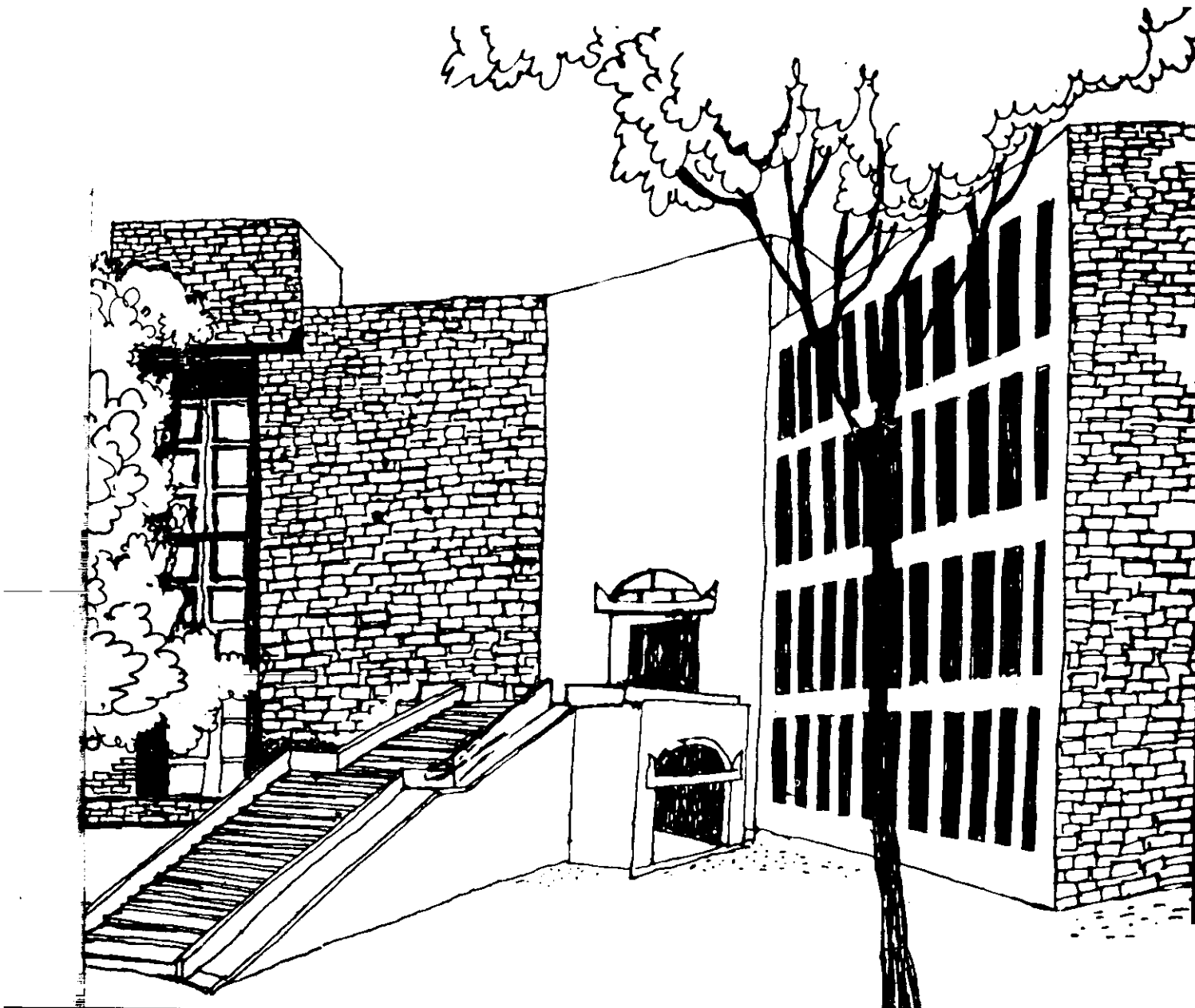




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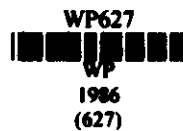
Working Paper



**NATIONAL COST OF TELEVISION IN INDIA IN
2000 A.D.: SOCIO-ECONOMIC AND POLITICAL
IMPLICATIONS AND ISSUES**

By

U.K. Srivastava



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NATIONAL COST OF TELEVISION IN INDIA IN
2000 A.D : SOCIO-ECONOMIC AND POLITICAL
IMPLICATIONS AND ISSUES*

U.K. Srivastava**

India represents a case of rapid coverage of television (programme production and transmission capability) to the majority of its population in a very short period of time. Television was introduced on an experimental basis in New Delhi on 15th August 1959. During the first decade of its growth (1959-69), it remained confined to the national capital. In the second decade (1969-79) of expansion, the other three metropolitan cities - Bombay, Calcutta and Madras - and a few urban centres and some small rural areas were covered. The major spurt was witnessed on the eve of the Ninth Asian Games in November 1982. At present, there are 179 transmissions with a coverage claimed to be 63% of the total population. Social scientists and policy-makers have emphasized the role of TV as a major developmental communication tool. This paper is designed to cover the following aspects :

1. To present the existing and simulation results of the estimate of public cost of production and transmission of TV programmes in India and the orders of magnitude of private cost that need to be incurred by the population to actually have the access to TV programmes, by the year 2000 AD.
2. To analyse the socio-economic and political implications of lack of purchasing power to meet the private cost by a sizeable portion of Indian population. The implications of knowledge gap between 'haves' and 'have-nots' will be presented in this paper.
3. To outline various strategies for raising the access of most abject poor to TV programmes,

* Paper presented at the XV General Assembly of the IAMCR at New Delhi between August 25 and 29, 1986.

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TV COVERAGE AND ESTIMATED VIEWERSHIP

Data in Table-1 indicates that the total number of transmitters has gone up from 3 in 1976 to 179 in 1986. These include 153 low power (100 Watt), 11 high power (10 KW), 5 relay centres (10 KW) and 10 post-site/INSAT centres (10 KW & 1 KW) (see Figure-1). These transmitters have enhanced the reach of TV signals from 31.17 million population in 1976 to 428.80 million population in 1986. This means that presently the TV signals are within the reach of 63% of India's population.

The effective reach is, however, conditioned by availability of TV sets and sets actually tuned in at a given point of time. Data presented in Table-2 indicates that the number of TV sets in India has gone up from 0.479 million in 1976 to 8.75 million in 1986. It has been observed by recent studies conducted by the Audience Research Unit of Doordarshan (TV) that on an average 6 persons watch a TV set and on an average 73% of TV sets are tuned at a point of time. In addition, one has to make at least 10% adjustment downwards for a set not being in operation at a particular point of time due to linguistic incompatibility. Theoretically, the estimated viewership has gone up from 3% in 1976 to 12.26% in 1986 (percentage of people having actual access to the population within the reach of present TV signals). If one wants to know as to what percentage of people actually watch TV at a point of time, it increased from 2.73% in 1976 to 8.05% in 1986 (Table-2). This indicates that there is a wide gap between the theoretical coverage based on the reach of the TV signals and the actual viewership in India.

PUBLIC COST OF PRODUCTION AND TRANSMISSION OF PROGRAMMES

The national cost of TV programmes has two components: a) public cost of production and transmission of programmes, and b) private cost of receptions of the programmes incurred by the viewers. Before, we present the empirical estimates of public

TABLE-1 : TOTAL COVERAGE OF TELEVISION PROGRAMMES IN INDIA
(1976 - 1986)

Year	No. of Transmitters	Area Covered ('000 sq.km)	Population (Million)*		
			Urban	Rural	Total
1976	8	175.39	39.98	51.19	91.17
1977	13	318.49	51.04	75.85	126.89
1978	15	341.09	51.86	84.93	136.79
1979	17	392.09	56.64	98.96	155.60
1980	17	392.09	56.64	98.96	155.60
1981	18	435.29	60.92	106.93	166.85
1982	39	588.79	69.95	133.00	202.95
1983	41	605.79	74.11	135.89	210.00
1984	166	1109.56	127.61	247.08	374.69
1985	175	1162.21	130.01	265.28	395.29
1986	179	1329.00	136.00	292.00	428.00

Source: Television in India, Audience Research Unit, Directorate General - Doordarshan, New Delhi, July 1985 and April 1986.

Note: * Coverage of population is in terms of the reach of the signals.

INDIA

DOORDARSHAN TRANSMITTERS

- HIGH POWER TRANSMITTERS
- WITH PRODUCTION FACILITIES ●
- WITHOUT PRODUCTION FACILITIES ○
- LOW POWER TRANSMITTERS ◆
- YET TO BE UPGRADED ◆

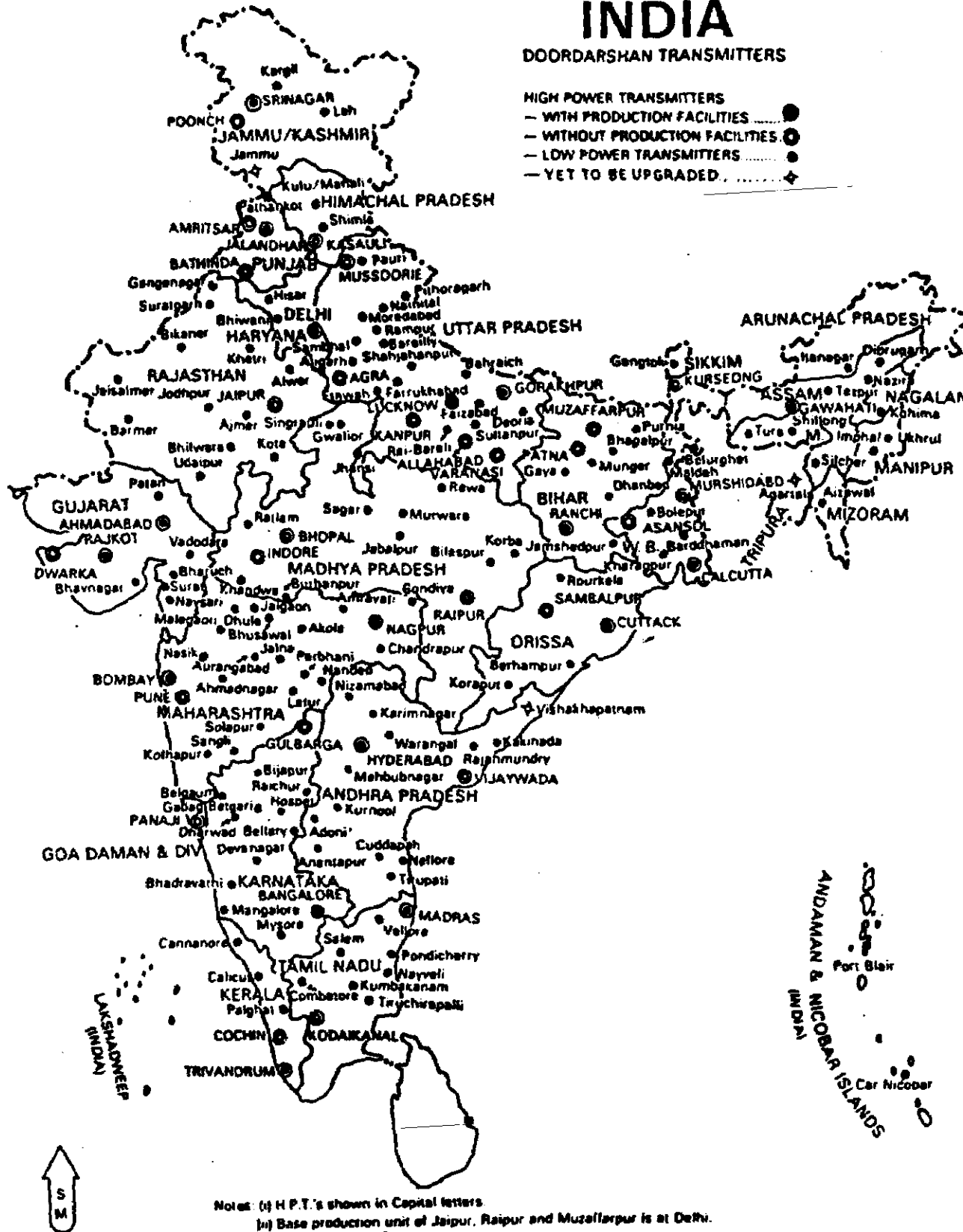


FIGURE 1 : NETWORK OF TELEVISION IN INDIA

Source : Television in India, Audience Research Unit, Directorate General, New Delhi (April 1986).

TABLE-2 : NUMBER OF TV SETS AND POPULATION HAVING ACCESS TO TV

(Figures in million)

Year	Total Number of TV Sets	Total Population having access to TV	Total Population covered by TV Signals	Percentage of Population having access to TV to total population covered by TV signals	Number of TV sets tuned in at a period of time		
					No. of tuned in sets after adjustments with language incapability	Population having access to TV	% of Population having access to TV to total population covered
1976	0.479	2.875	91.161	3.15	0.315	2.489	2.73
1977	0.479	2.875	126.893	2.26	0.315	2.489	1.96
1978	0.677	4.060	136.789	2.96	0.445	2.667	1.95
1979	0.899	5.395	155.596	3.46	0.591	3.544	2.28
1980	1.151	6.908	155.596	4.43	0.756	4.539	2.92
1981	1.548	9.288	166.848	5.56	1.017	6.102	3.66
1982	2.096	12.573	202.944	6.19	1.377	8.261	4.07
1983	2.112	12.670	210.002	6.03	1.387	8.324	3.96
1984	3.632	21.794	374.684	5.81	2.386	14.319	3.82
1985	6.750	40.500	395.286	10.24	4.435	26.609	6.73
1986	8.750	52.500	428.000	12.26	5.749	34.493	8.05
cumulative investment	28.573	-	-	-	-	-	-

Sources: 1. Compiled from various issues of 'India' : A Reference Annual, compiled by the Research & Reference Division, Ministry of I & B, Publication Division, Government of India.
 2. TV Audience Survey Viewership Measurement & Reactions to Advertisement, A report by Directorate General - Doordarshan, New Delhi.

cost of production and transmission of programmes, the theoretical framework is given below. Let us represent the cost function as follows :

$$\text{Total Cost (TC)} = TC(h)$$

where, $TC(h)$ is the total cost of transmission for number of transmission hours.

The average cost per hour of transmission can be computed from the total cost as follows :

$$\text{Average Cost } AC(h) = TC(h)/h$$

This average cost can be converted into average cost per hour of transmission per viewer as follows :

$$AC(h)/N$$

where, N is number of viewers.

Total cost consists of two parts: fixed and variables. It can be written in a linear form as follows :

$$TC(h) = F + V_h$$

$$\text{where, } F = f_1 + f_2 + f_3$$

f_1 = Annualized cost of the Satellite, master control at Hassen, the ground segment.

f_2 = Annualized cost of studios + transmitters + machinery and equipments.

f_3 = Annualized cost of Directions and Administration + Listeners Research.

V_h = Variable cost per hour of programme transmission.

h = Hours of programme transmission per year.

The need for annualizing the capital cost represented by f_1 and f_2 arises from the fact that these costs are incurred once to acquire goods and services which have useful life time that extends beyond the time of purchase. For example, in the case of f_1 , the cost of Satellite cover has been incurred once but it has life time of seven years. Similarly, we assume that the life time of studios is 20 years and the transmitters and that machinery & equipments (f_2) have a life time of 10 years.

Since the life of assets is long, it is important to annualize these expenditures on capital equipment. The process of annualization takes into account two factors: 1, first, the life time of equipment (it comes to reason that if the life is 'n' years, $1/n$ amount should be charged every year as annual depreciation cost). 2) Second, the social discount rate represents the value judgement concerning the cost to society for tying up the capital and foregoing any other use for that capital.

The discount rate represents an interest rate which must be paid for the use of capital. Both these factors can be put together as follows :

$$a(r, n) = r(1 + n)^n / (1 + r)^n - 1$$

Where, 'r' represents the social discount rate.

'n' represents the economic life of the capital equipment.

Annualized Cost of the Satellite (f_1)

The presently operating Satellite INSAT-1B was launched in August 1983. The cost of the multipurpose Satellite was Rs. 122.90 crores.* It has three functions : i) telecommunications, ii) meteorological earth observations and data relay, and iii) direct TV broadcasting to

* Government of India, INSAT - The Indian National Satellite System, (New Delhi : INSAT Coordination Committee, January 1984), p. 5.

arrangement community sets in rural areas and networking of terrestrial TV transmitters and regional and national networking of radio transmitters.

In the absence of a better basis, we allocated one-third cost for each function. Therefore, the cost of the space segment for coverage of Doordarshan telecasting came to Rs. 40.75 lakhs. This cost was annualized by assuming that i) the life of the satellite is seven years, and ii) the cost of the capital is 10 percent.

Annualized Costs of Studios, Transmitters, Machinery and Equipments (f₂)

Data on actual expenditure on these items were collected from the Demand for Grants of the I & B Ministry. The data were annualized by assuming that i) the life of studios is 20 years, and that of transmitters and machinery and equipments are 10 years, and ii) the cost of the capital is assumed to be 10 percent.

Annualized Cost of Direction and Administration, and Listeners Research (f₃)

The demand for grants of the Information & Broadcasting Ministry presents these data under two categories: i) Direction and Administration, and ii) Listeners Research. Since, this expenditure does not represent any asset with life-time more than one year and does not vary in proportion to hours of transmission, we have taken this as a part of the fixed cost in the year it was spent.

Variable Cost (V)

We have included three components in the variable costs: i) cost of operation and maintenance, ii) programme services, and iii) commercial services. Data on individual components of variable costs were collected from the demand for grants of the I & B Ministry.

Hours of Programming (h)

Efforts were made to get accurate data on actual programme transmission by Doordarshan from 1976-77 onwards. We could get this data in the form of a programming schedules since April 1983 only. On this basis and on the basis of recent programming schedule (Appendix-I) the number of actual hours of programme transmission has been estimated for the years 1983-84, 1984-85 and 1985-86. In estimating the actual transmission hours, relay of national and other programmes from LPTs and others have not been included because relay of the national programme does not involve any production costs. The equipment and personnel cost of LPTs have already been accounted in fixed cost.

Estimated Cost Function for Programme Production and Transmission

An effort was made to compute the cost function for the period 1976-77 to 1985-86. This data is given in Table-3. The cost function could be computed only for 1983-84, 1984-85 and 1985-86, since the figures for total transmission time was not available for previous years. Computed cost functions are as follows :

$$1983-84 : TC(h) = 244408000 + 16171h = 488.493 \text{ million} \\ \text{where, } h = 15,114.$$

$$1984-85 : TC(h) = 344061000 + 21019h = 688.121 \text{ million} \\ \text{where, } h = 16,369.$$

$$1985-86 : TC(h) = 456238000 + 23050h = 912.559 \text{ million} \\ \text{where, } h = 19,797.$$

The above cost functions indicates that annual public cost was Rs. 488.493 million in 1983-84, Rs. 688.121 million in 1984-85, and Rs. 912.559 million in 1985-86.

TABLE-3: COMPONENTWISE COST ESTIMATES AND AVERAGE COST OF PROGRAMME PER HOUR AND PER VIEWERS

Year	Fixed Cost (F) (Rs. Millions)			Total	Variable Cost (V) (Rs. millions)	Annual hours of transmission (nos.)	Variable cost per hour of transmission (Vh) (Rs.)	Average Cost per hour AC(h) (Rs.)	No. of viewers (N) (millions)	AC(h)/N (Rs.)
	Annualized f ₁	Annualized f ₂	f ₃							
1976-77	-	12.039	3.156	15.195	75.450	NA	@	@	2.875	@
1977-78	-	18.565	4.232	22.797	86.534	NA	@	@	2.875	@
1978-79	-	21.252	4.637	25.889	93.495	NA	@	@	4.060	@
1979-80	-	24.687	4.335	29.022	103.009	NA	@	@	5.395	@
1980-81	-	28.976	4.443	33.419	120.161	NA	@	@	6.908	@
1981-82	-	42.867	5.240	48.107	152.965	NA	@	@	9.288	@
1982-83	-	66.394	9.105	75.499	205.778	NA	@	@	12.573	@
1983-84	0.836	131.896	12.080	144.812	244.408	15114	16171	25752	12.670	2032.5
1984-85	0.836	219.363	14.228	234.427	344.061	16369	21019	35340	21.794	1621.5
1985-86	0.836	296.378	18.250	315.464	456.238	19797	23050	38980	40.500	962.5

Source: Computed from the basic data given in Appendix-I and data on viewing Population presented in Table 2.

Accordingly the average cost per hour, AC(h) was estimated as under :

1983-84	:	AC(h) = Rs. 25,752
1984-85	:	AC(h) = Rs. 35,340
1985-86	:	AC(h) = Rs. 38,980

The above mentioned average cost per hour can further be viewed in terms of average cost per hour per viewer. This comes to as

1983-84	:	Rs. 2023.5 per hour for one million viewers
1984-85	:	Rs. 1621.5 per hour for one million viewers
1985-86	:	Rs. 962.5 per hour for one million viewers.

It is expected that average cost per hour per million viewers will decline rapidly as more population gains access to TV sets. Even now average cost per hour of production and transmission of programmes and average cost per hour per million viewers is already extremely low.

PRIVATE COST OF RECEPTION OF TV PROGRAMMES

Taking the price of colour TV at Rs. 6,000 and black and white TV at Rs. 2,000, cumulative investment in 8.75 million TV sets (90% black and white, and 10% colours) comes to Rs. 28.57 million.

Annualized cost of owning and viewing colour TV set comes to about Rs. 1,488 at 10% interest rate with a life of 10 years. As indicated earlier bulk of the TV sets today are in urban and metropolitan areas and there too only with the top four consumption brackets.

COMMERCIAL REVENUES AND TOTAL BUDGET OF DOORDARSHAN

With the expansion of TV coverage and liberalization of policy of accepting advertisement on commercial basis, gross revenue of Doordarshan (TV) has steadily increased from Rs. 8.75 million in 1980-81 to Rs. 622.79 million in 1985-86. Total budget of Doordarshan has also increased during the same period from Rs. 270.63 million to Rs. 1,742.65 million in 1985-86 (Table-4). Gross revenue as percentage of total budget, has now become 35.74 percent of the total budget in 1985-86 (Table-4). Thus, there has been very rapid increase in the gross revenue from commercial operation. In addition, the government also gets one time licence fee of Rs. 100 from the sale of every TV set in the country.

TABLE-4 : TELEVISION - COMMERCIAL REVENUE AND TOTAL BUDGET

Year	Gross Revenue (Commercial) (Rs. million)	Total Budget (Revenue Expen- diture + Capital Expenditure) (Rs. million)	Gross Revenue as a percentage of total budget
1980-81	80.750	270.631	29.84
1981-82	112.694	432.124	26.08
1982-83	158.874	777.076	20.45
1983-84	197.899	1051.371	18.82
1984-85	314.345	1335.223	23.54
1985-86	622.792	1742.646	35.74

Source: Television in India, Audience Research Unit, Directorate General - Doordarshan, New Delhi, April 1986.

SCENARIO IN 2000 A.D.

Total Populating having Access to TV in India in 2000 A.D.

It is projected that upto the year 2000 A.D. every year the country will be adding four million new TV sets (3 million black & white and one million colour sets). Besides, there will be imports which may be taken to off set the number of TV sets which will become depreciated and disfunctional. In addition, 10 percent of the existing sets would also become depreciated and disfunctioned by the 2000 A.D. Taking all these figures into consideration, the projected number of TV sets in the year 2000 A.D. would become 63 million (1/3rd colour and 2/3rd black & white) (Table-5). These TV sets would provide access to 378 million people. We expect that the total population of 986 million would be theoretically covered by the TV signals. Thus, the number of viewers, as a percentage of total population covered by the Doordarshan would be 38.34 in the year 2000 A.D. Therefore, there will exist a wide gap between the reach of the TV signals and population having actual access to TV viewing. It is expected that the total hours of transmission would increase to 59,391 (3 times of the present number). This will happen because of the pressure for starting a second channel everywhere and longer transmission hours per day.

National Cost, Revenue and Total Budget in the Year 2000 A.D.

It has been estimated that the annualized fixed cost would become double by the year 2000 A.D. Variable cost per hour would go up by 1.5 times because there will be a possibility of re-runs of already produced programmes and this will bring down the production and transmission costs. Taking these two estimated costs and projected total hours of transmissions at 59391. Public cost of production and transmission (annualized) would reach at Rs. 2737.92 million in the year 2000 A.D. (Table-6). If this cost is divided by the estimated number of viewers, given in Table-5, the public

TABLE-5 : SCENARIO OF TOTAL POPULATION HAVING ACCESS TO TV
IN INDIA IN 2000 A.D.

Sr. No.	Items	Projected for 2000 A.D.
1.	Number of TV sets (in million)	63.0
2.	Estimated Viewers :	
	a) Total Viewers (in million)	378.0
	b) Total population covered by TV (in million)	986.0
	c) Total viewers as percentage of total population covered by TV	38.34
3.	Total hours of transmission	59391

TABLE-6 : SCENARIO OF NATIONAL COST (PUBLIC AND PRIVATE)
REVENUE AND TOTAL BUDGET IN THE YEAR 2000 A.D.

(Figures in million)

Sr. No.	Item	Projected for 2000 A.D.
1.	Public cost of production and transmission of programmes (annualized per year)	2737.92
2.	Public cost per hour per million viewers	7.24
3.	Private cost of reception (cumulative)	209591.60
4.	Commercial revenue and budget :	
	a) Commercial Revenue	6227.92
	b) Total budget	10455.88
	c) Commercial revenue as a percentage of total budget	59.55

cost per hour per million viewers comes to only Rs. 7.24. This indicates that public cost would decline at a very rapid pace as the actual access of the population increases. This also indicates that in terms of the public cost per viewer, TV will become perhaps the cheapest medium of mass communication in India and also perhaps in the world.

Taking the projected number of TV sets at 63 million, the private cost of buying TV would come to Rs. 20991 million by the year 2000 A.D. It may also be noted that while the public cost of production and transmission would decrease rapidly, the annualized private cost of owning and viewing TV would not decline at all for an individual.

It is estimated that the commercial revenue would go up by ten times of 1985-86 figures by the year 2000 A.D. The total budget of Doordarshan is only expected to increase by at the most five times (Table-6). This will mean that commercial revenues as a percentage of the total budget would go up to 59.56 percent.

Profile of Population having Access to TV in the Year 2000 A.D.

The estimated figure of 63 million TV sets in the year 2000 A.D. would give access to 378 million viewers (38% of the population). It is interesting to examine the profile of these viewers. In terms of the economic classification, the viewers will belong to top five brackets in urban areas and top ten in the rural areas on the basis of per capita consumer expenditure (Table-7). This means that they would belong to top 82.76 percent of urban population and top 30.65 percent of rural population in terms of the distribution of consumer expenditure. This skewed distribution of viewership in favour of relatively richer sections of population is mainly because of a very high capital requirement and annualized cost of owning and viewing TV.

TABLE-7 : PROFILE OF POPULATION HAVING ACCESS TO TV IN THE
YEAR 2000 A.D.

I. ECONOMIC CLASSIFICATION :	
Population in top five deciles in urban and top deciles of rural population in terms of per capita consumer expenditure:	
a) Urban (% of total population)	89.76
b) Rural (% of total population)	30.65
II. CLASSIFICATION BY SEX (in million)	
i) Male viewers	113.40
ii) Female viewers	113.40
iii) Children viewers	151.20
III. LOCATION-WISE CLASSIFICATION OF VIEWERS (in million)	
i) Urban viewers	264.60
ii) Percentage of urban viewers to total urban population	61.20
iii) Rural viewers	113.40
iv) Percentage of rural viewers to total rural population	17.20

In terms of classification by sex, the total viewership of 378 million would be divided as follows: children (below 14 years) (51.20 million) and females and males at 113.4 million each.

In terms of location of these viewers about 70 percent (264.6 million) would be located in urban areas. These viewers would constitute 81.2 percent of the urban population. Only 30 percent (113.4 million) of the viewers are expected to be located in rural areas. These viewers would constitute only 17.2 percent of the total rural population. Thus, the viewership would be predominantly urban.

SOCIO-ECONOMIC AND POLITICAL IMPLICATIONS OF OWNERSHIP PROFILE

The TV viewers profile which has emerged above for the year 2000 A.D. indicates that it will accentuate knowledge gap between abject poor in urban areas and others on the one hand and between rural and urban people on the other. It will also have serious socio-economic and political implications as follows :

- 1) As urban viewers would constitute the bulk of the viewers, they would demand the kinds of programmes which have more entertainment bias rather than those which play the role of a development communication tool.
- 2) There will be a perpetual conflicts between the programmes meant for rural and urban poor and those suitable for middle and upper income brackets in urban areas.
- 3) In terms of political implications, vast majority of rural masses would not have access to TV. Thus, the TV's role for integration and unity of the country and as a leveliser of regional difference would not be achieved.

- 4) The situation will be akin to what Agrawal* has indicated in Figure-2 where cultural elite in social hierarchy would form the apex of the obtuse cone, the information excess and its percolation would create an obtuse inverted information cone in which lack of access to TV insulates any possibility of information percolation. The people who would have access to TV would already have high media exposure from newspapers, radio, video and movies. The media poor would not be able to afford most of the means of receiving external information through electronic media, 3/4th of them would be the illiterates forming the largest part of the base of the obtuse cone. Thus, the knowledge gap between 'haves' and 'have nots' would widen.

POLICY OPTIONS FOR BRIDGING THE GAP

The above analysis indicates that given the present policies for augmenting the production facilities and pricing of TV sets, about 62 percent of the population (largely belonging to rural areas and abject poor in urban areas) would not get access to TV viewing even by the year 2000 A.D. This calls for a multi-pronged policy thrust for giving access to this bulk of the population. In this section we shall deal with three such policy interventions as follows:

- i) Market Mechanism: It can be seen from Table-8 that present prices in India both for black & white and colour TV sets are substantially higher than the international prices for the comparable sizes. The tax-incidence ranges between 10 percent in black & white (12"/14" size) to about 42 percent in some models of colour TV of 20" size.

If the consideration is to bridge the gap between the projected access and total theoretical viewership, government has the option to grant fiscal exemptions for all these sizes. If the taxes are exempted/reduced on all sizes, the process of richer sections of

* Bindu C. Agrawal, Culture Communication and Knowledge : The Structural Predominants (mimeo), Development and Educational Communication Unit, ISRO, Ahmedabad (June 1986).

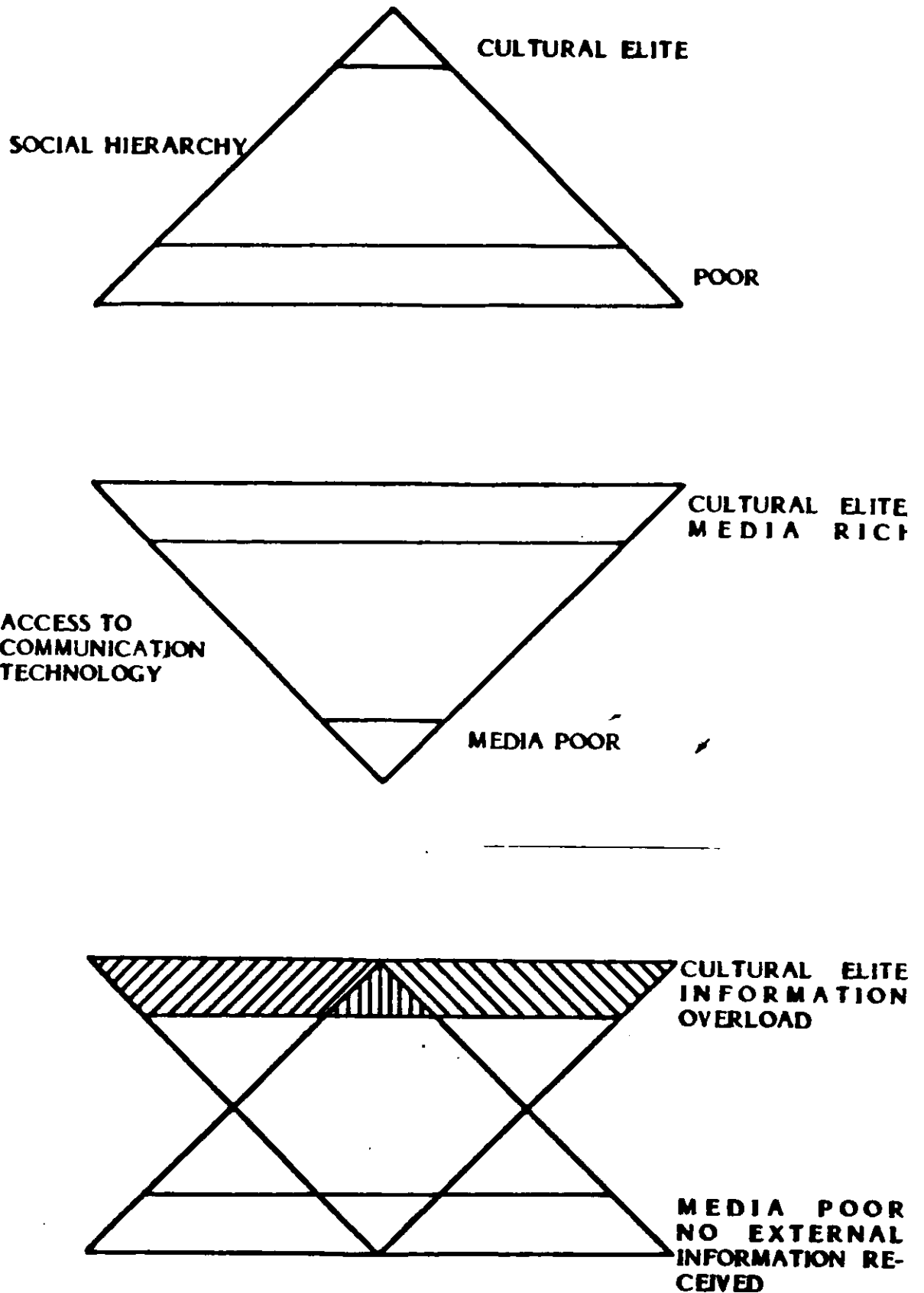


FIGURE 2 : DIFFERENTIAL ACCESS OF POPULATION TO THE MASS MEDIA

Source : Binod C. Agrawal, Culture, Communication and Knowledge : The Structural Predicaments (mimeo), Development and Educational Communication Unit, ISRO, Ahmedabad (June 1986).

population changing from black & white TV to colour TV would be accelerated. This process considerably reduces the price of second hand black & white TV sets in the market. This would enable the poor sections ('have nots') of the population to acquire the TV sets at cheaper prices. The government can use the existing market structure to achieve the objective of bridging the gap.

ii) Community TV at Public Costs: Since bulk of the 'have-nots' (in terms of access to TV sets) would be located in rural areas and urban slums, another policy option open to government is to set up the Community TV sets (SITE experiment in India has demonstrated the viability of direct reception sets through the chicken mesh antenna) at public cost. In this context the calculations given in Table-6 regarding the commercial revenue and the projected budget in the year 2000 A.D. are of interest. It has been projected that commercial revenues will go up by about 10 times and total budget would increase by five times than the figure of 1985-86. Therefore, the commercial revenue would become 59.56 percent of the total budget of Doordarshan. The cost of Satellite cover is not included in this total budget. This is normally included in the budget of the Department of Space (ISRO). To this extent the percentage may be an over estimate. The point, however, remains that the government may decide to plough back some of the revenues to meet the cost of community TV sets in rural areas and urban slums. The SITE evaluation studies indicate that viewership of community TV sets would also be 5 to 6 times larger than that of private TV sets. Large scale introduction of community TV sets would, however, require infrastructure and back-up support for the repair and maintenance of those sets. It is expected that all the villages in the country would be electrified and connected with an all-weather road by the year 2000 A.D. Similarly the literacy rate would also substantially go up, particularly in view of the new education policy being implemented by the government.

TABLE-8: COST STRUCTURE FOR PRODUCTION OF TELEVISION SETS IN INDIA AND TAX INCIDENCE (1985-86)

T.V Models	Cost Details	Basic Cost			Tax Components			Total Taxes (4+5+6)	Consumer Price	Tax-Compon- ent as % of consumer price
		Material Cost	Conversion Cost + Distribu- tion cost +Profit	Total (1+2)	Excise Duty	Sales * Tax	Customs@ Duty			
		(Rs)	(Rs)	(Rs)	(Rs)	(Rs)	(Rs)	(Rs)		
		1	2	3	4	5	6	7	8	9
Black & White										
	12" / 14"	900-1200	225-510	1125-1710	NIL	125-190	NIL	125-190	1250-1900	10%
	20"	1600-1800	195-950	1795-2750	300+100	250-360	55-90	705-850	2500-3600	28-24%
Colour	20"	3300-4700	1040-2700	4340-7400	1500+100	750-1100	810-900	3160-3600	7500-11000	42-33%

Source: Department of Electronics, Government of India.

Notes :

- * Sales tax is 10% of the consumer price.
- @ Customs duty on all components 75%.

iii) School TV Sets at Public Cost: With the implementation of new education policy, it is expected that substantial portion of children in school going age would be actually studying in the schools. We know that 40 percent of the population is that of children. Another policy option open to government will be to introduce TV sets again at public costs. A beginning in this direction has already been made by the University Grants Commission in India to support the Universities and Colleges in buying TV sets on grant basis and to help Doordarshan in broadcasting the educational TV programmes through Doordarshan.

SUMMING UP

The rapid expansion of TV coverage has opened up possibilities of this medium to be used as a developmental communication tool. The analysis in this paper has indicated that only 12 percent of the population residing in the areas with the reach of the TV signals can only watch the TV at present. The simulation exercise reported in this paper indicates that unless some major policy interventions are made, only 40 percent of people would have access to TV programmes even in the year 2000 A.D. The profile of these viewers indicates that bulk of these viewers would be from the urban area and top three brackets of consumption expenditure in rural area. The paper has discussed some of the socio-economic and political implications of this profile of viewership. This calls for a multi-pronged policy thrust in remedying the situation of skewed access to TV in India, widening the knowledge gap between 'haves' and 'have-nots'. This paper has suggested three such areas policy of interventions. The implementation of suggested interventions would also have implication for production planning, fiscal measures and support of village panchayats and local bodies and school systems. These aspects need to be taken into account in communication planning for the year 2000 A.D.

Appendix - I

TABLE-1 : TRANSMISSION HOURS OF MAIN STATIONS

Kendra	Monday to Friday	Saturday	Sunday	
	p.m.	p.m.	Morning a.m.	Evening p.m.
Delhi *	6.00 - 11.30	1.45 - 4.00 6.00 - 12.00	9.30 - 2.00	2.00 - 11.30
Bombay *	5.45 - 11.30	1.45 - 4.00 6.00 - 12.00	9.00 - 2.00	2.00 - 11.30
Calcutta	6.00 - 11.45	1.45 - 4.00 5.25 - 12.00	9.30 - 2.00	2.00 - 11.15
Madras	5.30 - 11.45	1.45 - 4.00 5.00 - 12.00	9.30 - 2.00 9.00 - 2.00 8.30 - 2.00 8.50 - 2.00	2.00 - 11.15
Jalandhar	5.00 - 11.15	1.45 - 4.00 5.00 - 12.00	8.30 - 2.00	2.00 - 11.15
Lucknow	6.00 - 11.15	1.45 - 4.00 5.30 - 12.00	9.30 - 2.00	2.00 - 11.15
Srinagar	5.30 - 11.15	1.45 - 4.00 5.30 - 12.00	9.45 - 12.00	2.00 - 11.15
Bangalore	7.00 - 11.30	1.45 - 4.00 5.30 - 12.00	9.00 - 2.00	2.00 - 11.30
Trivendrum	6.30 - 11.15	1.45 - 4.00 5.00 - 12.00	9.00 - 2.00	6.30 - 11.15
Gauhati	6.00 - 11.15	1.45 - 4.00 5.00 - 12.00	9.00 - 2.00	2.00 - 11.15
Ahmedabad	7.00 - 11.15	1.45 - 4.00 5.00 - 12.00	9.30 - 2.00	2.00 - 11.15
Jaipur/ Raipur/ Muzaffarpur	6.00 - 11.30	6.00 - 12.00	9.30 - 2.00	2.00 - 11.30

Note:

* In addition, facility of Channel II is available between 6.30 to 8.30 p.m.

Appendix - I (Contd.)TABLE-2 : TRANSMISSION TIMINGS OF MAIN CENTRES THROUGH INSAT/
UPGRAH KENDRAS

Centres	ETV	HETV		Area Specific Programme	Total Duration (per day) Hrs. Mts
	am	pm	Repeat pm		
Ranchi	9.45-10.30	12.45-1.45	4.00-5.00	5.00-5.40	3 - 25
Gorakhpur*	9.45-10.30	12.45-1.45	4.00-5.00	5.40-6.15	3 - 20
Cuttack*	10.30-11.15	12.45-1.45	4.00-5.00	6.15-6.55	3 - 25
Hyderabad*	9.00-9.45	12.45-1.45	4.00-5.00	6.55-7.30	3 - 20
Nagpur*	11.15-12.00	12.45-1.45	4.00-5.00	7.30-8.05	3 - 20
Rajkot*	12.00-12.45 pm	12.45-1.45	4.00-5.00	8.05-8.40	3 - 20

Source: Television in India, Audience Research Unit, Directorate General,
Doordarshan, New Delhi (April - 1986)

Note:

* They are linked with Delhi at suitable punctuations.

ETV - Educational TV Programmes of enrichment type.

HETV- Higher Educational TV Programmes originated by UGC.

Appendix - IITABLE-1 : CAPITAL EXPENDITURE f₂

(Figures in million)

Financial Year	Studios	Transmitters	Machinery and Equipment	Total
1976-77	45.782	40.843	0.154	86.779
1977-78	16.994	27.684	0.158	44.836
1978-79	11.759	7.686	0.355	19.800
1979-80	15.281	9.781	0.322	25.384
1980-81	24.395	8.125	0.682	33.202
1981-82	93.088	18.276	0.127	111.491
1982-83	74.433	90.392	0.514	165.339
1983-84	125.937	311.331	0.127	437.395
1984-85	123.080	447.608	0.654	571.342
1985-86*	272.067	272.486	4.708	549.261
Grand Total	802.816	1234.212	7.801	2044.829

Source: Compiled from various issues of Demand for Grants, Ministry of Information and Broadcasting, Government of India.

Note:

*1985-86 Figures may be treated as provisional since appropriate account has not so far been finalized.

Appendix -II (contd.)TABLE-2 : EXPENDITURE ON DIRECTION AND ADMINISTRATION AND
LISTENER RESEARCH (F₃)

(Figures in million)

Financial Year	Direction and Administration	Listener Research	Total
1976-77	2.952	0.204	3.156
1977-78	3.161	1.071	4.232
1978-79	3.554	1.083	4.637
1979-80	3.458	0.876	4.335
1980-81	3.550	0.893	4.443
1981-82	4.417	0.823	5.240
1982-83	8.087	1.018	9.105
1983-84	10.918	1.162	12.080
1984-85	12.891	1.337	14.228
1985-86 (Provisional)	16.928	1.322	18.250
Grand Total	69.917	9.789	79.706

Source: Compiled from various issues of Demand for Grants, Ministry of Information and Broadcasting, Government of India.

Appendix -II (Contd.)

TABLE-3 : COMPONENTS OF VARIABLE COST

(Figures in million)

Financial Year	Operations and Maintenance	Commercial Service	Programme Service	Total
1976-77	14,035	1,238	60,185	75,458
1977-78	15,681	3,440	66,613	85,734
1978-79	13,309	7,786	72,400	93,495
1979-80	14,308	9,210	79,491	103,009
1980-81	14,045	11,887	94,229	120,161
1981-82	19,337	17,731	115,897	152,965
1982-83	35,284	24,343	146,151	205,778
1983-84	24,882	31,817	187,709	244,408
1984-85	46,774	50,658	246,629	344,061
1985-86 (Provisional)	41,156	95,810	319,272	456,238
Grand Total	238,811	253,920	1388,576	1881,307

Source: Compiled from various issues of Demand for Grants, Ministry of Information and Broadcasting, Government of India.