited and that it is proposed to equip the Centre by constructing buildings etc. for minimum training areas like film, studio, editing, processing and printing rooms and air conditioning plant room. The Committee further note that the sanctioned strength of twenty-six professional staff was short by seven in the various categories and that the vacancies in certain cases have not been filled for as long as two years. The Committee are given to understand that adequate facilities are being provided in the Training Centre at Poona where the existing Training Centre is expected to be shifted in 1974 and that as against the average turn-over of 64 trainees per course, an average turn-over of 100 trainees per course and that of 200 trained personnel per annum is expected when the Training Centre at Poona has its own permanent facilities.

4.32. The Committee are surprised that even though the Delhi Training Centre was started as early as 1971, it not only lacks facilities in certain minimum technical areas but even the full complement of professional teaching staff, is not in position and that the Training Centre at Poona with all the necessary facilities is yet to come up.

4.33. The Committee, therefore, feel that the importance of training in the various fields of TV has not been fully realised and the problem of meeting the man-power requirements of TV stations has not been dealt with satisfactorily.

4.34. The Committee cannot but emphasise that manpower and training problems ought to be considered and decided at the earliest stage of planning TV stations as delays in such decisions mitigate against having a viable, efficient and satisfying service. The Committee therefore urge that expeditious and effective steps should be taken to remove the deficiencies in the existing training facilities to make it self-sufficient and also to accelerate the construction work of the training centre at Poona to ensure its commissioning without delay.

4.35. The Committee suggest that an evaluation of the existing training imparted at the Delhi Training Centre should be made with a view to bringing about improvements in the teaching methods and also to know how far the persons trained at the Centre have really proved useful for TV Service.

4.36. The Committee are of the view that as the television net-work is developed during the Seventies, it would be necessary that a flow of competent and well trained personnel is available to meet the needs of TV/relay station for the production and technical operation, in addition to research, curriculum specialists, educational planners etc. for an effective development of the system. The Committee, therefore, recommend that keeping in view the phased development of TV during the Fifth Plan period and thereafter and the needs of each of the TV station for the various categories of personnel, the training capacity of the Institute for the various categories of personnel should be planned and a phased programme for training in the various fields of TV should be drawn up and necessary steps taken to select the trainees with a view to ensuring the availability of required man-power with the commissioning of a TV station.

4.37. The Committee are of the view that, apart from the training at the Institute, there would still be areas of in-service training which will be the continuing responsibility of the TV stations themselves. The Committee, therefore, suggest that necessary arrangements for such training should also be made simultaneously with the setting up of new TV stations.

4.38. Television is a growing industry in the country having considerable employment potentiality and the training institutes have an important role to play. The Committee, therefore, suggest that with the expansion of TV training facilities, trainees from the open market on all India basis should also be selected and encouraged to receive training in the various fields of TV for which suitable norms regarding the basic qualifications etc. required for each branch of training should be laid down.

4.39. The Committee note that the AIR Engineering Training School provides facilities for TV and electronics training and maintenance. The Committee desire that the existing facilities available at the AIR engineering Training School should be reviewed with a view to extending the scope of training to cope with the future demand.

4.40. The Committee are unhappy to note that even though the UNESCO Mission, as early as 1969 recommended for a training programme on educational TV, it is only now that Government have established a Centre for Educational Technology under the NCERT for the purpose. The training of script writers, editors, educational planners and administrators etc. is also proposed to be undertaken at the TV and Film Institute, Poona. This, in the opinion of the Committee goes to show that the

planners did not attach due importance to the various types of training for the development of educational TV at the initial stage.

4.41. The Committee note that a Committee has been set up to investigate the area of coordination, if any, between the TV Training Centre and the Film Institute when the TV Training Centre moves to Poona. The Committee would like to be apprised of the findings of the Committee and the action taken by Government thereon.

4.42. The Committee note that AIR's Staff Training School undertakes training on servicing of TV receivers and some basic lectures on TV are being given as part of the training programme for lower grade operational staff in the general field of broadcasting engineering. The Committee also note that the West Germany Government have agreed to gift some television equipment for the said school and after the arrival of the equipment regular courses of maintenance training in TV are proposed to be instituted.

4.43. The Committee recommend that with the expansion of AIR's Staff Training School (Technical) maximum training facilities should be extended to the State Governments for training the personnel in servicing and maintenance of TV sets. The Committee also recommend that various engineering and polytechnics institutes should be encouraged to provide specialised training courses on servicing TV sets etc. to meet the growing demand in this regard, with the development of TV net-work in the country.

4.44. The Committee note that a Committee consisting of officials and non-official members has been constituted for the purposes of making selection of the trainees on the basis of their aptitude and past background. The Committee feel that the existing procedure of making selection of AIR staff either for sending abroad or for receiving training at the training institute should be streamlined to minimise the chances of persons leaving the service after getting the training resulting in infructuous expenditure. The Committee suggest that suitable guidelines should be laid down for the purpose. .

4.45. From the data furnished by the Ministry of Information and Broadcasting with regard to the deployment of untrained staff, the Committee note that a large number of untrained persons are functioning in various positions. To quote a few, there are 8 untrained Producers Grade I as against 5 trained Producers, 14 untrained Cameramen Grade I, as against 6 trained Cameramen, 20 Production Assistants as against only 1 trained, whereas 30 untrained Engineering Assistants, 12 Senior Technicians and 17 Technicians are there without a single trained person in the respective cadre.

4.46. The Committee are unhappy at this unsatisfactory state of affairs which indicates lack of proper planning. They would like the Government to take suitable measures to train the remaining staff according to a time-bound programme so as to deploy competent and trained staff in the field.

(ii) *Teachers Training*

4.47. The UNESCO Mission on TV Development and Training (1969) in their report had observed that TV can help in teacher training programmes and that programmes for teachers should be prepared as soon as TV facilities become available. Priority programmes included:

- (i) Lesson demonstration by master teachers.
- (ii) Programmes dealing with classroom routines.
- (iii) Educational Psychology related to real classroom situations.
- (iv) Methodology related to teaching objectives.
- (v) Introduction to new curricula e.g. New approach Mathematics.
- (vi) Classroom problems and how they might be solved.
- (vii) Philosophy of Education.
- (viii) Introduction of modern trends in education: and
- (ix) Comparative Education.

4.48. Asked by the Committee about the steps taken to improve the teachers's training programme keeping in view the observations of the UNESCO Mission, the representative of the Ministry of Education stated:

"The programme referred to related to TV teachers training programme... The Centre for Educational Technology in collaboration with All India Radio Training programme will undertake training of teachers and script writers."

He added:

"NCERT has been entrusted with the improvement of quality education. They have not only circulated a model syllabus for teacher training schools of which they are 1,400 but they have done some work also in respect of Secondary School teachers. In that the question of new methods, new science programmes etc. are included. This alone is not sufficient. The service programmes are also being conducted. The major one is the summer school. Eighty such programmes are conducted every year. New science programmes are being conducted by them. Separate hand books have been prepared for science

programmes and separate training programmes are conducted not only in these summer schools but also in the State Institutions of science education which are available in 14 States in the country."

He further added:

"As regards introduction of new curricula e.g. new mathematics, new methods have been introduced so far in Delhi and the Delhi TV lessons include lessons for the new methods. The training programmes for school teachers in Delhi are meant to tell them how to deal with the new curriculum."

With regard to other States, the witness stated:

"We have not yet decided that the new method is the best solution. There is some thinking that the new method should not be introduced so early. The point of extending it to the rest of the country is still under consideration."

4.49. To a query made by the Committee regarding methods in other countries, the witness replied:

"In America, the tide is turning against the new method being introduced at a younger age. Introduction of new methods is normally at the school stage. Some educationists say that this has to be introduced earlier. This has momentum and we are also trying to do it in Delhi."

4.50. Asked by the Committee about the nature of the present facilities available at the training schools and the steps taken to modernise and to equip these schools with modern libraries and technological devices, the representative of the Ministry of Education replied:

"There are two types of teacher training institutions—one for primary and the other for secondary. With the assistance of UNICEF and UNESCO we have attempted a large scale programme for teachers' training, particularly by revising the syllabus."

He added:

"So far we have had television only in Delhi and we have close collaboration with the AIR."

4.51. To a query made by the Committee regarding utilisation of facilities available, the witness replied:

"It is a question of whether we can get more hours for teacher training programme also, when they are not available even for primary schools in Delhi. It is a question of priorities."

He added:

"We are having some other alternatives and we are considering whether they will give better results than television."

4.52. The UNESCO Mission in their Report on the Television and Development of Training (1969) had observed that the following aspects of teacher training require special attention as it is on these that the possibility of the successful implementation of any Educational TV system will depend:

- (i) The training of a small number of educational planners both in the Central and State ministries of education in the design and operation of instructional systems involving the 'mass' media.
- (ii) The training of a large number of curriculum specialists, again at both the Central and regional levels in the Planning and development of curricula in multi-media terms.
- (iii) The training of a great number of teachers in the various TV coverage areas in the effective utilisation of the medium and to orient them to the changes in the education system which the integration of the media will entail.

4.53. Asked by the Committee what action has been taken on the above observation and whether any short-term or long-term plan has been prepared for teacher training, the Ministry of Information and Broadcasting in a written note have stated:

"Under the Educational Technology Project of the Ministry of Education a Centre for Educational Technology has recently been set up in New Delhi as an Institute of NCERT. The Centre will, *inter alia* undertake training programmes for a wide variety of personnel who will be responsible for promoting, organising and raising the quality of the production and utilization of mass media for education at both the Central and State levels. The training programmes would be:—

- (i) For proper utilisation and presentation of mass media materials for education;
- (ii) for teachers/communicators for preparation of software based on suitable technology and on programmes learning and other educational techniques;

- (iii) for orienting the administrators and planners;
- (iv) for providing educational TV (ETV) Complementary courses for the programme producers of the TV and Film Institute;
- (v) follow-up courses and seminars if considered necessary and feasible.

4.54. Besides, the Centre for Educational Technology at Delhi, the Ministry of Education are also setting up Educational Technology Cells in various States, in a phased manner, under the Educational Technology Project. Such a Cell has already been established in Maharashtra. The functions and responsibilities of these Cells would *inter-alia* include:

- (i) Training of user (i.e. classroom) teachers who will give pre-broadcast instructions and conduct post-broadcast discussions in the classroom;
- (ii) arranging the training of script-writer and present teachers at the State level in adequate numbers.

Even before the Centre for Educational Technology came into being, it was realised that for successful organisation of Educational Television, it was necessary to involve teachers fully in the philosophy and use of Educational T.V. To achieve this seminars and workshops for teachers and educationists are an integral part of our work and this activity will continue, both independently and also in collaboration with the Centre for Educational Technology.”

4.55. The Committee desired to know whether there is any machinery for close coordination between the Centre and the regional departments of Education for the purpose of nominating teachers to take the special courses in Educational TV and for planning summer or short-in-service courses for teachers in the utilisation of TV and radio broadcasts in the classroom within courses of education media. The Ministry of Information and Broadcasting in a written note stated:

“The Educational Technology Unit of the Ministry of Education which has been set up under the Educational Technology Project of that Ministry, provides for necessary coordination between the Centre and the regional Departments of Education for the development of Educational Technology in various States. The Unit maintains close liaison with the State Government through the Educational Technology Cells which have been or are being set up in various States with Central assistance. The functions of the State Cells would include—

- (a) arranging the training of script writer and presenter teachers at the State level; and
- (b) conducting short courses for teachers in the utilisation of TV and radio broadcasts in the classroom."

4.56. In a memorandum submitted to the Committee, a view has been expressed that the present teacher training programmes are traditional, rigid and bogged down by a cast-iron syllabus following an obsolete curricular pattern.

Asked to comment, the Ministry of Information and Broadcasting in a written note have stated:

"The statement is rather exaggerated. All possible efforts are being made to improve the teacher training programmes to make them more and more relevant to the needs of the country. The NCERT has evolved a new syllabus for teacher training and has circulated it to all the States for adoption. A National Council for Teacher Education has also been recently set up to advise Government on all matters concerning teacher education including preservice and inservice training, evaluation of curricula for teacher education and periodical review of progress in revising curricula."

4.57. Asked about the response from the teachers for training programmes and the measures taken to bring TV as an instrument of teaching, closer to the teachers themselves so that they can have a sense of participation, the Director, TV stated during the course of evidence:

"At the moment educational TV is only at Delhi and we are telecasting it for Higher Secondary schools. In relation to the teachers there are two aspects. One is that, apart from the 16 lessons, we have been doing for the Higher Secondary students, there is one weekly programme for teachers' training. We have made some minor changes in the programme and also in timings. It need to be telecast in the morning and afternoon shifts with the result that the response was poor. Now this particular programme for teachers is in the recess period and the response is better. The point is that with the kind of resources, we have in Delhi, we are doing the maximum we can do. We are telecasting 17 lessons a week.

The second thing is about Co-ordination. I had mentioned that Co-ordination exists in two ways—at the planning stage and at the presentation or production stage. At the planning stage we are working along side with the Education Depart-

ment. We are telecasting programmes not for the public schools but for Delhi Administration schools. Now, how far we have been able to help is another matter but I am suggesting we do have full co-ordination in working out the syllabus and preparing the lessons."

He added:

"The programmes are being prepared by the reputed teachers. First of all, the Producers of our TV cell have a background of education; they came from teaching institutions. Secondly, the people who prepare the lessons are from the teaching faculties from various institutions. So, there is complete co-ordination at the planning and production stages of the programmes."

4.58 It has been stated by the Ministry of Information and Broadcasting that Delhi puts out half-an-hour programme per week for teachers. The Committee desired to know the category of teachers i.e., primary, secondary or college/university teachers for whom these programmes are telecast, their response to these programmes and whether any evaluation of the programmes has been made. The Ministry of Information and Broadcasting in a written note have stated:

"A weekly 20-minute programme is put out for teachers from Delhi TV station with a view to improving the teaching standards in Delhi schools. The normal school broadcasts, though intended for students, are also useful to the teachers in improving the quality of their methods. Both the school broadcasts and the teacher training programmes are intended for secondary level. Although no proper evaluation of these programmes has yet been made, there is sufficient response from the teachers of these programmes. The programmes are drawn up by AIR in close collaboration with the Delhi Administration. Experienced teachers serve as the script writers and the presenters in these programmes. Considering the limitation of resources, the present programmes are adequate and there is no proposal to increase the number of programmes for the time being. Constant endeavour is, however, made to improve the quality of these programmes."

4.59 The Committee desired to know whether the existing arrangements for the teacher training at pre-primary level, Primary level and secondary level are adequate to meet the educational requirements for TV and if not,

what steps are proposed to be taken to bring improvements in this regard. The Ministry of Information and Broadcasting in a written note have stated:

"Till recently, Delhi was the only State having TV coverage in the country. School broadcasts from Delhi TV station are intended only for secondary level. Arrangements for the training of secondary teachers exist through a weekly teacher training programme broadcast from Delhi TV station. Besides these broadcasts, the school broadcasts also help the teacher in improving their efficiency. Similar arrangements are being made in Bombay where enrichment programmes have already started for secondary schools and regular programmes, related to curricula are proposed to be introduced from next academic session. Jammu and Kishmir and Punjab which are the other two States having TV coverage, have not yet started school broadcasts.

The Centre for Educational Technology set up by the Ministry of Education will be examining this matter and evolve suitable programmes for teacher training at various levels."

4.60 The Committee are unhappy to note that no tangible progress has been made in teachers training programme so far even though the desirability of such programmes at various levels was emphasised by the UNESCO Commission as far back as 1969. It is only now that a Centre for Educational Technology Project of the Ministry of Education to evolve a suitable programme to undertake teachers' training. The Bombay and Srinagar TV Stations have already been commissioned but the educational programmes from these Stations are yet to start. This indicates that planners entrusted with the responsibility of teachers training programmes did not attach due importance to this aspect right from the initial stage and did not prepare proper plans therefor.

The Committee desire that the programme for teachers training and script writers at various levels, should be evolved expeditiously so that no time is lost in starting educational programmes simultaneously with the Commissioning of a TV Station.

4.61. The Committee note that a model syllabus for teachers' training schools has been circulated by NCERT with a view to improving the quality of teachers' education. The Committee suggest that a close watch should be maintained and periodical assessment made with regard to the improvements achieved in this regard with a view to bringing improvements wherever and whenever necessary as such programmes are a continuous process.

4.62 The Committee suggest that to bring the teachers' training in line with the modern methods, the syllabus and the methods of teachers' training followed by various countries having educational TV programmes, should be studied in depth to scout for significant ideas with a view to suitably adapting them as might be applicable to the Indian conditions and requirements.

4.63 The Committee recommend that a long term plan for promoting, organising and raising the quality of programmes and utilization of mass media for education both at the Central and State levels should be drawn and necessary guidelines laid down for close coordination at all levels for the successful implementation of the programmes and their periodical evaluation.

4.64 The Committee regret to note that no provision has been made in the teachers' training programme as regards training for teachers in Basic education. The Committee feel that as basic education is an important ingredient of educational system in the country, it is imperative that the TV programmes for teachers training should be suitably augmented to include to cater to the needs of training teachers in basic education.

4.65. The Committee note that an Educational Technology Cell has been set up by the Ministry of Education in the State of Maharashtra, the functions of which will inter-alia include training of user (i.e. Classroom) teachers and arranging the training of script writer and presenter teacher at the State level in adequate number.

4.66 The Committee desire that similar educational Technology Cells should also be set up in a phased manner in other States where TV Service is proposed to be started during the Fifth Plan period so that these States do not lag behind in meeting the requirements of educational TV.

4.67 The Committee are of the view that as and when teachers education programmes are produced for TV, these programmes, besides being a part of the course content of the teacher-training schools, should become an integral part of the correspondence course to upgrade teacher training.

4.68 The Committee recommend that as and when TV facilities are made available in a State, the Education Departments should be encouraged to install TV sets in the teacher training schools and the training programme outlined by NCERT in collaboration with the Teacher Training Institute.

4.69. The Committee are in agreement with the observation made by the UNESCO Mission that full potential of educational media cannot be realised until trained personnel are available in sufficient numbers to operate the systems as they develop. For this, the following types of training are necessary:

- (i) Training of educational planners in the application of mass media to educational system.
- (ii) Training of professional staff in the techniques and production methods of the media.
- (iii) Training of production personnel in the special method, which are applied to educational programmes and material.
- (iv) Training of selected educators, extension officers and other specialists in the organisation and management of media based systems of education and extension.
- (v) Training of all those field workers and teachers, monitors and group teachers, directly concerned with the utilization of media which prepares them to take their place as effective component in the system.

4.70 The Committee, therefore, recommend that the training programme should be drawn up keeping in view the above aspects if the educational TV programmes are to achieve fully their declared objectives.

4.71 The Committee recommend that nomination of teachers to take special courses in Educational TV as also to plan summer of short-in-service courses for teachers in the utilization of TV in the classroom should be made by the Educational Technology unit of the Ministry of Education in close coordination with the Central and States departments of Education to achieve the desired results.

4.72 The Committee suggest that suitable norm should be laid down for the selection of teachers for TV training and selection should be made on the basis of their standing in the profession, teaching experience in the subject and the like. Suitable incentives should also be given to the teachers to develop a sense of participation and to dispel their fear, if any, that TV is to promote education and not to replace them.

4.73 The Committee suggest that the existing syllabus for the teachers training including pre-service and in-service training should be evaluated in its entirety with a view to bringing it in tune with the present needs of the various regions of the country.

4.74 The Committee recommend that the existing arrangements for the teachers training at pre-primary, primary and secondary level as also the facilities available at the training schools should be reviewed to remove the deficiency, if any, and to bring about improvements. The training schools should also be equipped with modern libraries and technological devices to make them self-sufficient.

CHAPTER V

ORGANISATIONAL SET UP

5.1. According to the Indian Telegraph Act of 1885, as amended, the Government of India has the exclusive privilege of establishing, maintaining and working a broadcasting service. Since its inception, AIR has been a department of Government and its present status is that of an attached office of the Ministry of Information and Broadcasting. The Ministry is in charge of a Minister of State.

5.2. The Director General is responsible to the Ministry for the working of AIR as its executive head. He is appointed by the Government in consultation with the U.P.S.C. It is usual to appoint an officer of the programme cadre of AIR to be the Director General though the post is not specifically reserved for the cadre. There have been occasions when officers of the Indian Civil Service were also appointed as Director Generals of AIR.

5.3. The Television Centre of AIR is headed by a Director who is assisted by a number of officers such as Assistant Station Director, Engineer-in-Charge, Audience Research Officer, Administrative Officer, Programme Executives etc.

5.4. The Committee on Broadcasting and Information Media (1966) while discussing the organisational set-up of TV either by placing it under the aegis of AIR as an attached office of the Ministry of Information and Broadcasting or making it an autonomous Corporation had observed as under:

“This possibility (as an attached office of the Ministry of Information and Broadcasting) has to be ruled out as AIR is not organisationally and financially equipped to shoulder this responsibility. It would also be unfair to tag on television to AIR and expose it at its birth to prejudices which exist against AIR. On all these considerations we would strongly advise against the development and management of this new medium, requiring a dynamic and imaginative approach and ample resources being linked as an ancillary to an organisation which itself needs a major overhaul and refurbishing. We have been strengthened in this view by the opinion expressed by the

Director General himself that television should be allowed to develop as a separate entity unfettered by the inhibitions of AIR."

The Committee has further observed:

"The question will remains whether the new organisation should follow the pattern of AIR and become an attached office of a Ministry or whether it should be made autonomous corporation created by a special statute of Parliament. Having carefully considered the question in all its aspects, we have come to the conclusion that to develop on correct lines television must not be hampered by the limitations of a department, it should have a broader outlook, greater flexibility and freedom of action which the Corporate form alone can give. This view received near-unanimous support from the witnesses who appeared before us. Government should naturally have control over its policy in matters clearly set out in the statute and the right to issue directive whenever necessary. While discussing the future organisation of AIR we have already stated in detail the reasons for our recommendation that an autonomous statutory Corporation would be the best form of organisation for providing a broadcasting service. These considerations apply with equal if not greater force in the case of TV and do not need a repetition."

5.5. Asked by the Committee during the course of evidence about the action taken by Government on the above recommendation, the Secretary, Ministry of Information and Broadcasting replied:

"Government have agreed that TV organisation would be separated from AIR. A scheme to this effect has been prepared and is under submission to the Prime Minister."

5.6. Asked about the proposed organisational pattern for the future TV set up, the Ministry of Information and Broadcasting in their written note had stated that the question of future TV set up is under the active consideration of the Government and the details are yet to be finalised.

5.7. In a memorandum submitted to the Committee it has been suggested that an Advisory Board on TV consisting of the representatives of the Planning Commission, Ministries of Education, Information and Broadcasting, Agriculture and Health and Family Planning including free lance writers, educationists and film makers etc. should be constituted.

5.8. Asked to comment, the Secretary, Ministry of Information and Broadcasting stated:

"We agree to it. In fact a great deal of association already exists with the Ministries of Education and Agriculture, we are trying to ensure that these Ministries are closely associated in a consultative capacity with our new TV organisation. There would be representatives from the side of the journalism and culture on the Advisory Board of the organisation."

5.9. In a memorandum submitted to the Committee, it had been represented that so far there are no recruitment rules for TV personnel. The Committee desired to know the procedure for recruiting TV staff and whether any standard staffing pattern has been laid down. The Ministry of Information and Broadcasting in a written vote have stated:

"The entire question of the organisational set up of TV is under review of the Government and the staffing pattern specially suited to the needs of TV is being worked out. Therefore, the procedure for recruitment of TV staff being followed at present are only *ad hoc* and will be replaced as soon as the staffing pattern has been finalised."

5.10. The Committee Broadcasting and Information Media in their Report (1966) had observed that:

- (i) The Delhi TV Centre is overstaffed.
- (ii) The staff is not properly selected and is mostly untrained.
- (iii) The staff should be confined to uses within the organisation and allowed to specialise by being permanently absorbed.

5.11. Asked by the Committee whether the staffing pattern TV organisation been studied by the Staff Inspection Unit of the Ministry of Finance, the Director General, AIR stated:

"Staff Inspection Unit assesses the recruitment of my staff. TV station is like a complex factory. At every point everything is linked up with engineering aspect. It is not easily amenable to ordinary Staff Inspection Unit kind of norms or judgement....."

The representative of the Ministry of Finance stated:

"In the case of Delhi TV, if it is that the Staff Inspection Unit is not a fit organisation, a decision may be taken that for TV station there should be separate organisation for study and staff. But as the present orders of the Government stand, Staff Inspection Unit is supposed to study the staffing pattern of TV also. We have to work under the framework of the Government orders."

He added:

"According to our estimate, Delhi TV station is over-staffed and it has run for several years; we have been requesting that the staff Inspection Unit should make a study of the existing staff position and this request is outstanding for more than two years. We have said that unless the Staff Inspection Unit is permitted to go into the staff position and make a study of it, it is not possible for us to add to the staff of Delhi TV station."

The Secretary, Ministry of Information and Broadcasting stated:

"The Finance Ministry are quite right in saying that when they have to sanction staff for a TV station, they must have some norms by which to go. Their machinery for determining the norms is Staff Inspection Unit. This is a generalistic kind of unit. Over the years it has acquired expertise in certain areas like Government offices, Secretariat offices *i.e.* how many stenographers, Under Secretaries, Deputy Secretaries should be in a Ministry. But it has very wisely not gone into other newer and complicated fields of Government activity *e.g.* Staff Inspection Unit is not sent to Science Laboratories to decide how many scientific officers or people in various fields there should be. TV and Radio are very specialised fields of activity and, therefore, new instruments should be developed in the Government of India for determining the norms of these radio stations or TV stations."

He added:

"The Staff Inspection Unit has been wanting to go into TV station analysis, their staff strength, to fix the norm. I submit that there must be an association. There should be a body with experts in the TV field in order to fix these norms."

The witness further stated:

"I am just attempting an experiment. I have asked the UNESCO experts over here at our TV Training Institute to sit together and draw up a chart on the basis of their experience of TV in their country, of what the structure of a TV station should be in this country.... They have prepared a chart a few days ago and I am going to have a meeting with Directors of TV stations and our Financial Adviser and put this before them and they may try to assess to what extent the norms that they are suggesting are realistic and are applicable to Indian conditions. I hope, in this exercise, the Ministry of Finance will

cooperate and would be able to fix some norms and our basis of staffing in the TV stations would be established."

5.12. In their subsequent written reply, the Ministry of Information and Broadcasting informed the Committee that all the proposals for the creation of posts of various categories of staff have been scrutinised and approved by the Work Study Unit in the Director General, AIR.

5.13. With regard to the overstaffing, the Ministry of Information and Broadcasting in a written note have state:

"The Committee on Broadcasting and Information Media made this observation in 1966 when the general service of the Delhi TV Centre was of 1½ hours duration only. Today, this Centre is putting out a 4 hours' daily service. Therefore, the observation of the Committee made in 1966 is out of date now. In any case, the Work Study Unit of Director General, AIR has recently made a study of the Delhi TV Centre and has recommended the creation of a number of additional posts. Therefore, it is obvious that the Delhi TV Centre is not over-staffed at present."

The Ministry of Information and Broadcasting have further stated:

"The staffing pattern of TV stations is being finalised keeping in view the special requirements of this medium. Thereafter, Recruitment Rules for each post in the light of the staffing pattern decided, will be framed for each post and recruitment made in accordance with those rules. Meanwhile, the selection of staff for the various categories of posts has been done by duly constituted Selection Committees approved by Directorate from time to time taking into account the required qualifications for the posts.

The present procedure of screening candidates for production posts in TV which consisted of only on interview was found inadequate. Accordingly, a visual test and a conceptualisation test have also been introduced recently, in addition to interview. Instructions have also been issued to Selection Committees to look for a person who has a good social perspective and has a degree of intellectual commitment to social change and social improvement.

While recruitment has been made from among people found suitable for TV programming, training is imparted by turn to the new entrants at the TV Training Institute at Mandi House."

5.14. With regard to continuing the staff for utilisation in TV organisation, the Ministry of Information and Broadcasting have stated:

"As it is, the TV staff selected is confined to uses within the organisation. This allows them to acquire a fair degree of specialisation. The contract of TV staff is, by and large, allowed upto 55 years of age."

5.15. Explaining during evidence the difficulties regarding staff arrangements prior to the commissioning of a TV station, the Director General, AIR stated:

"Under the present arrangement, whether it is a radio station or a TV station, I cannot recruit anybody or post any programme staff of any category earlier than six months before a station is to start. Even for an ordinary post, I have to smuggle out from other stations. The minimum complement of programme staff to do the proper planning should be worked out in radio six months in advance."

Explaining the witness stated:

"If I had earmarked Mr. A or Mr. B for the next station, instead of his waiting for the station to come up, opportunities should be created to enable them to work with Delhi station so that he can learn by seeing how the Delhi station works. But, under the current arrangements, there is no way of doing it."

The representative of the Ministry of Finance stated:

".....In the case of TV.....there have been lots of backlog and many stations which were supposed to be commissioned at a particular time, have been back-dated by two years and even three years.

He added:

"If the Director General, AIR or the Ministry can say that a particular TV station will be commissioned by a definite date and he wants staff even in advance of one year, there should be no objection, provided he takes the responsibility about the definite commissioning of that station by a particular date....".

The witness further added:

"The Ministry have got a plan to work as to where the TV stations should be set up and they must have planned within the ambit of the Five Year Plans. But, for various difficulties, it has been found that it is not possible to anticipate accurately the time at which a particular station will be commissioned.

Therefore, to sanction staff, in advance of one year or more than that is very difficult. It will be a wastage of Government resources."

5.16. The Committee desired to know whether any study has been made of the terms and conditions of service of the staff of TV in other countries and whether the question of recruiting artists etc. for TV on short-term contract basis has been considered by the Government. The Ministry of Information and Broadcasting in a written note have stated:

"No study has been made of the terms and conditions of service of TV staff in other countries. It is felt that in view of the difference in the social and economic conditions obtaining in those countries and India, a direct comparison would not be valid."

5.17. The Committee note that Government have decided that TV organisation would be separated from A.I.R. and that its future set up is under their active consideration. Keeping in view the fact that the TV net-work is going to be progressively developed during the Seventies and that TV is far more sophisticated and complicated in the matter of techniques and operations requiring broader outlook, greater flexibility and freedom of action, the Committee feel that Government should examine in depth and arrive at a decision expeditiously about the nature of organisation that would be best suited for TV. As TV is a creative media, the organisational set-up should provide for flexibility and should be free from usual bureaucratic constraints.

5.18. The Committee note that the staffing pattern especially suited to the needs of TV are being worked out and that the procedure for recruitment of TV staff being followed at present on ad-hoc basis will be replaced as soon as the staffing pattern has been finalised.

5.19. The Committee also note that the question of going into staffing pattern and the staff position of TV by the Staff Inspection Unit of the Ministry of Finance has been pending with the Ministry of Information and Broadcasting for over two years.

5.20. The Committee suggest that the entire staffing pattern and staff position should be examined by the Staff Inspection Unit of the Ministry of Finance with which the experts in the field of TV may be associated. The Staff Inspection Unit should inter-alia lay down suitable norms of the staff in various categories.

5.21. The Committee suggest that a comparative study of the terms and conditions of service, recruitment rules and staffing pattern etc. obtaining in other countries well-established in TV such as UK, USSR, Italy, Canada etc. may also be made with a view to suitably adapting them as are applicable, in accordance with the Indian conditions.

5.22. The Committee note that association and coordination with the Ministries of Education, Agriculture, Health and Family Planning is only on ad hoc basis and there is no regular coordinating body. The Committee, therefore, recommend that with a view to having a closer coordination and efficient functioning of the organisation in the field of education, health and family planning and agriculture etc., the question of setting up an Advisory Board on TV consisting of the representatives of the Planning Commission, Ministries of Education, Health and Family Planning, Information and Broadcasting, Agriculture as also eminent artists, writers, educationists and film makers etc. may be considered.

5.23. The Committee further suggest that local Advisory Committees consisting of eminent educationists, artists, social workers etc., may be attached to each TV Broadcasting Station to advise on TV programmes also to give a sense of public participation in the working of the Television system.

5.24. The Committee desire that question of deployment of the necessary staff in advance of the commissioning of a TV station should be settled in consultation with the Ministry of Finance.

NEW DELHI;
April 27, 1974.
Vaisakha 7, 1896 (S)

R. K. SINHA,
Chairman,
Estimates Committee.

APPENDIX I.

Statement Showing Summary of Recommendations

S. No.	Reference to para No. of Report	Summary of recommendations
1	2	3
1	1.8	<p>The Committee note that introduction of T.V. in India has had a low priority and that it was only during the 4th Plan that expansion of TV net work in the country was seriously thought of. They agree that other pressing problems like agricultural and industrial development, employment, education etc., facing the country, required higher priorities compared to Television. Now the Government have taken a decision to expand the TV net work in the country, the Committee would like to sound a note of caution that extreme care should be taken in regard to planning and programming of TV broadcasts in the country. It is to be realised that TV medium, as an audio-visual medium, is very powerful for mass-communication and has a unique role to play in this regard. It is an important means of transmission of messages relating to national development. It can play a vital role in the successful implementation of Five Year Plans and accepted national socio-economic policies. The Committee recommend that Government should learn a lesson from the experience gained in the use of this medium in foreign countries and its effect on the viewers and carefully plan the use of this powerful medium for nation building activities and for achievement of socio-economic objectives, besides providing healthy entertainment, by directing it in proper channels.</p>
2	2.28	<p>The Committee note that the Fourth Five Year Plan envisaged completion of six mother TV stations viz. Bombay, Srinagar, Madras, Calcutta, Lucknow and Jullundur and Seven Relay Stations at Poona, Amritsar, Kasauli, Kanpur, Asansol, Kharagpur and Mussoorie at an estimated cost of Rs. 23 crores. It was estimated that on the completion of these projects, the all India coverage of the population by TV service would be about 16.8% and 7% of population in the rural and urban areas respectively.</p>

The Committee also note that only two TV mother stations at Bombay and Srinagar and two relay centres at Poona and Amritsar have been commissioned and that the achievement in terms of population coverage will be 4.7% only (till March, 1974), of which 2.5% will be in the rural areas and 2.2% in the urban areas, the remaining TV stations/relay stations being spilled over to the Fifth Plan period.

The Committee are unhappy at the slow progress in the execution of the television projects/schemes during the Fourth Plan period.

The reasons for the slow progress in the implementation of the TV scheme have been mainly attributed to the time taken in the acquisition of site, revision in the scope of the project, decision to revise the specifications of TV towers in the case of certain TV stations and delay in supply in the equipment etc.

The Committee are constrained to observe that there has been lack of proper initial planning and estimation which necessitated revision in the scope of projects at a later stage resulting in delays in the execution of the projects.

The Committee need hardly emphasise the desirability of close coordination and concerted efforts at all levels of planning and implementation of schemes/projects to achieve the desired results.

The Committee feel that in the light of the experienced gained the reasons retarding the progress in the implementation of the plan schemes should be indentified and the existing arrangements for coordination and the implementation of the schemes reviewed in their entirety with a view to streamlining the entire arrangements to ensure smooth implementation of the schemes in future.

The Committee need hardly emphasise that continuous review of progress is of vital importance for ensuring successful and timely implementation of projects. There should be annual performance review of the schemes which should be incorporated in the Annual Report of the Ministry.

The Committee note that acquisition of land for TV station/relay station takes anything between one to three years because of legal difficulties and financial constraints and that the normal time schedule for their completion is between three and four years.

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The Committee also note that at times, there is delay in the procurement of equipment for schemes/ projects as the normal procedure for ordering them through DGs&D has to be followed.

The Committee are strongly of view that the whole procedure for acquisition of land and procurement of equipments etc. has to be rationalised.

4 2.39 It was brought to the notice of the Committee that the Ministry of Finance has been approached for their concurrence in initiating advance action for the acquisition of sites and ordering of equipment etc. required for the TV/relay stations proposed to be set up during the Fifth Plan period and that their formal concurrence was being awaited. The Committee would like to be apprised of the final decision taken in this regard.

5 2.40 Television programme in new to the country and it is therefore imperative that the Ministry charged with the responsibility for implementation of the programme should be vested with adequate powers to initiate timely action in the matter of acquisition of land and the ordering of equipments etc. for new TV stations. The Committee would like Government and the Planning Commission to examine whether some additional funds could be specifically earmarked and made available for taking such advance action. Government should also consider the question of the Ministry of I & B. being authorised to place orders direct on public undertakings such as Bharat Electronics and Triveni Structural for supply of equipment in the interest of speedier execution of projects.

6 2.41 The Committee recommend that keeping in view the problems inherent in the acquisition of land, delivery of equipments, managerial build-up and organisational set up a realistic time bound schedule for completion of the various TV schemes in hand and those proposed to be taken up during the Fifth Plan period should be drawn up and effective measures taken to ensure proper and close coordination at all levels to ensure implementation of the schemes according to the schedule.

7 2.42 The Committee suggest that necessary steps should also be taken simultaneously to seek active cooperation of the State Government concerned where TV/relay station is proposed to be set up in sorting out the procedural delays in the acquisition of sites and necessary procedure evolved to maintain close coordination with the State machinery for the purpose.

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8	2.43	<p>The Committee feel that there is need for a realistic re-assessment of the capacity of the indigenous suppliers of TV equipment etc., particularly B.E.L. to meet within the assumed time schedule, the requirements of the schemes/projects proposed to be taken up during the Fifth Plan period both the spilled over schemes as well as the new schemes, based on such a reassessment a time bound programme for the supply of indigenous equipment required for TV/relay stations should be drawn up in consultation with the Department of Electronics and B.E.L. and necessary procedure evolved for proper and close coordination to ensure that the implementation of any TV/relay stations is not held up for delay in the supply of equipment etc.</p>
9	2.44	<p>The Committee are concerned to note that the estimated outlay on the schemes which were originally included in the Fourth Five Year Plan, increased from Rs. 6.40 crores only to Rs. 16.29 crores at the time of the Mid-term Appraisal and is now anticipated to rise to Rs. 31.60 crores, i.e., an increase of about five times of the original estimates. Similarly, the estimated expenditure on four other schemes which were included in the Fourth Plan, during Mid-term Appraisal (1971), has risen from Rs. 6.45 crores to Rs. 10.10 crores. The rise in the estimated cost has been attributed to escalation in the prices, revision in the scope of projects etc. The Committee strongly feel that the original estimates of the various projects/schemes were not only framed in a rather unrealistic manner but the wide variations in the original estimated costs and the latest revised costs also indicate the casual manner in which the cost of the schemes were estimated originally. The Committee realise that in a developmental economy, rises in costs are likely to occur but then the estimates should provide for such escalations in cost to enable Government to consider the schemes in a realistic manner before sanctioning them. The Committee feel that such wide variations between the original estimated cost and the final costs of the projects, vitiate the very basis on which these schemes are approved by Government. The Committee strongly recommend that not only this tendency should be curbed effectively but the responsibility for such abnormally unrealistic estimates should be fixed to avoid recurrence of such cases in future.</p>
10	2.45	<p>The Committee need hardly stress the need to step up the progress in respect of the TV schemes in hand so as to complete them as early as possible as further delay in their completion would involve higher cost due to continued escalation in prices.</p>

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11 2.54 The Television Centre at Srinagar is yet another example of unrealistic planning and estimation in respect of the cost of the project. In the case of certain items, provision was made on assumptions which did not prove to be correct. The Committee hope that keeping in view the experience gained every possible care would be taken in framing a more realistic estimate of the proposed augmentation of the television facilities at Srinagar which are estimated to cost Rs. 3 crores and effective measures would be taken to ensure proper coordination at all levels of planning and implementation of the scheme to avoid any delay in the execution of the project.

12 2.55 The Committee note that the T.V. station at Srinagar which started operation on low power antenna has switched over to normal antenna with effect from 6-11-73.

The Committee note that out of 550 community viewing centres proposed to be selected, 440 centres have been selected of which 150 centres have been provided with community viewing T.V. sets.

The Committee desire that immediate steps should be taken to finalise the remaining community viewing centres and to provide them with T.V. sets expeditiously, so as to extend T.V. service to these areas also without delay.

13 2.58 The Committee would like that the question regarding electrification of the villages/locations selected for T.V.s service where T.V. reception is expected to be good but power is not available should be taken up with the State Government.

14 2.59 The Committee note that in view of the fact that the All India Radio has been responsible for the maintenance of the community receivers for sound Broadcasting in the State of Jammu and Kashmir, the existing organisation for maintenance of these receivers is proposed to be augmented suitably for the maintenance of community T.V. sets also under the central responsibility.

The Committee would like Government to carefully evaluate the experience of the working of community sets in Jammu and Kashmir so that in the light thereof, guidelines could be evolved for the location of these viewing centres as well as for the upkeep and efficient maintenance of community T.V. sets. The Committee feel that unless the maintenance of community sets and their efficient

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functioning is assured it would hardly be possible to extend the benefit of television to the rural masses as the present cost of sets is too high for an ordinary farmer to afford its luxury.

15 2.61 The Committee also stress the need for intensified research so as to evolve a T.V. set which would be hardy and render trouble-free service over a period and which could be maintained and repaired easily and economically. As many of the villages may not have electricity, though coming in the command area of the television centre, it is necessary to speed up the development and manufacture of transistorised television sets within the country for establishing viewing centres in such villages.

The Committee would like to be informed within six months of the concrete action taken and progress achieved in pursuance of the above recommendations.

16 2.70 The Committee are distressed to note the manner in which the Jullundur T.V. Scheme has been dealt with at various stages. The proposal to set up Jullundur T.V. Station with relay centres at Kasauli, Amritsar and Bhatinda was initially estimated to cost Rs. 3.5 crores. This was subsequently revised to cost Rs. 9.761 crores to provide cent percent population coverage in Punjab. The proposal was again amended to cost Rs. 9.08 crores on the advice of the Ministry of Finance. On further examination the cost of the scheme was reduced to Rs. 7.38 crores by the Ministry of Finance. Finally the scheme was approved at an estimated cost of Rs. 5.50 crores by completely deleting the provision for staff quarters, one relay centre at Bhatinda, studio facilities at Jullundur. The main reason for the rise in the cost of the scheme from Rs. 3.5 crores to Rs. 5.50 crores has been attributed to increase in the cost of site at Jullundur, increase in the complement of film equipment now found to be necessary, higher cost of building, increase in the cost of equipment to be supplied by B.E.I. etc.

The Committee trust that specific provision has been made in the revised estimates for likely increase in the prices by the time, the project would be executed.

The Committee feel that the existing system of coordination should be reviewed thoroughly with a

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view to streamlining the procedure of framing scrutinising and sanctioning the schemes/projects and, if necessary suitable guidelines laid down in this regard.

17 2 '73 The Committee note that the site for the location of the studio centre at Jullundur has been taken over and that the site for the transmitter at Jullundur and relay centre at Kasauli has been provisionally selected. The Committee desire that concerted efforts should be made to acquire the transmitter site at Jullundur and for relay centre at Kasauli expeditiously.

18 2 '74 The Committee are unable to appreciate the manner in which the setting up and commissioning of the Amritsar Transmitting Station had been planned as the very purpose for commissioning it on war emergency had been defeated. The transmitting station which was originally scheduled to be commissioned in April, 1972, was completed in November, 1972 and the service was started only in September, 1973.

The Committee are surprised to note that setting up of the Amritsar Transmitting Station was taken up without making any assessment of the programme requirements for telecasting and without making adequate arrangements for their production and availability simultaneously with the commissioning of the transmitting station. The result was that though the installation of the transmitting station was completed in November, 1972, service from the station could be started only in September, 1973 when arrangements for the production and recording of the programme to be telecast from the transmission station were made at the Delhi TV Station after its renovation. This again goes to show lack of advance planning and effective coordination between all authorities concerned with the implementation of the projects.

19 2 '84 The Committee note that there has been delay of more than 2 years in the expansion of Delhi T.V. Centre. They consider that this delay was not mainly because of the difficulty in the acquisition of site for the transmitter complex but because of faulty planning in the selection and finalisation of a suitable site necessitating changes in the sites for one reason or the other.

The original proposal to locate the transmitter complex alongwith the tower in the projected N.D.M.C. building had to be abandoned because of the limitation imposed on height of the building in that area. The two alternative sites selected at Mandi House and the

Exhibition ground had to be dropped because of objections raised by the Directorate General, Civil Aviation and Air Headquarters necessitating a survey for the selection of alternative sites.

The Committee desire that effective steps should be taken to sort out the issues involved in the transfer of, the finally selected site near the Hindu Rao Hospital Delhi for the transmission complex expeditiously to avoid further delay.

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The Committee note that in the Union Territory of Delhi, 68 TV sets have been provided in the Community viewing centres in the rural areas as against 166 TV sets provided in the urban areas.

The Committee cannot understand why the number of community viewing centres in the rural areas of the Union Territory of Delhi should be only 68 when the community viewing area in the rural sector within the command of Delhi T.V. station is over 446 sq. miles. The Committee would like Government to review the working of the existing rural T.V. centres and take effective measures to increase the community viewing centres in the rural areas. The Committee have elsewhere in the report given recommendations about the need for efficient maintenance of T.V. sets at the community viewing centres and they would like Government to keep these recommendations in view while establishing more community viewing centres in the rural areas of Delhi.

The Committee would like to be informed of the progress made in this behalf within six months.

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The Committee are unhappy to note that the Lucknow TV Station scheduled to be completed in the Fourth Plan period, will now be completed and commissioned in the Fifth Plan period as the Lucknow T.V. Scheme too has been a victim of the land acquisition problem which has been one of the major causes for the slow progress in the implementation of the various T.V. Schemes.

The Committee earlier in the Report have expressed the view that in the light of the experience gained, it is imperative to have the existing administrative procedures simplified and to initiate advance action for the acquisition of land and ordering of equipment etc. to cut down delays and to avoid escalation in cost.

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The Committee desire that concerted efforts should be made both at the Central and State level to finalise the site and to complete the acquisition proceedings expeditiously.

22 2.101 The Committee note that a separate T.V. Cell has been created in the Directorate General, A.I.R. to ensure undivided attention to T.V. projects. The Committee would like to be apprised of the results achieved in the expeditious execution of this project with the setting up of the T.V. Cell in the Directorate-General, A.I.R.

23 2.103 The Committee hope that the Studio equipment procured for the Lucknow T.V. Station and diverted for utilisation at the Base Production centre for Satellite at Delhi would be available in time for installation and commissioning of Lucknow T.V. Station.

24 2.116 The Committee regret to note that the Calcutta T.V. Scheme is yet another case of unrealistic planning and under estimation of the expenditure involved in the scheme. The Scheme which was originally estimated to cost Rs. 99 lakhs was subsequently revised to cost Rs. 190.59 lakhs and is now estimated to go upto Rs. 760 lakhs.

25 2.117 The Committee are not satisfied with the manner in which the whole question regarding finalisation of the site of Calcutta T.V. and its acquisition has been dealt with. The process of selection and acquisition of site was started as far back as September 1969 and its finalisation and acquisition took more than four years. The acquisition formalities are yet to be completed.

The Committee are of the view that with more concerted efforts and close and proper coordination among the authorities concerned the period taken in the selection, finalisation and acquisition of the site could have been reduced considerably.

The Committee desire that effective measures should be taken to complete the acquisition formalities in respect of the site finally selected for the Calcutta T.V. Centre expeditiously.

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26	2.120	The Committee would also like Government to finalise the contract for the construction of the T.V. building at Calcutta without delay so that the construction work could be taken up and the T.V. station commissioned according to the revised schedule.
27	2.121	The Committee note that bulk of the T.V. equipment procured for Calcutta is proposed to be diverted to Base Production Unit at Cuttack for production and pre-testing of programmes for Satellite T.V. experiment.
		The Committee would, however, like to stress that adequate measure should be taken to maintain and safeguard the remaining equipment from any damage that might be caused due to passage of time.
		The Committee would also like to emphasise that effective measures should be taken by Government to ensure the timely availability of the equipment so diverted so that the commissioning of the T.V. station at Calcutta is not delayed for want of equipment.
28	2.124	The Committee note that the State Government of West Bengal have agreed to meet the additional expenditure to the tune of Rs. 25 lakhs for installing a T.V. studio as an interim arrangement for telecasting the programmes till a permanent T.V. station is commissioned at Calcutta. The Committee hope that the equipment procured for the temporary T.V. Studio at Calcutta would be gainfully utilised after the commissioning of a permanent T.V. station at Calcutta and that there would be no loss on this account.
29	2.125	The Committee note that the sites for T.V. relay centres at Asansol and Kharagpur have been provisionally selected and their clearance from the Air Force authorities is still awaited.
		The Committee desire that in the light of experience gained, effective measures should be taken to finalise and to acquire in time the sites for the transmitting stations at Asansol and Kharagpur.
30	2.127	The Committee also note that tenders for the supply of transmitting equipment and accessories for these transmitting stations have been invited from M/s Bharat Electronics.

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The Committee desire that the question regarding placing of order with M/s Bharat Electronics Ltd., for the equipment required should be finalised expeditiously and a well coordinated plan drawn up for the procurement of the equipment both indigenous and imported to ensure commissioning of these centres along with the commissioning of the Calcutta T.V. Station.

31 2.134 The Committee note that the Commissioning of the Madras T.V. Station scheduled for September, 1974 has been delayed by six months and the T.V. Station is now scheduled to be completed by the *end of 1974. The reason for delay in the commissioning of the T.V. Station has been attributed to the subsequent decision to increase the height of the tower from 150 M to 175 M to provide facility for installation of another antenna for a second channel service in future.

The Committee desire that effective measures should be taken to ensure that the revised schedule of commissioning of Madras TV station is adhered to.

32 2.136 The Committee have elsewhere in the Report emphasised the desirability of taking all precautionary measures to maintain and safeguard the remaining equipment from any damage where bulk of the equipment is proposed to be diverted to some other TV station.

33 2.137 The Committee have also elsewhere in the Report stressed the need for proper and close coordination at all levels to ensure the timely availability of the equipment so diverted so as to ensure that the commissioning of a TV Station is not delayed for want of equipment.

34 2.151 The Committee note that in May, 1972, the Planning Commission had set up a Steering Group on Communication and Broadcasting in connection with the formulation of the Fifth Plan proposals. The shelf of the projects originally prepared involving an estimated expenditure of Rs. 179 crores—Rs. 94 crores for Sound Broadcasting and Rs. 85 crores for TV was subsequently revised to Rs. 501 crores—Rs. 193 crores for Sound Broadcasting and Rs. 308 crores for T.V. Subsequently it was further revised to Rs. 341 crores—Rs. 137 crores for Sound Broadcasting and Rs. 104 crores for TV—for setting up 3 mother stations at Cuttack, Hyderabad and Patna and 17 relay stations. The Committee further note in the Draft Fifth Plan, a provision of Rs. 80 crores only has been made for the development of T.V.

*If the time of factual verification the Ministry of Information and Broadcasting have stated that the TV station would be completed by March, 1975.

The Committee feel that the process of framing and finalising the proposals for T.V. schemes to be undertaken in the Fifth Plan, has taken an unduly long time. The Committee are of the view that with a more realistic approach and better coordination at all levels the Fifth Plan TV schemes could have been finalised much earlier leaving sufficient time to initiate advance, action for the implementation of the proposals according to schedule as it takes several years for a TV project to be commissioned.

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The Committee are of the view that if it is desired to create a truly mass-oriented nation-wide television system in the country, a large percentage of the outlay should take into consideration the capital and operational cost of community viewing TV sets as the prevailing high prices of the TV sets have made them beyond the reach of common man and the installation and maintenance of community viewing sets would be a formidable and expensive proposition.

The Committee therefore feel that unless this fact is recognised and taken into cognizance in the development of TV in the Seventies, television would become a conventional entertainment for the affluent sections of society and the very purpose of its introduction to achieve the national objectives in bringing about environmental changes and Scio-economic developments through this powerful medium would be defeated.

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The Committee, while recognising the role that television can play in social and economic development are aware of the overall constraints of the resources, and country's pressing priorities like food, employment, industrial development etc. They feel that the programme for the development of a technically complex and expensive service like TV has to be planned on long term basis and implemented in a phased manner.

The Committee, therefore, agree that the investment on TV development programme during the Fifth Plan may cover spill over schemes and such viable schemes which would further the objective of socio-economic development.

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37 2.157 The Committee have in paragraph 7.38 of their 39th Report (Fifth Lok Sabha) observed that although 23.4 percent of the villages in the country have been electrified, there are wide disparities in the provision of electricity in the various States. While there are States like Haryana and Tamil Nadu where practically every village has been electrified there are States like Assam where only 3.3% of the villages have been electrified.

The Committee are strongly of the view that if TV has to be developed in the country as a powerful medium to play a vital role in meeting the communication gap, spreading literacy and modern agricultural technology and for achieving the socio-economic objectives, the TV system in the country has to be phased as far as practicable in harmony with the programme of rural electrification as almost 80% of the Indian population to day lives in villages. As it may take a long time before most of the rural areas are electrified Government will have to depend largely on Transistorised T.V. sets so that the unelectrified villages coming in the command area of Television Centres also benefit from the T.V. media.

38 2.159 The Committee have elsewhere in this Report recommended the development and manufacture of transistorised T.V. sets on priority basis to meet the needs of T.V. Community Viewing Centres in rural areas. The Committee would like to see significant development in this field in the Fifth Plan period.

39 2.173 The Committee note that the Fourth Plan envisaged completion of 5,000 kms of broad-band microwave links for TV network connecting Delhi to Bombay, Bombay to Calcutta, Calcutta through Lucknow to Delhi and down from Lucknow towards Jabalpur. In the Srinagar side, Delhi-Jullundur-Srinagar were anticipated to be connected with broad-band microwave links. In terms of achievement, however, only 3,000 kms microwave links are likely to be completed by the end of the Plan period and the remaining 2,000 kms would be spilled over to the Fifth Five Year Plan. The Committee further note that a tentative target of 15,000 kms of broad-band and narrow band microwave system (Broad band

10,000 to 12,000 kms including spill-over of 2000 kms from the Fourth Plan) has been proposed during the Fifth Plan period.

The reason for not achieving the target of 5000 kms of broad-band microwave is mainly attributed to slippage both as regards indigenous development and in placing orders on firms in Canada and Hungary for supply of equipment from abroad. The equipment from Canada would only meet the part requirement for connecting Delhi-Bombay-Calcutta-Delhi routes while another order for supply of equipment for Bombay-Madras, Mangalore and Trivandrum routes has been placed with a Hungarian firm.

The Committee are constrained to observe that the whole planning as regards laying down the targets and drawing up the programme and completing formalities for supply of equipment has been unrealistic.

The Committee stress that there should be close coordination between the AIR and the Department of Posts and Telegraphs so that the requisite broad-band microwave links are available for extending the range of coverage as soon as the planned TV stations are commissioned. The Committee would like Government to prepare an integrated plan for the purpose and take concrete measures to implement the same.

40 2.177 The Committee feel that high priority should be given to development and manufacture of broadband microwave equipment within the country to meet the ambitious targets laid down in the Fifth Plan.

41 2.186 The Committee are unable to appreciate the circumstances in which an agreement for a Satellite Instructional Television Experiment (SITE) was signed in September, 1969 with the US National Aeronautics and Space Organisation for the purpose of gaining experience in the use of Satellite for television propagation.

(i) The whole technology of receiving signals direct from the satellite into television receiver is untried.

(ii) The cost on this experiment is estimated at Rs. 9 crores.

(iii) Even if the experiment is successful, the satellite will be available for one year only.

(iv) The possibilities of having our own satellite are very remote as the costs of launching a satellite are prohibitive.

(v) The TV receiver sets required for receiving programmes from satellites are costlier and it is not certain whether the same could be used for terrestrial receiving programmes from the normal TV transmitters.

It is a moot point whether in the present developmental stage of the country, the financial constraints as well as the requirements of resources for other priority items, it was a wise step for the Government to have gone in for this experiment. Since the whole programme is in an advanced stage and the satellite is expected in 1975, the Committee would like Government to exercise utmost economy in the implementation of this programme and to ensure that maximum benefit is derived from the scarce financial resources that are being spent on this costly experiment.

42 2.188 The Committee are of the view that the comparative costs, as indicated by the Ministry of Information and Broadcasting, do not decisively favour any one particular type of TV system in the country. Before making any choice among the TV technologies, important factors like (i) speed at which the technology can help in establishing a nationwide TV system subject to national constraint of resources; (b) the extent to which the system can offer flexibility in building the TV system and (c) the extent of the risk of failure involved in a particular technology will have to be taken into consideration.

43 2.189 The Committee are strongly of the view that considering the magnitude of the expenditure involved, the complexity of the hardware and software involved the question of developing a nation wide pure satellite system terrestrial system hybrid system or a mix of the system of TV would require critical evaluation in its entirety in consultation with the Departments of Space and Communications and other authorities concerned after evaluating the experience gained during one year SITE experiment and keeping in view the following aspects in respect of Satellite system:

(i) The suitability of the new untried technology and its economic viability for the country having wide language and cultural diversities;

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- (ii) International constraints on power and radio band width on telecommunication;
- (iii) Scope and possibility of using a nationwide satellite system for other communication purposes
- (iv) Availability of the regional or state TV sub-stations for a nationwide satellite system.
- (v) The extent of self reliance and self-sufficiency in ground and space technology and in software development.
- (vi) Manpower requirement for production, transmission and maintenance of the specially designed TV sets for direct reception from the satellite and recurring and non-recurring expenditure involved.
- (vii) Vulnerability of the Satellite during enemy hostility as compared to terrestrial TV and security problem relating to its operation and the possibility of using one or more channels of the satellite by an unfriendly country for propaganda purposes.
- (viii) The extent of benefits as compared to the cost.
- (ix) Limited life of the Satellite necessitating investments at intervals of 5 to 7 years.

The Committee would like Government to examine the recommendations of INSAT task Force in depth keeping in view the above mentioned aspects as also the economic viability of the Satellite system and also Indian capability of launching a Satellite.

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The Committee note that the Satellite experiment (SITE) which was due to commence in 1972-73 will now commence in June, 1975. The reason for delay in the launching of the Satellite has been attributed to the slippage in the NASA schedule in granting the contract for building the Satellite and subsequent decision to conduct a similar experiment in USA. The Committee also note that the cost of the Satellite originally estimated at Rs 6.36 crores has been revised to Rs 9 crores because of delay in launching the satellite earlier estimates being tentative, rise in the cost of material and the additional items which were not originally budgetted for.

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The Committee feel that since it was known as early as January, 1971 that there would be a delay of about 18 months in the availability of Satellite to India, it should have been possible to frame a more realistic estimates for the Satellite programme keeping in view the various factors that were likely to result in the escalation of overall cost. The Committee cannot but reiterate that the whole process of framing and scrutinising the estimates should be streamlined with a view to framing estimates on a more realistic basis.

45 2.196 The Committee note that out of 500 villages tentatively selected in each of the six States viz., Bihar, Rajasthan, Orissa, Madhya Pradesh, Andhra Pradesh and Mysore, only 400 villages in each of these States would be finally selected for the SITE experiment by physically visiting these villages.

The Committee hope that final selection of the villages would be completed well in advance of the SITE experiment and in order to gain widest possible experience, the cluster of villages to be covered with SITE experiment, would be selected taking into consideration the backwardness of the region, their culture, linguistic and agricultural background.

46 2.198 The Committee desire that efforts should be made to ensure the availability of sufficient inputs and infrastructure facilities to the selected villages so that the techniques suggested in the programmes are adopted in those villages and full benefit of the experiment is derived.

47 2.205 The Committee note that for the SITE instructional programmes, the AIR is primarily responsible for the software segment i.e. production of the programmes for the SITE for which Base Production centres are being set up at Delhi (for Rajasthan & Bihar), Cuttack (for Orissa and Madhya Pradesh) and Hyderabad (for Andhra Pradesh and Karnatak).

The Committee also note that a total number of programme hours required for the SITE experiment is estimated to be 1500 hours, of which 360 hours will be for viewing by children in schools and for teacher training.

The Committee further note that about 200 hours of ready made programme would be available and that the actual programming required to be done would be approximately 900 hours of general programme and 360 hours of programme for school and teacher training.

The Committee desire that concerted efforts should be made to ensure that the required number of hours of capsuled programme is ready in accordance with the requirements of the various regions, keeping in view their language, agricultural practices, food habits, social customs and culture and economic conditions etc. well in advance of the launching of the Satellite in close co-ordination with the State Governments concerned and other agencies like Ministries of Education, Agriculture, Health and Family Planning, National Council of Agriculture Research, Film Division etc. to derive the maximum benefit from the SITE experiment.

48 2.209 The Committee note that the audience profile studies for Andhra and Mysore region have been completed and that studies in other regions are under way.

The Committee desire that concerted efforts should be made to complete the audience profile studies in the remaining regions to ensure that the programmes are formulated in accordance with the requirements of the various regions.

49 2.211 The Committee note that the man-power requirements for the production, transmission and training for the SITE programme have been worked out and that some staff has already been recruited and others are in the process of being recruited. The Committee trust that the staff would be in position in time for the assigned task to implement the SITE programme.

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50 2.212 The Committee note that during the Fifth Plan itself it would not be possible to launch our own Satellite, continuing the programme of SITE. The Committee, therefore, consider it imperative that the three mother stations at Hyderabad, Cuttack and Patna with necessary micro-wave links required for continuing the SITE programme are established and are operational before June, 1976 at the latest to feed the programme to the six clusters of villages being selected for the SITE programme after the Satellite moves away after a year.

51 2.220 The Committee note that a detailed scheme has been worked out for the maintenance and operation and availability of specially designed TV sets which would be working on a module system.

The Committee hope that availability of sufficient spares as also of adequate number of spare TV sets as stand by for replacement as and when necessary would be ensured for smooth and efficient operation of the community viewing sets in the cluster areas.

52 2.222 The Committee suggest that a suitable machinery might be evolved to maintain a close coordination with the State Governments concerned and to ensure proper functioning of the TV sets in the six cluster areas.

53 2.223 The Committee elsewhere in the Report have suggested that suitable guidelines should be laid down for the upkeep and efficient maintenance of the community viewing TV sets.

54 2.229 The Committee note that, at present, the import content in T.V. transmitter is of the order of 40 per cent while in the case of studio equipment, it is 80 per cent.

The Committee also note that the electronics industry is rapidly moving towards greater indigenous capability and production and that part of the transmitter and studio equipment is being supplied by BEL and to what extent the equipment has also been standardised.

The Committee further note that items like video type recorders, sound mixers for programme and announcer studios, 16 mm film equipment etc. are still required to be developed and produced indigenously and that they account for significant foreign exchange.

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The Committee are of the view that in order to establish indigenous production of the items being imported, it is necessary that a developmental plan should be drawn up and intensive efforts made to accelerate the space of research and development to yield the maximum results in the shortest possible time.

The Committee would like the Department of Electronics to prepare an integrated plan in consultation with the Ministry of Information and Broadcasting so that our country can become self-reliant in this sensitive mass media of communication at the earliest. The Committee would like to be informed of the concrete measures taken in pursuance of the above recommendations within six months.

55 **2.234** The Committee desire that a firm assessment of hardware requirements for the developmental programme of T.V. during Fifth Plan period should be urgently made. Orders for the same should be placed on the suppliers well in advance keeping in view the lead time required for production and delivery so that the equipments etc. are available in time for proposed T.V. projects.

56 **2.239** The Committee are in agreement with the observations made by the UNESCO Commission in their Report on Television Development and Training in India that with the coming up of the TV Stations into operation, there would be extensive requirement of inputs of film material for which it would be necessary to draw upon 16 mm film technology fully responsive to the needs of the television stations.

The Committee note that four TV Film Production Centres for producing TV films and documentaries are proposed to be set up by the Films Division at New Delhi, Bombay, Calcutta and Madras involving an outlay of Rs. 118.16 lakhs each during the first six years.

The Committee have dealt with this subject in detail in paras 1.66 and 1.67 of their 59th Report (5th Lok Sabha) on Films Part-II.

57 **2.242** The Committee note 60% of the TV Programmes are at present either studio based or video-taped. There is need to diversify the programmes, with greater accent on covering subjects of interest, outside the studio not only to meet the cultural, linguistic and socio-economic requirements of the regions but also to ensure larger participation of the people. The Committee would urge Government to take necessary actions to achieve the above objectives at the earliest and use the production technology which may be best suited to achieve optimum results.

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58 3.22 The Committee note that out of a total of 549 Higher Secondary Schools and 395 Middle Schools in Delhi, 424 Higher Secondary Schools and 90 Middle Schools have been provided with educational TV Sets leaving 125 Higher Secondary Schools and 305 Middle Schools still uncovered with TV service. The Committee further note that only 4 community TV centres have been provided for the benefit of physically and socially handicapped children.

The Committee feel that the progress made in providing educational TV sets particularly to the Middle Schools and for the physically and socially handicapped children since 1964-65 has not been satisfactory.

The Committee hope that in the Fifth Plan period every endeavour will be made by the authorities concerned to provide TV sets in all the Higher Secondary and Middle Schools and the institutions of the physically and socially handicapped children.

59 3.25 The Committee regret to note that while an expert had recommended as early as 1960 gradual extension of TV service to primary schools and that while there has been an increasing realisation of the need for much larger TV media support for the primary schools for several reasons, nothing has been done to provide TV service in these schools so far and this matter is still being examined in consultation with the various authorities concerned.

The Committee need hardly emphasise that the first four to five years of schooling of a child are the most important formative years for him, during which he needs every motivation and encouragement. There is, therefore, a greater need for paying special attention to the primary school level education as compared to others.

The Committee, therefore, recommend that the question of introducing educational TV at primary school level should be decided expeditiously and that a time bound programme be chalked out to provide TV service in all the primary schools as far as possible at a very early date.

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60 3.28 The Committee also suggest that the State Governments of Maharashtra and Jammu and Kashmir, which have already started TV service, may be urged to consider the question of introducing educational TV at the primary level in a phased manner in consultation with the State Education Departments and the AIR. It may also be stressed upon the State Governments where TV service is likely to be started during the Fifth Plan period that the State Education Department in consultation with AIR should plan the educational TV programmes for schools including primary schools, well in advance of the commissioning of TV Stations in those States.

61 3.29 The Committee note that with a view to developing a systematic approach in education, an educational technology cell is proposed to be set up in all the states with Central assistance to ensure proper use of mass media education.

The Committee note that apart from the establishment of a Centre of Educational Technology at Delhi, the State Government of Maharashtra have already established an Educational Technology Cell and that the State Governments of Punjab and Jammu and Kashmir propose to set up similar cells.

The Committee suggest that the State Governments concerned where TV stations are proposed to be set up during the Fifth Plan period, be requested to take expeditious steps to establish Educational Technology Cells well in advance of the setting up of these stations so that audio-visual instructional materials are ready in time to feed TV education programmes.

62 3.32 The Committee are surprised to note that no study to evaluate the utilization and effectiveness of school programmes has so far been conducted either by the Directorate of Education or the Ministry of Education excepting one or two studies conducted by AIR on actual physical operation of T.V. sets in schools.

The Committee are given to understand that continuous evaluation is being carried out by the staff of TV Branch of Delhi Directorate of Education by visits to the schools, on-the-spot meetings and questionnaire issued to the students and teachers. While such an evaluation is welcome, it cannot be considered a sub-

stitute for an objective evaluation which should be carried out jointly by the Central and State Ministries concerned on a systematic and scientific basis periodically to identify the deficiencies and to suggest improvements for better utilisation of the media, with a view to achieve best results.

The Committee hope that the proposed State Council of Schools broadcasting, consisting of representatives from the Centre and Directorate of Education and educational experts and broadcasters etc. would be set up soon for feedback and evaluation of the educational programmes.

63 3.35 The Committee suggest that the proposed Council should *inter-alia* evaluate the quality and presentation of the Educational TV programmes and the improvements that can be made by incorporating other devices such as pictures, films, slides, graphic material and the like and selection and preparation of the TV lessons in relation to the syllabus and adequacy or otherwise of the duration of these lessons on TV and the extent to which the present time allocation has served the intended purpose.

In this connection, the Committee would like to emphasise that besides making continuous efforts to improve the quality of E.T.V. programmes and enrichment of its contents it should also be ensured that educational TV programmes are fully integrated with the school syllabus and are a real aid to class room teaching. The programmes should be such as kindle a thirst for knowledge among the student audience and raise their mental horizon and dimensions. In this context, the Committee would like that a critical study of educational TV programmes in other advanced countries may be made to benefit from their experience in drawing up our educational programmes.

64 3.37 The Committee note that some functional and operational deficiencies and the points for improvements in educational TV were brought out at the seminar of Headmasters of Delhi schools held in February, 1973. The Committee would like suitable steps to be taken to rectify the shortcomings and effect improvements in the TV programmes, in the light of suggestions made at the Seminar.

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65	3.38	The Committee note that an interim Ministerial Coordination Committee was set up in September, 1972 <i>inter-alia</i> to lay down guidelines for educational programmes on radio and television and to draft programme for training of personnel required for the purpose. The Committee would like to be apprised whether the aforesaid guidelines and draft programmes have been formulated and the action taken to implement them.
66	3.39	The Committee recommend [*] that with a view to attaining maximum results and maintaining close and proper coordination between the various agencies responsible for ETV i.e. AIR, Director of Education/Ministry of Education and the schools, there should be frequent and regular meetings between the representatives of the Ministry of Education, Director of Education, AIR and the schools to discuss matters of policy and educational problems to evolve meaningful programmes and to secure effective cooperation between them in the implementation of these programmes.
67	3.40	The Committee are of the view that if the medium of ETV is to be used efficiently and economically, it should also be ensured that there is no avoidable duplication between programmes produced by the various T.V. Stations.
		The Committee recommend that the educational TV programme/scripts should be so produced that it is possible to exchange these programmes not only within the same linguistic regions but also with other TV stations as far as possible. This would also help in reducing the cost of production of programmes considerably.
68	3.42	The Committee note that closed circuit is proposed to be used for teacher training purposes. The Committee have no doubt that the cost of production of these programmes would be carefully gone into <i>vis-a-vis</i> the expected benefit before implementing it.
69	3.62	The Committee regret to note that no progress has been made to introduce the following programmes for the farmers which was recommended by the UNESCO Commission as far back as 1969 : <ul style="list-style-type: none"> (i) General Farm Programme (ii) Farmer Training TV short courses; and (iii) Teleclub/broadcasting in those areas where community decision and actions important to develop desired agricultural practices

The main reasons for non-implementation are the non-inclusion of community viewing scheme in the Fourth Plan and the inability of the State Governments to meet the expenditure on the community viewing TV sets. These objectives are now proposed to be achieved in the Fifth Plan period.

The Committee wish that a beginning on an experimental basis had at least been made in the Fourth Plan so that it could be improved upon in the light of experience for more extensive implementation in the Fifth Plan.

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The Committee regret to note that the objective of utilising the TV media of mass communication for giving effective support to developmental efforts in the fields of education, agriculture, health and family planning and generally to educate and motivate people in participating in these sectors of national activity in rural areas in particular, has not so far been achieved to a great extent. The very fact that the number of viewers of Krishi Durshan Programme primarily meant for rural people, has been declining progressively every year from 49.87 per cent to 40.69 per cent during the period from 1968 to 1970 (upto August) goes to indicate that it has not had the desired impact.

The Committee note that various factors are responsible for this declining trend; more important among them are the programme treatment and content *vis repetitious, monotonous, dull, stale nature of programmes, programmes understandability, organisational deficiencies like lack of sitting arrangements, irregular operations of TV, unsuitable location of TV etc., social relationship between the TV custodians and the people, lack of entertainment programmes and adverse and unhealthy effect of programmes on the social environment and minds of children.*

The Committee feel that the present TV programmes mostly cater to the urban audiences with heavy emphasis on amateurish entertainment.

The Committee need hardly stress that TV has to fit in harmoniously with the needs and aspirations and social environment of those for whom the programmes are intended. The Committee would, therefore, like to emphasise that the reasons for the declining trend among the viewers of the rural programme mentioned in paras

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		3.52—3.61 of this Chapter, should be examined thoroughly and in depth and suitable remedial measures taken expeditiously to rectify these deficiencies, particularly as regards timing, frequency, length, format, content and treatment of the programmes.
71	3.69	<p>The Committee are strongly of the view that</p> <ul style="list-style-type: none"> (i) urbanised programmes should be kept to the minimum. (ii) Programmes should be based on rural development. (iii) Programmes, besides being entertaining, should be aimed to improve agricultural practices, contribute to national integration and vocational guidance and ensure active participation of the rural audience. (iv) Programmes should be integrated with other programmes community development planned by various Ministries like Education, Agriculture Health and Family Planning, Social Welfare etc. to make them more intensive and co-ordinated.
72	3.70	The Committee consider that programmes for rural women should receive high priority and should deal with subjects such as, child care nutrition and sanitation, food preparation and storage, family planning personal and environmental hygiene, and the like. The programmes should be in simple language which could be easily understood by rural people.
73	3.71	The Committee would also like to emphasize that follow-up action on the agricultural practices and family planning programmes is very necessary so that farmers could be enlightened on the use of practices and programmes by practical demonstration. With this end inview, assistance and collaboration of the ministries concerned <i>viz.</i> Ministries of Agriculture and Health and Family Planning should be actively sought on a regular footing. The services of extension workers in rural areas should also be enlisted in this regard.
74	3.72	The Committee are surprised to note that no attempt has been made so far either by the Department of Agriculture or by AIR evaluate the usefulness of otherwise of the rural programmes particularly 'Krishi Darshan' programme. The evaluation of 'Krishi Darshan' programme has been done by outside Researchers only.

The Committee are of the view that the various factors brought out by the Researchers as a result of the studies conducted by them, need serious thinking with a view to taking effective remedial measures to develop the rural programmes on sound lines so as to achieve the maximum results.

The Committee recommend that rural programme should be periodically evaluated by a small team comprising of the representative of AIR, Departments of Agriculture, Health and Family Planning, Education and other experts in the field having full understanding of the rural requirements, so as to assess their usefulness and suggest measures to improve them and develop a sense of participation in the rural audience by giving them programmes that are not only entertaining but are also stimulating and help in the development of attitudes, values, motivations and social patterns which are most appropriate for their all round progress and development.

75 3.78 The Committee are surprised to note that no provision for Community Viewing TV Sets was made to cover the service areas of TV transmitters to be installed under the Fourth Plan.

The Committee, however, note that a provision of 59,400 Community viewing sets costing Rs. 46.83 crores was made in the Fifth Plan proposal which has been reduced to Rs. 17 crores by the Planning Commission.

The Committee, hope that within the financial constraints, every attempt would be made to provide community viewing sets to as many villages as possible.

The Committee need hardly stress that greater emphasis has to be laid on the maintenance of community sets and their efficient functioning if the benefit of television is intended to be extended to rural areas as the present cost of T. V. sets is too high or an ordinary farmer to afford.

76 3.82 The Committee note that a scheme for the repair and maintenance of the Community viewing TV sets is under the examination of the Ministry of Information & Broadcasting. The Committee desire that this scheme should be finalised expeditiously in consultation with the State Governments concerned.

The Committee, however, desire that the whole scheme should be carefully examined and drawn up keeping in view the experience gained in the maintenance of the Community Radio receivers, the staff required etc. Care should be taken to avoid overstaffing and keeping the expenditure to the minimum. Arrangements for the maintenance of Community T. V. sets should be made so as to synchronise with the installation of these sets, with the commissioning of new TV stations.

77 3.84 The Committee, also desire that in the scheme, the sphere of responsibility of the Central Government and the State Governments should be clearly defined so that there is no ambiguity in the matter of repairs and maintenance of community viewing TV sets which should be kept in perfect working condition so as to fulfil the purpose for which these sets are provided.

78 3.96 Judging from the data regarding audience preference furnished by the Ministry of Information and Broadcasting it is evident that 'Chitrahar' (92.3%) and Hindi feature film (88.5%) are the most sought after programmes. The study regarding audience preference also indicates that most of the other programmes find a low place in it. It is thus evident the either the audience is indifferent to these programmes or these programmes are poorly presented.

The Committee are of the view that there is need for serious thinking on the part of the authorities concerned to strike a balance between "education" and "entertainment" and to take effective and remedial measures to use this powerful medium as a tool for national development.

79 3.98 The Committee need hardly stress that as the T. V. programmes are seen by the whole family, including the children and as the mind of the children is very impressionable, there is greater need for designing and producing healthy programmes on T. V. having educative value. 'Chitrahar' and feature films are popular for obvious reasons, but the effect of such programmes on the minds of children and adolescents cannot be ignored.

80 3.99 The Committee feel that TV entertainment programmes should not merely depend on the film industry. The Committee desire that dependence on feature films etc. should be moderated by producing more TV films suited to the special requirements of the medium and the needs of the viewers.

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81 3.100 The Committee note that Government have set up a committee to screen the films to judge their suitability for showing on TV. They would like the Committee set up by Government to prescribe suitable norms for selecting films for screening on TV.

The Committee need hardly stress that while the films selected for T. V. should be entertaining ; these should be free from sex, nudity, violence and crime and should be such as would help to inculcate our cultural and moral values and socio-economic objectives etc. among the viewers. The programmes would do well to focus attention on problems like urban and civic living self employment, vocational training, increasing productivity etc.

82 3.102 The Committee regret to note that at present no programmes are being telecast for the benefit of industrial workers. The Committee feel that as industrial workers form a sizable part of population in metropolitan and other industrial cities where T.V. Stations are in operation or are proposed to be installed, suitable programmes of their interest should be drawn up in consultation with various institutes concerned with the Workers' Education Programmes and presented on T. V.

83 3.103 The committee would like Government to examine the feasibility of constituting a Programme Planning Board to lay down guidelines for the production and presentation of various T.V. programmes keeping in view the basic objective that TV is meant to be used in the development process as an instrument for social change and national cohesion.

84 3.108 The Committee are in agreement with the findings of the Indian Institute of Mass Communication that the basic shortcoming of Delhi's TV news programme is lack of visual emphasis essential to effective TV programming.

The Committee are strongly of the view that for the purpose of making the news on TV more interesting there is greater need for visual presentation relevant to the news than the reader. For this, the Committee feel that there is need for close coordination between the Newsreel Unit of the Films Division and TV service for pooling their manpower and production resources to give a new look to the news presentation on TV.

The Committee are also of the view that in the content of the Indian situation, TV news should have its own format, style and distinctive role to play. The Committee, therefore, desire that there should be constant endeavour to help it to develop its own character in the collection, reporting, editing, production and presentation.

85 3.111 The Committee note that there are senior announcers doing the newscasting in Hindi and that the selection of news readers in English is to be made from amongst the staff and outsiders for which details are being worked out. The Committee would like this to be completed expeditiously.

86 3.119 The Committee note that by and large documentaries shown on TV are those which are produced by the Films Division and by other individual producers. The Committee also note that foreign documentaries obtained are strictly screened and only those documentaries which have educative value and provide entertainment, are shown on TV.

The Committee feel that whereas showing of foreign documentaries on T.V. may help to enhance knowledge about other countries, there is greater need to show more documentaries depicting Indian way of life, culture, art etc. and historical events and on other subjects like achievements made in the field of science and technology which would help greatly in increasing the horizon and knowledge of the viewers about the advancements made in the country.

87 3.121 The Committee suggest that larger number of persons should be encouraged to produce T.V. shorts and films dealing with subjects of vital and absorbing interest to public.

88 3.122 The Committee recommend that efforts should be made to make full use of the untapped valuable material in the National Archives and the National Library/Museums for making short documentary TV films in close coordination and collaboration with the Central Ministries and the State Departments concerned.

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89 3.123 The Committee recommend that the interviews etc. with eminent personalities recorded for telecasting may not only be widely shown on TV but should also be preserved permanently for future use. The Committee desire that suitable guidelines should be laid down for the purpose.

90 3.126 The Committee note that apart from the films produced by the Children Film Society, children films are also obtained from other countries under cultural agreements and these films are shown on TV once a month.

The Committee feel that the present rate of showing children's films only once a month is on the low side. The Committee consider that there is need for telecasting more children's films during a month. The Committee would, however, like to stress that extreme care should be exercised in choosing films for child audience. The Committee have given concrete suggestions for improving the number and quality of children's films in their 59th Report on Ministry of Information and Broadcasting—Films (Part II).

91 3.132 The main objective of TV is to help bring about desirable social and economic changes in the country. While commercial services on T.V. may bring in some money by way of advertisements etc., the business interest cannot be expected to have the same commitments. It is true that benefiting by the experience of U.S.A. certain countries have tried to safeguard, by statute where necessary, control over the programme policy but there is no gain saying the fact that it would intimately effect the contents and style of programme.

The Committee are convinced that commercialisation of TV at this stage of development is not called for.

92 3.146 The Committee are surprised to note that when the Audience Research Unit was reorganised no investigator was provided for the TV Centre and the staff provided to the Audience Research Unit of T.V. Centre was not adequate to meet the requirements.

The Committee are of the view that Audience research and devaluation of programmes is an integral part of any broadcasting system. Without a continuous research and evaluation of programme, the telecasting system will not have a reliable basis to improve its programmes to subserve better the national objectives and improve its audience appeal.

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The Committee hope that the Audience Research Wing of TV would be suitably manned in the Fifth Plan to meet the requirements.

93 3.149 The Committee recommend that, apart from the audience research wing which would be a part of the TV Organisation, there should be an independent and objective evaluation of the TV programmes to see whether the TV programmes are fulfilling the objectives for which television was introduced and to suggest improvements, wherever necessary. It would be desirable if the representatives of the Ministry of Education, Agriculture, Health and Family Planning as well as outside experts in the various fields, are associated with such an evaluation.

94 3.150 The Committee suggest that suitable guidelines for the purposes of conducting programme evaluation studies should be laid down.

95 3.172 The Committee note that at present the price of TV set is around Rs. 3500 which is so high that only well-to-do families can afford this luxury. The Committee consider that if this powerful medium of TV is to benefit a large section of people it would be necessary to bring down the cost of TV receivers drastically. The Committee have no doubt that with intensified research and development efforts, the manufacturing cost of TV could be brought down considerably and a break through can be achieved as has happened in the case of radio sets. The Committee would therefore like the industry to make determined efforts by improved technology and other measures to reduce their manufacturing cost and marketing margins so that prices of TV sets are considerably brought down and TV is available at a reasonable price which is within the reach of common man.

96 3.173 The Committee would further urge Government to ensure that raw materials required by the TV components manufacturers are readily available to them so that the need for maintenance of large inventories by them, is obviated and production cost of TV is reduced.

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97 3.174 The Committee note that one of the major elements contributing to the high price of TV set is taxation i.e., customs, duty excise duty, sales tax etc., which works out to about 35% of its sale price. They note that the excise duty on TV sets has been increased from 10% ad valorem to 20% ad valorem this year itself. The Committee recommend that Government may examine the question of rationalisation of custom duty on imported material needed for the manufacture of TV receivers, excise duty and sales tax on TV, in the interest of making available moderately priced indigenous TV sets so that a large number of householders may buy TV sets and thus derive benefit from the programmes of development which are telecast. The Committee have no doubt that unless TV sets are placed within the reach of the common man, the objectives of TV as an instrument of social and economic change would not be achieved and the TV will remain a rich man's toy in a poorman's country.

98 3.178 The Committee note that import content in the TV receiver has already come down to Rs. 60/- from Rs. 300—400 in the initial stage and it is likely to be reduced to Rs. 30/- only in 1974-75. The Committee hope that it would be possible to eliminate altogether the import content of TV receivers by indigenisation within the shortest possible time, by intensifying research and development efforts in this regard.

99 3.188 The Committee feel that with a view to gaining knowledge and insight into the ways and means by which TV can be effectively used as a tool in the national development it is essential to conduct intensive research in the programme formats particularly those related to the national objectives.

100 3.189 The Committee are of the view that because of the language diversity, it is necessary to design and plan research for the software development keeping in view the local interests and requirements so that the viewers of the region/area may identify the programme with their needs and develop a sense of participation. Designing a programme for the software development would, therefore, imply some fundamental research and understanding about the people in that area, method of execution with the participation of local people and evaluation and feedback to design the next programme.

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The Committee suggest that an analysis of the present and projected capability of producing the software requirements should be made and necessary steps should be taken in advance for the development of the programme in close coordination with the Central and State authorities.

101 3.191 The Committee suggest that software development should take into account the programmes requirements of the weaker sections of society and should be tailored keeping their needs in view.

102 3.192 The Committee note that the Ministry of Information and Brodcasting propose to set up a Television Programme Research and Prototype Production unit to undertake research in programme forms and formats particularly those which are related to the national objective and that the proposal is under the consideration of the Ministry of Finance.

The Committee desire that the proposal should be finalised expeditiously and the Committee apprised of the progress made in implementing it.

103 3.194 The Committee note that the audience profile study in the Andhra and Mysore regions is almost complete and that such studies in Rajasthan and Bihar have already been completed.

The Committee desire that efforts should be made in close coordination with all concerned to complete the studies expeditiously so that the programmes could be designed, produced and protested to determine their suitability in accordance with the requirements of the regions/areas well in advance of the TV service in these areas.

104 3.196 The Committee suggest that a phased programme to undertake audience profile studies in other regions where TV service is likely to be extended during the 5th Plan period should also be drawn up in consultation with the authorities concerned and necessary steps taken to ensure that such studies are undertaken and completed according to schedule.

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105 4.29 The Committee note that the existing TV Training Centre, Delhi was set up in 1971 in collaboration with UNDP/UNESCO with the main objective to provide trained man-power for running the TV stations in the country. In terms of the collaboration agreement which is for a period of 3 years (10-8-1971 to 9-8-1974) the UNDP contribution will be in the form of experts, fellowships and foreign equipment to the tune of 1.14 million dollars whereas Government will provide local staff, building and indigenous equipment estimated to cost Rs. 130 lakhs.

The Committee further note that the training centre is, at present, imparting training to the staff of AIR only and after the completion of the training, the trainees are posted to various TV stations by the AIR. The average expenditure per trainee works out to Rs. 5,500/- approximately (excluding salary etc. of the trainees).

The Committee also note that the existing training facilities in the Training Centre at Delhi are limited and that it is proposed to equip the Centre by constructing buildings etc. for minimum training areas like film, studio, editing, processing and printing rooms and air conditioning plant room. The Committee further note that the sanctioned strength of twenty-six professional staff was short by seven in the various categories and that the vacancies in certain cases have not been filled for as long as two years. The Committee are given to understand that adequate facilities are being provided in the Training Centre at Poona where the existing Training Centre is expected to be shifted in 1974 and that as against the average turn-over of 64 trainees per course, an average turn-over of 100 trainees per course and that of 200 trained personnel per annum is expected when the Training Centre at Poona has its own permanent facilities.

The Committee are surprised that even though the Delhi Training Centre was started as early as 1971, it not only lacks facilities in certain minimum technical areas but even the full complement of professional teaching staff, is not in position and that the Training Centre at Poona with all the necessary facilities is yet to come up.

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The Committee, therefore, feel that the importance of training in the various fields of TV has not been fully realised and the problem of meeting the man-power requirements of TV stations has not been dealt with satisfactorily.

The Committee cannot but emphasise that manpower and training problems ought to be considered and decided at the earliest stage of planning TV stations as delays in such decisions mitigate against having a viable, efficient and satisfying service. The Committee therefore urge that expeditious and effective steps should be taken to remove the deficiencies in the existing training facilities to make it self-sufficient and also to accelerate the construction work of the training centre at Poona to ensure its commissioning without delay.

106 4.35 The Committee suggest that an evaluation of the existing training imparted at the Delhi Training Centre should be made with a view to bringing about improvements in the teaching methods and also to know how far the persons trained at the Centre have really proved useful for TV service.

107 4.36 The Committee are of the view that as the television net-work is developed during the Seventies, it would be necessary that a flow of competent and well trained personnel is available to meet the needs of TV/relay station for the production and technical operation, in addition to research, curriculum specialists, educational planners etc. for an effective development of the system. The Committee, therefore, recommend that keeping in view the phased development of TV during the Fifth Plan period and thereafter and the needs of each of the TV station for the various categories of personnel, the training capacity of the Institute for the various categories of personnel should be planned and a phased programme for training in the various fields of TV should be drawn up and necessary steps taken to select the trainees with a view to ensuring the availability of required man-power with the commissioning of a TV station.

108 4.37 The Committee are of the view that, apart from the training at the Institute, there would still be areas of in-service training which will be the continuing responsibility of the TV stations themselves. The Committee, therefore, suggest that necessary arrangements for such training should also be made simultaneously with the setting up of new TV stations.

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109 4.38 Television is a growing industry in the country having considerable employment potentiality and the training institutes have an important role to play. The Committee, therefore, suggest that with the expansion of TV training facilities, trainees from the open market on all India basis should also be selected and encouraged to receive training in the various fields of TV for which suitable norms regarding the basic qualifications etc. required for each branch of training should be laid down.

110 4.39 The Committee note that the AIR Engineering Training School provides facilities for TV and electronics training and maintenance. The Committee desire that the existing facilities available at the AIR Engineering Training School should be reviewed with a view to extending the scope of training to cope with the future demand.

111 4.40 The Committee are unhappy to note that even though the UNESCO Mission, as early as 1969 recommended for a training programme on educational TV, it is only now that Government have established a Centre for Educational Technology under the NCERT for the purpose. The training of script writers, editors, educational planners and administrators etc. is also proposed to be undertaken at the TV and Film Institute, Poona. This, in the opinion of the Committee goes to show that the planners did not attach due importance to the various types of training for the development of educational TV at the initial stage.

112 4.41 The Committee note that a Committee has been set up to investigate the area of coordination, if any, between the TV Training Centre and the Film Institute when the TV Training Centre moves to Poona. The Committee would like to be apprised of the findings of the Committee and the action taken by Government thereon.

113 4.42 The Committee note that AIR's Staff Training School undertakes training on servicing of TV receivers and some basic lectures on TV are being given as part of the training programme for lower grade

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operational staff in the general field of broadcasting engineering. The Committee also note that the West German Government have agreed to gift some television equipment for the said school and after the arrival of the equipment regular courses of maintenance training in TV are proposed to be instituted.

The Committee recommend that with the expansion of AIR's Staff Training School (Technical) maximum training facilities should be extended to the state Governments for training the personnel in servicing and maintenance of TV sets. The Committee also recommend that various engineering and polytechnics institutes should be encouraged to provide specialised training courses on servicing TV sets etc. to meet the growing demand in this regard, with the development of TV network in the country.

114 4.44 The Committee note that a committee consisting of officials and non-officials members has been constituted for the purposes of making selection of the trainees on the basis of their aptitude and past background. The Committee feel that the existing procedure of making selection of AIR staff either for sending abroad or for receiving training at the training institute should be streamlined to minimise the chances of persons leaving the service after getting training resulting in infructuous expenditure. The Committee suggest that suitable guidelines should be laid down for the purpose.

115 4.45 From the data furnished by the Ministry of Information and Broadcasting with regard to the deployment of untrained staff, the Committee note that a large number of untrained persons are functioning in various positions. To quote a few, there are 8 untrained Producers Grade as against 5 trained Producers, 14 untrained Cameramen Grade I, as against 6 trained Cameramen, 20 Production Assistants as against only 1 trained, whereas 30 untrained Engineering Assistants, 12 Senior Technicians and 17 Technicians are there without a single trained person in the respective cadre.

The Committee are unhappy at this unsatisfactory state of affairs which indicates lack of proper planning. They would like the Government to take suitable measures to train the remaining staff according to a time-bound programme so as to deploy competent and trained staff in the field.

116 4.6c The Committee are unhappy to note that no tangible progress has been made in teachers training programme so far even though the desirability of such programmes at various levels was emphasised by the UNESCO Commission as far back as 1969. It is only now that a Centre for Educational Technology has been set up under the Educational Technology Project of the Ministry of Education to evolve a suitable programme to undertake teachers' training. The Bombay and Srinagar TV Stations have already been commissioned but the educational programmes from these Stations are yet to start. This indicates that planners entrusted with the responsibility of teachers training programme did not attach due importance to this aspect right from the initial stage and did not prepare proper plans therefor.

The Committee desire that the programme for teachers training and script writers at various levels should be evolved expeditiously so that no time is lost in starting educational programmes simultaneously with the Commissioning of a TV Station.

117 4.6i The Committee note that a model syllabus for teachers training schools has been circulated by NCERT with a view to improving the quality of education. The Committee suggest that a close watch should be maintained and periodical assessment made with regard to the improvements achieved in this regard with a view to bringing improvements wherever and whenever necessary as such programmes are a continuous process.

118 4.62 The Committee suggest that to bring the teachers' training in line with the modern methods, the syllabus and the methods of teachers' training followed by various countries having educational TV programmes, should be studied in depth to scout for significant ideas with a view to suitably adopting them as might be applicable to the Indian conditions and requirements.

119 4.63 The Committee recommend that a long term plan for promoting, organising and raising the quality of programmes and utilization of mass media for education both at the Central and State levels should be drawn and necessary guidelines laid down for close coordination at all levels for the successful implementation of the programmes and their periodical evolution.

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120 4.64 The Committee regret to note that no provision has been made in the teachers training programme as regards training for teachers in basic education. The Committee feel that as basic education is an important ingredient of educational system in the country, it is imperative that the TV programmes for teachers training should be suitably augmented to include to cater to the needs of training teachers in basic Education.

121 4.65 The Committee note that an Educational Technology Cell has been set up by the Ministry of Education in the State of Maharashtra, the functions of which will *inter-alia* include training of user (*i.e.* Classroom) teachers and arranging the training of script writer and presenter teacher at the State level in adequate number.

The Committee desire that similar educational Technology Cells should also be set up in phased manner in other States where TV Service is proposed to be started during the Fifth Plan period so that these States do not lag behind in meeting the requirements of educational TV.

122 4.67 The Committee are of the view that as and when teachers education programmes are produced for TV, these programmes, besides being a part of the course content of the teacher-training schools, should become an integral part of the correspondence course to upgrade teacher training.

123 4.68 The Committee recommend that as and when TV facilities are made available in a State, the Education Departments should be encouraged to install TV sets in the teacher training schools and the training programme outlined by NCERT in collaboration with the Teacher Training Institute.

124 4.69 The Committee are in agreement with the observation made by the UNESCO Mission that full potential of educational media cannot be realised until trained personnel are available in sufficient numbers to operate the systems as they develop. For this, the following types of training are necessary :

- i) Training of educational planners in the application of mass media to educational system.
- ii) Training of professional staff in the techniques and production methods of the media.

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- (iii) Training of production personnel in the special method, which are applied to educational programmes and material.
- (iv) Training of selected educators, extension officers and other specialists in the organisation and management of media based systems of education and extension.
- (v) Training of all those field workers and teachers, monitors and group teachers, directly concerned with the utilization of media which prepares them to take their place as effective component in the system.

The Committee, therefore, recommend that the training programme should be drawn up keeping in view the above aspects if the educational TV programme are to achieve fully their declared objectives.

125 4.71 The Committee recommend that nomination of teachers to take special courses in Educational TV as also to plan summer or short-in-service courses for teacher in the utilization of TV in the classroom should be made by the Educational Technology unit of the Ministry of Education in close coordination with the Central and States departments of Education to achieve the desired results.

126 4.72 The Committee suggest that suitable norm should be laid down for the selection of teachers for TV training and selection should be made on the basis of their standing in the profession teaching experience in the subject and the like. Suitable incentives should also be given to the teachers to develop a sense of participation and to dispel their fear, if any, that TV is to promote education and not to replace them.

127 4.73 The Committee suggest that the existing syllabus for the teachers training including pre-service and in-service training should be evaluated in its entirety with a view to bringing it in tune with the present needs of the various regions of the country.

128 4.74 The Committee recommend that the existing arrangements for the teachers training at pre-primary, primary and secondary level as also the facilities available at the training schools should be reviewed to remove the deficiency, if any, and to bring about improvements. The training schools should also be equipped with modern libraries and technological devices to make them self-sufficient.

129 5.17 The Committee note that Government have decided that TV organisation would be separated from A.I.R and that its future set-up is under their active consideration. Keeping in view the fact that the TV net work is going to be progressively developed during the Seventies and that TV is for more sophisticated and complicated in the matter of techniques and operations requiring broader outlook, greater flexibility and freedom of action, the Committee feel that Government should examine in depth and arrive at a decision expeditiously about the nature of organisation that would be best suited for TV. As TV is a creative media, the organisational set-up should provide for flexibility and should be free from usual bureaucrat constraints.

130 5.18 The Committee note that the staffing pattern especially suited to the needs of TV are being worked out and that the procedure for recruitment of TV staff being followed at present on ad-hoc basis will be replaced as soon as the staffing pattern has been finalised.

The Committee also note that the question of going into staffing pattern and the staff position of TV by the Staff Inspection Unit of the Ministry of Finance has been pending with the Ministry of Information and Broadcasting for over two years.

The Committee suggest that the entire staffing pattern and staff position should be examined by the Staff Inspection Unit of the Ministry of Finance with which the experts in the field of TV may be associated. The Staff Inspection Unit should *inter-alia* lay down suitable norms of the staff in various categories.

131 5.21 The Committee suggest that a comparative study of the terms and conditions of service, recruitment rules and staffing pattern etc. obtaining in other countries well-established in TV such as U.K., U.S.S.R. Italy, Canada etc. may also be made with a view to suitably adapting them as are applicable in accordance with the Indian conditions.

132 5.22 The Committee note that association and coordination with the Ministries of Education, Agriculture, Health and Family Planning is only on *ad hoc* basis there is no regular coordination body. The Com-

mittee, therefore, recommend that with a view to having a closer coordination and efficient functioning of the organisation in the field of education, health and family planning and agriculture etc., the question of setting up an Advisory Board on TV consisting of the representatives of the Planning Commission, Ministries of Education, Health and Family Planning, Information and Broadcasting, Agriculture as also eminent artists, writers, educationists and film makers etc. may be considered.

133 5.23 The Committee further suggest that local Advisory Committees consisting of eminent educationists, artists, social workers etc., may be attached to each TV Broadcasting Station to advise on TV programmes as also to give a sense of public participation in the working of the Television system.

134 5.24 The Committee desire that question of deployment of the necessary staff in advance of the commissioning of a TV station should be settled in consultation with the Ministry of Finance.

APPENDIX II

(*Vide* Introduction)

Analysis of Recommendations contained in the Report.

Classification of recommendations :

A. Recommendations for improving the organisation and Working :

Serial Nos. 2, 3, 4, 5, 6, 7, 8, 16, 18, 21, 22, 33, 39, 52, 61, 62, 63, 66, 83, 92, 93, 102, 105, 106, 107, 108, 110, 113, 114, 115, 116, 121, 124, 128, 129, 130, 131, 132, 133, 134.

B. Recommendations for effecting economy :

Serial Nos. 9, 10, 11, 28, 36, 41, 42, 43, 67, 76.

C. Miscellaneous Recommendations :

Serial Nos. 1, 12, 13, 14, 15, 17, 19, 20, 23, 24, 25, 26, 27, 29, 30, 31, 32, 34, 35, 37, 38, 40, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 64, 65, 68, 69, 70, 71, 72, 73, 74, 75, 77, 78, 79, 80, 81, 82, 84, 85, 86, 87, 88, 89, 90, 91, 94, 95, 96, 97, 98, 99, 100, 101, 103, 104, 109, 111, 112, 117, 118, 119, 120, 122, 123, 125, 127.