# Unit-4: HISTORY OF TELEVSION BROADCASTING IN INDIA

## UNIT STRUCTURE

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## 4.1 LEARNING OBJECTIVES

After going through this unit, you will be able to -

- discuss the development of Television Broadcasting in India and identify important milestones.
- elaborate on the efforts put behind the technological development in Indian Television and itsoutcome.
- explain of the various media related committees set up in the country for improvisation of television services.

## 4.2 INTRODUCTION

Television has been a companion and entertainer to people of all age groups across the globe, including India for a few decades now. Even

though the internet revolution and the mobile phone popularity has been remarkable, yet Television has retained its place as a favourite entertainer and has in fact moved on with the times adapting to advanced digital technology**.**It has played a crucial role in India's growth post-independence. In this unit, we shall discuss the growth and development of television in India and other related aspects.

## 4.3 GROWTH AND DEVELOPMENT OF TELEVISION IN INDIA

In India, Television has grown simultaneously with the nation, participating in its development and achievements. In fact, it is believed by many experts that the Indian Television system is one of the most extensive systems in the world. The first experimental Terrestrial television telecast in the country began in September 1959, from Delhi, with the help of a makeshift studio and a small transmitter, under the umbrella of All India Radio.

In 1961, Doordarshan was used as support to middle and higher secondary school education. Its experiments in teaching of science, mathematics and language were proved most successful and received appreciation from many UNESCO experts. Regular daily transmission began on 15$^{th}$ August, 1965. 'Krishi Darshan' a programme for farmers on agriculture was inaugurated by Indira Gandhi on January 26$^{th}$1967.

In the mid-1960s, Dr Vikram Sarabhai, a farsighted technocrat and founder of India's space program, began arguing in policy-making circles that a nationwide satellite television system could play a major role in promoting economic and social development. At Sarabhai's initiative, a national satellite communication group (NASCOM) was established in 1968.

Based on its recommendations, the Indian government permitted the concept of "hybrid" television broadcasting system consisting of communication satellites as well as ground-based microwave relay transmitters. Sarabhai envisioned that the satellite component would allow India to leap multiple steps into the state-of-the-art communication technology, speed up the development process, and take advantage of the

lack of infrastructure (until 1972, there was only one television transmitter in India, located in Delhi).

Eventually, satellite television was introduced in India after surveying the constant popularity of Indian television. Satellite broadcasting fits naturally with India's immense size, and with the ability of satellites to overcome natural barriers to television signals like mountains. Satellite communication removed the cost of distance in transmitting television (or telephone) messages. The initial success of the channels had a snowball effect. Moreforeign programmers and Indian entrepreneurs flagged off their own versions. Some talent came from the film industry, some evolved advertising and some also from the field of journalism.

The first major expansion of television in India began in 1972, when a second television station was opened in Mumbai (Then Bombay). By 1975, seven India cities could enjoy the television services including Srinagar, Chennai, Amritsar, Lucknow and Kolkata apart from Mumbai and Delhi.

In 1975, the Indian Government also started the first satellite based television services on experimental basis to test its possibilities of using it for socio economic development of the nation. The programme was called SITE (Satellite Instructional Television Experiment). SITE was a one year pilot project in 1975-76, covering 2400 villages in six states. The experiment got international attention. It made India TV conscious taking television to areas beyond urban boundaries.

ATS-6 Satellite and up-link centres at Ahmedabad (ISRO) and Delhi, programmes were telecast for 4 hours and day, involving in and out of school learning. The programmes ranged from agriculture, family planning, health and hygiene, planning and national integration. SITE was fairly successful in demonstrating the effectiveness of Satellite based television in India, and the lessons learnt from it was also used by the government in designing its own domestic Satellite INSAT, fist launched in 1982.

On April 1st in 1976, television services were separated from radio, and eventually by early 1980s, Doordarshan became a household name entertaining and education the nation. While SITE became a remarkable

example of using television for development in India, the ASIAD games in 1982, brought more demand for Television in the Indian market and people had the choice of buying colour television.

Now, headed by the Director General, appointed by Information and BroadcastingMinistry, Doordarshan, in 1976, also opened gates for Advertising on Indian television.

In 1982 television began to attain national coverage as government's preeminent media organisation, with launch of INSAT 1 A and coverage of Asian Games, hosted by India.

In the coming years yet another government terrestrial channel DD metro was introduced creating more space for itself among the viewers. In 1990, over 90 per cent of Indian population had access to television signals. The 1980s saw Indian serials like Hum Log, Mahabharat and Ramayan gaining popularity, while the 1990s experienced the domination of Hindi film industry on Doordarshan programmes.

In 1991, international television was introduced to India through CNN coverage of Gulf war. Three months later Hong Kong based Star TV entered Indian market. The opportunity was also grabbed by Indian Television channels that came into being between 1991 to1994, catering to people's taste and giving them entertainment not controlled by Government interference.

In 1995, DD international channel came into being reaching out to audiences across theglobe with the help of PAS-1 and PAS 4 satellites. International Satellite programming opened up the gates for unlimited entertainment and news from across the globe flow into the country. In 1997, Prasar Bharati, a statutory autonomous body was established.

The 21$^{st}$ century has seen the biggest revolution in television industry. Today people have hundreds of channels to choose from and can watch programmes from any part of the world sitting in some other corner with advent of digital and more advancement in satellite technology. The cable TV network and then DTH (Direct to Home) services gained large patronage across the country. Now the times are catering to the Digital Terrestrial Television Broadcasting (DTTB).

## 4.4 LAUNCH OF INSAT

The Launch of Indian National Satellite system, a series of multipurpose geo stationary satellites, commonly known as INSAT, was a major step forward in the world of communication and television broadcast revolution in India, brought in by a joint venture of the Department of Space, Department of Telecommunications, Indian Meteorological Department, All india Radio and Doordarshan.

Comissioned in 1983, INSAT is the largest domestic communication system in the Asia Pacific region. The INSAT satellites system was launched with the motive of enhancing the quality of and satisfying the broadcasting, telecommunications, meteorological and search and rescue operations needs of the country. The overall coordination and management of INSAT system rests with the Secretary-level INSAT Coordination Committee.

In fact the first INSAT satellite, INSAT-1A was launched in 1982 from Cape Canerva Air Force Station with help from NASA. The satellite was built by Ford Aerospace and operated by ISRO (Indian Space Research Organisation). But due to some technical drawbacks after its launch it was withdrawn in 18 months, abolishing its planned duration of service of seven years. In 1983, INSAT 1B was launched.

INSAT satellites provide transponders in various bands (C, S, Extended C and $K_u$) to serve the television and communication needs of the nation. Some of the satellites in the INSAT system also have the Very High Resolution Radiometer and CCD cameras for meteorological imaging (KALPANA-1 is an exclusive meteorological satellite). These Satellites are very useful in rescue missions in difficult terrains as they incorporate transponder(s) for receiving distress alert signals within in the South Asian and India Ocean Region. (ISRO is a member of the 'Cospas-Sarsat' program for search and rescue operations in the region.

In total 24 Satellites under the INSAT system were launched out of which 11 are functional till date. The Satellites have been very useful in the rapid expansion of Televisionbroadcasting and modern telecommunication facilities, extending its reach in to even the remote areas and off-shore

islands. The satellites are monitored and controlled by Master Control Facilities that exist in Hassan and Bhopal.

- **Some of the functioning INSAT satellites are:**

a) INSAT-2E (1999)
b) INSAT-3A (2003)
c) INSAT-3C (2002)
d) KALPANA-1 (2002)
e) INSAT-3E (2003)
f) GSAT-2 (2003)
g) Edusat (2004)
h) INSAT-4 Series (2005)
i) INSAT-4B (2007)
j) INSAT-3D (2013)
k) INSAT-4CR (2007)
l) GSAT-8 (2011)
m) GSAT-10 (2012)
n) INSAT – 3DR (2016)

## 4.5 DEVELOPMENT POST 1982

1982 onwards began the next phase of expansion of television in India. The country was preparing to host the next Asian Games and Doordarshan was gearing up for the beginging of colour transmission with Asian Games. At the same time a big leap was taken by TV with launch of INSAT satellite, marking the beginning of relaying to programmes nationally from different centres simultaneously.

The coverage of ‘Asian Games’ ‘NAM’ and ‘CHOGM’ was made possible using Satellite technology and microwave linkage. Doordarshan, in 1983 started services in six states simultaneously with support of INSAT 1B. The states were Andhra Ppradesh, Orissa, Maharashtra, Gujarat, Bihar and Uttar Pradesh. Many policy chages took place after ASIAD. The government realised that the development of television advertising was a huge source of revenue. The advent of commercials led to second significant development, that is, increase in entertainment programmes of different kinds.

In 1984, the first soap Opera of Indian Television 'Hum Log' was introduced with the aim of promoting women welfare, family planning, reinforcing positive social values and exposing social evils. Another series 'Buniyaad' was a big hit. Comedy series and other seirials followed. Ramayan and Mahabharat managed to draw huge fan following across the country. Eventually DD metro was introduced. Doordarshan also started its teletxt services.

In 1997, Prasar Bharati, a statutory autonomous body was established. Doordarshan along with AIR was converted into government corporations under Prasar Bharati. The Prasar Bharati Corporation was esablished to serve as the public service broadcaster of the country which would achieve its objectives through AIR and DD. This was a step towards greater autonomy for Doordarshan and AIR. However, Prasar Bharati has not succeeded in shielding Doordarshan from government control.

## 4.6 EMERGENCE OF COLOUR TELEVISION

In 1982, when the nation was gearing up for Asian games, there was a sense of uncertainty as to if India would be able to move out of the Black and white era of the small screen. One cabinet decision changed the show and the colourful spectacle of Asian games was decided to go coloured on television as well. In 1982, colour TV services was introduced by Doordarshan. India proceeded to install transmitters nationwide rapidly for terrestrial broadcasting. In this period no private enterprise was allowed to set up TV stations or to spread TV signals.

In the beginning, it was a temporary permit, with the Union Government allowing the import of 50,000 colour television sets by November of that year. Later many people bought imported colour television sets bringing high customes reveue for the government.

Because of I&B Minister Vasant Sathe's decision to allow imports, it opened the doors to expanding the television market in a big way in the country. It was followed by Doordarshan's networking phase. In 1982, television transmitters jumped from 35 to 100, by 1990, the figure was getting ready to cross the 400 mark.

## 4.7 AUTONOMY OF ELECTRONIC MEDIA

The most important role of every mass media is to reach out to people either to inform or to entertain. But in the recent years, the electronic media seems to have gained autonomy over the print or traditional media mainly because of its ability to reach out to larger masses within a shorter span of time, and its potential to leave stronger impact on the users.

The electronic media caters to both, the literate and the illiterate, the rich and the poor, the elite and the common alike, and gives ample options to choose from. It not only has the capacity to entertain the normal people but also those specially abled or physically challenged.

A deaf person can watch something while a blind person can entertain him or herself by listening to songs or audio of programmes. The electronic media brings out utmost creativity in people and also generates more employment. It caters to different tastes.

## 4.8 CHANDA COMMITTEE REPORT

During Indira Gandhi's tenure as the union minister for I and B, the A.K Chanda Committee was appointed in 1964 which sumitted its report in 1966, but was tabled in parliament only in 1970. It recommended the liberation of Radio and TV from rigid government control by converting them into separate corporations.

It stated: It is not possible in the Indian context for a creative medium like broadcasting, to flourish under a regiment of departmental rules. It is only by an institutional change that AIR can be liberated from the present rigid financial and administrative procedures of the Government. It is recommended that the separate corporation, set up for Akashvani and Doordarshan, should have the freedom to evolve its own methods of recruitment, regulate scales of pay and conditions of service according to its needs, and device a financial and accounting system appropriate to its creative activity.

It took another six years to separate Doordarshan from 'Akashwani' to create Akashwani and Doordarshan on april 1$^{st}$1976, though both

functioned from different administrative and financial procedures with common engineering and programme staff cadres.

## 4.9 VERGHESE COMMITTEE WORKING GROUP REPORT

The Janata government, after coming into power Post Emergency, appointed a working Group on Autonomy for Akashwani and Doordarshan in August 1977, headed by BG Verghese, which submitted its recommendations on February 24, 1978. But the main suggestion of the Verghese Committee, the formation of the Akash Bharati or the National Broadcasting Trust for both AIR and Doordarshan, did not find favour with the Government.

**The Report of the Verghese Committee stated:**

1. An autonomous national Trust should be created under which Akashvani and Doordarshan would function.
2. Radio and TV should work for the Public Purpose.
3. The proposed autonomous broadcastingtrust authority should be owned by the nation and be accountable to the Parliament.
4. The priority of broadcasting has to change from “urban elitist moorings to the rural and semi urban areas and to the urban poor.”
5. The committee recommends decentralisation of broadcasting authority.
6. The autonomy of the authority and independence from control of the government should be guaranteed by the Constitution.

The Verghese Committee Report was tabled in both houses of Parliament, and LK Advani, then I and B minister introduced a bill on May 16, 1979. The Bill proposed the setting up of an Autonomous Corporation known as Prasar Bharati for both AIR and TV. But it subsequently altered the basic structure of the proposed Corporation as suggested in the Verghese Committee report, and rejected the provision of Constitutional

safeguards. But on untimely dissolution of the Lok Sabha, the bill lost its existence.

BG Verghese said about the recommendations in the report as, "The reason why the people want an independent corporation is because the executive, abetted by captive parliament shamelessly misused broadcasting during the Emergency, that is what has to be prevented for all time. Democracy is not something based on the pillar of only one institution, such as Parliament or the Judiciary, however important it maybe. Democracy is a tapestry woven out of many institutions of which a free, responsible and creative broadcasting system is one of the most significant."

The Government later on introduced the Prasar Bharati (Broadcasting Corporation of India), Act 1990 in September 1990.

## 4.10 JOSHI COMMITTEE (THE WORKING GROUP ON SOFTWARE PLANNING FOR DOORDARSHAN - 1983) REPORT

TheCongress party, back in power in1979, did not consider AIR and Doordarshan, as mass media, necessary to be enabled to discharge their basic objectives of serving the people

In 1982, the government appointed a Working Group, headed by Dr. PC Joshi as Chairman, to prepare a software plan for Doordarshan. The Working Group submitted its report in 1984, and emphasized on the existing lack of functional freedom for Doordarshan. It suggested reorganisation of the Information and Broadcasting Ministry on the Railway Board pattern. It insisted that it should be manned in a similar manner as the Railway Board, with only people having professional experience, be part of it.

**The committee recommended:**

- Setting up of a National Doordarshan Council which would have three roles to perform.

1. To review and guide the organisation's performance.
2. Play the role of a guardian of Doordarsan's functional and

professional autonomy.

3. Act as a counterpart of the Press Council of India for examining complaints of inaccuracy or bias in the reporting of news and comment of current affairs.

The report emphasised that a developing country like India is exposed to danger of erosion of national cultural identity, and the need is to resist the cultural invasion from outside, by positive software planning. It urged the exploitation of the 'developmentpotential' of television, of using communication technology for leapfrogging into growth and development. The report endorsed the Jawaharlal Nehru and Vikram Sarabhai approach of tapping the communicationrevolution in general and television in particular as a major weapon in the fight against poverty and illiteracy.

Dr. Joshi, inhis Sardar Patel Memorial lecture in 1985 on 'Communication and Nation Building: Perspective and Policy, said, "Relevant software suited to the country can be generated with joint efforts of scientists and media men to introduce the people to the world view of the scientific age and to its fruits which help in solving the age old and new problems of human life. Equally important is, to draw upon the rich software on scientific education from developed countries and to adapt it to the country's needs."

## 4.11 DIGITAL TERRESTRIAL TELEVISION BROADCASTING

Digital terrestrial television (DTTV or DTT) is considered a technological evolution in the field of television broadcasting. Terrestrial digital TV broadcasting is a new format of broadcasting that enables the viewer to receive higher quality video and audio signals than conventional Analog TV, with no ghost images and no noise.

DTTV broadcasts are land-based (terrestrial) signals and the advantages are similar to digital versus Analog in platforms such as cable, satellite, and all telecommunications. There is much more efficient use of spectrum better quality images, and lower operating costs for broadcast and transmission (after the initial upgrade costs). A terrestrial implementation of digital television (DTV) technology uses an arial to broadcast to the

antenna, instead of Satellite dish or cable television connection.DDTV broadcasting is done through radio frequencies through terrestrial space using multiplex transmitters to allow reception of multiple channels on a single frequency range known as sub channels. There is use of Set Top Boxes (STB), TV gateways (included in TV sets) which decode signals received via standard television antenna. Some gateways also include Digital Video Recorders (DVR) functionality.

- **Unique Features of DTTV Broadcasting:**

With terrestrial digital TV broadcasting, one channel can be split up to broadcast 2-3 programs simultaneously and can be broadcast on a single digital Hi-Vision channel. In this way, for example, if a live sports broadcast goes into overtime, you can enjoy your favorite drama at the usual time on the main stream while watching the rest of the sports broadcast on other stream in the same channel.

It is disabled and elderly friendly as it allows subtitled caption broadcasting. Some new digital TVs have an audio speed adjustment function that allows you to slow down the speed of an announcer's voice. It is very useful for elder people.

Terrestrial digital broadcasts can be viewed on mobile phones, more popularly known as mobile TV. Clear signals can be received on mobile phones, laptops, Desk Tops, or TV in the cars. You can also check weather reports any time.

The Sound quality is remarkable. In Analog technology, noise can cause a deterioration of audio and video signals before they reach the viewer, and ghost images can appear as a result of reflection off of high buildings. Digital TV broadcasting, however, delivers high-quality audio and video, with no ghost images.

The technology offers the facility of 'Electronic Program Guide (EPG)' to check program information up to a week in advance with the help of remote buttons. Also provides the facility to adjust the setting of timer to watch favourite shows.

Terrestrial digital television broadcasts also give the option for

interactive television where with online connection people can make calls on live shows and participate in game shows.

- **DTTV Broadcasting in India**

In India, DVB-T system for digital television was adopted in July 1999.The first DVB-T transmission started on 26 January 2003 in the four major metropolitan cities by Doordarshan.Currently the terrestrial transmission is available in both digital and analog formats. 4 high power DVB-T transmitters were set up in the top 4 cities, which were later upgraded to DVB-T2 + MPEG4 and DVB-H standards. An additional 190 high power, and 400 low power DVB-T2 transmitters have been approved for Tier I, II and III cities of the country by 2017. The Indian telecom regulator, TRAI, had recommended the I&B to allow private broadcast companies to use the DTT technology. Indian I&B ministry only permits private broadcast companies to use satellite, cable and IPTV based systems. The government's broadcasting organisation Doordarshan had started the free TV service over DVB - T2 to the mobile phone users from February 25, 2016 onwards, and extended to cover 16 cities including the four metros from April 5, 2016.

- **Some of the Digital Terrestrial Television Broadcasting Systems are:**

1. ASTC DTV – Advanced Television standards Committee (Systems A)
2. ATSC-M/H- Advanced Television Systems Committee Mobile and Handheld
3. DVB-H Digital Video Broadcasting Handheld
4. DVB-T – Digital Video Broadcasting Terrestrial (System B)
5. ISDB-T – Integrated Services Digital Broadcasting Terrestrial (System C)
6. ISDB-TSB – Integrated Services Digital Broadcasting-Terrestrial

Sound Broadcasting – (System F)

7. FLO – Forward Link Only (System M)



## 4.12 LET US SUM UP

- The first experimental Terrestrial television telecast in the country began in September 1959, from Delhi, with the help of a makeshift studio and a small transmitter, under the umbrella of All India Radio.
- In 1975, the Indian Government also started the first satellite based television services on experimental basis to test its possibilities of using it for socio economic development of the nation. The programme was called SITE (Satellite Instructional Television Experiment).
- In 1984, the first soap Opera of Indian Television 'Hum Log' was introduced with the aim of promoting women welfare, family planning, reinforcing positive social values and exposing social evils.
- The electronic media caters to both, the literate and the illiterate, the rich and the poor, the elite and the common alike, and gives ample options to choose from. It not only has the capacity to entertain the normal people but also those specially abled or physically challenged.
- In 1982, with Asian games colour TV services was introduced by Doordarshan. The same year saw the launch of INSAT.
- The Chanda Committee, appointed in 1964 submitted its report in 1966, which stated that it is not possible in the Indian context for a creative medium like broadcasting, to flourish under a regiment of departmental rules. It is only by an institutional change that AIR can be liberated from the present rigid financial and administrative procedures of the Government.
- The Janata government, after coming into power Post Emergency,

appointed a working Group on Autonomy for Akashwani and Doordarshan in August 1977, headed by BG Verghese, which submitted its recommendations on February 24, 1978. But the main suggestion of the Verghese Committee, the formation of the Akash Bharati or the National Broadcasting Trust for both AIR and Doordarshan, did not find favour with the Government.

- In 1982, the government appointed a Working Group, headed by Dr. PC Joshi as Chairman, to prepare a software plan for Doordarshan. The Working Group submitted its report in 1984, and emphasized on the existing lack of functional freedom for Doordarshan.
- In 1997, Prasar Bharati, a statutory autonomous body was established. Doordarshan along with AIR was converted into government corporations under Prasar Bharati. The Prasar Bharati Corporation was established to serve as the public service broadcaster of the country which would achieve its objectives through AIR and DD.
- Terrestrial digital TV broadcasting is a new format of broadcasting that enables the viewer to receive higher quality video and audio signals than conventional Analog TV, with no ghost images and no noise.



## 4.13 FURTHER READING

1. PC Chatterjee (1987): Broadcasting in India, Sage, New Delhi
2. Nilanjana Gupta (1998): Switching Channels: Ideologies of Television in India, Oxford University Press, New Delhi
3. HR Luthra (1986): Indian Broadcasting, Publications Devision, New Delhi
4. David Page and William Crowley (2001): Satellites Over South Asia, Sage, New Delhi



## 4.14 MODEL QUESTIONS

**A. Very Short Questions :**

Q 1. Why are the years 1976 and 1982 important in the history of Indian Television?

**B. Short Questions : (Answer each question in about 150 words)**

Q 1. Write about the biggest satellite based instructional television experiment programme in India.

Q 2. Mention in brief the emergence of colour television service in India and its impact on the people and the economy.

**C. Long Questions : (Answer each question in about 300-500 words)**

Q 1. When was INSAT launched and how did it revolutionise the TV broadcasting technology in the country?

Q 2. When was Prasar Bharati finally established?

Q 3. Write in brief about the Chanda Committee?

Q 4. Mention the important recommendations of the Joshi committee.

Q 5. Discuss in detail the Verghese Working Group Committee.

Q 6. What do you understand by Digital Terrestrial Television Broadcasting?

Q 7. Write in 300 words the important milestones of Indian Television broadcasting.