

DEPARTMENT OF SCIENCE & TECHNOLOGY

An Outlook for India's Future
(2000 A.D.)

INTERIM REPORT

on

COMMUNICATIONS

by

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NCST PANEL ON FUTUROLOGY

The formation of the National Committee on Science and Technology (NCST) Panel on Futurology in mid 1973 has been the starting point of futuristic studies in India. The Panel identified nine areas, namely, (i) Energy Generation and Needs; (ii) Housing; (iii) Transportation; (iv) Communication; (v) Urbanology and Slum Problems; (vi) Rural Development; (vii) Food; (viii) Management; and (ix) Education, for study with a view to prepare scenarios for the year 2000 A.D. presenting likely and desired future perspectives and available options in these fields. It is hoped that these studies will afford the decision makers with a list of future courses of action. With this end in view the Futurology Panel hopes to prepare a series of monographs and technical reports in the field of future studies in the above areas. It also aims to encourage and simulate future consciousness and research in few advanced centres of study.

Nine technical sub-groups of Futurology Panel have been constituted to prepare monographs on the above topics. The report here, by Prof. J.G. Krishnayya, Director of the Systems Research Institute, and Convenor of the Futurology Panel's Technical Sub-group on Communications, is an interim report from his group. This constitutes an objective study. Statements made in this Report, however, do not yet constitute any policy position. It is hoped that this study will provide to our policy makers in different organisations a reasonable degree of data and information and a set of technological and social alternates relevant to choose the future course of action. The Futurology Panel will welcome comments and suggestions.

New Delhi,
the 11th October, 1976.

(S.C. Seth)
Member-Secretary
NCST Panel on Futurology

OUTLINE

1. Introduction
2. Emerging Scenario - The most likely future:
Knowledge-based bureaucratic society; Agro-surplus regions, Urban Complexes dominate; Limited access to one-to-one and many-to-many media; "Bombay-film" swamps other mass communication metaphors; One-way character of mass media creates Pavlovian Syndrome and passivity in the people.
3. Critical issues raised by the emerging scenario:
 - Will geographic distribution of access to communications be concentrated or spread widely?
 - Will the availability and price structure of media systems support a small spectrum of users or many types of users and uses? Interchangeability of messages and movement.
 - What is the meaning of difference between 'hard' and 'soft' technologies and what choices should therefore be policy-derived?
4. Preferred Scenario - What Policy Decisions are needed:
 - 4.1 Issue of Geographic spread of availability of Communication media to spread information/knowhow/problem-solving ability
 - Compensatory effort to vitalise rural areas using broad spectrum of communication devices - low power local radio transmitters, more local print media, public telephones, etc.
 - Community building in urban and rural areas through multi-media Communication centres for technical learning, etc.
 - Pricing policies to favour broad-based use of postal and telecommunications over transport wherever possible;
 - Support for role of Traditional media and art forms - Music/Drama/Dance;
 - 4.2 Issue of availability and price structure of media systems to support variety
 - Role of wide variety of special-interest print publications - postal rate, paper-pricing and legal aspects;
 - Role of local daily and weekly newspapers;
 - Positive role of metropolitan newspapers and newspaper chains;
 - 4.3 Issues of Technology Policy
 - Preferred broadband telecom strategy: All trunk communications services on main intercity routes between the 25 main urban centres to be digital, including digitised voice channels; to support packet-switching.
 - Videotape sets for institutional (educational) use rather than broadcast TV: TV, in colour rather than black-and-white, to be used only in metropolitan cities, as a public information medium with on-line or rapid feedback from viewers.

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- Modular technology wherever possible - use of microcomputer chips to provide versatility to user devices, e.g. party-line telephones.
- Expansion of telex and message-switching services and multiple newswire services in different languages
- Communications satellite to supplement coaxial and VHF links.