

CHAPTER 31 POST AND TELECOMMUNICATION

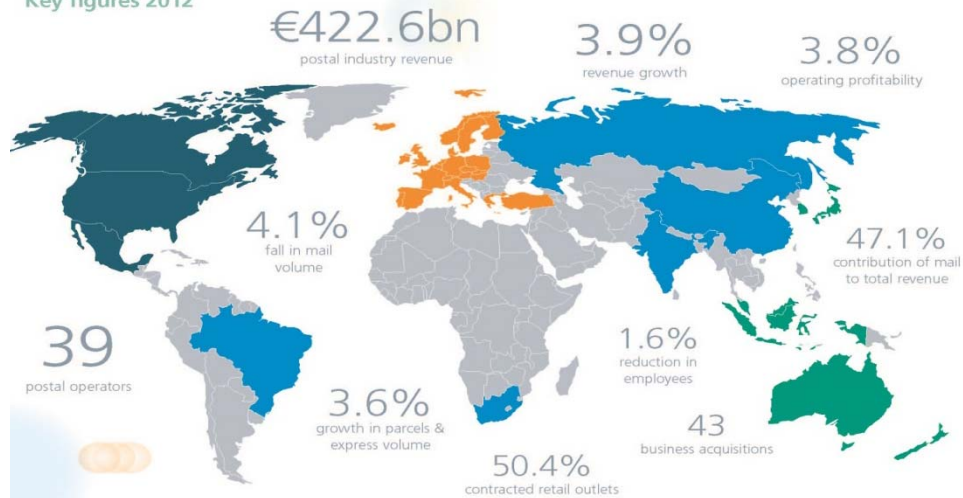
31.1 Global Scenario :

31.1.1 Postal services : **31.1.1.1** Postal services transport mail and small packages to destinations around the world, and they are mostly public corporations. However, there has been increased privatization of postal operators in the past 20 years, and government restrictions on private postal services have eased. Postal authorities are often also involved in telecommunications, logistics, financial services and other business areas. Postal operations involve providing domestic and international postal services – receipt, transport and delivery of mail, specialized mailing services, operation of postal facilities and sale of postal, philatelic and mailing supplies. The world postal network in 2009 was based on around 650,000 post offices and 5.5 million postal employees (one-third women and 20 per cent part-time) providing postal services throughout the world. There are around 8 million postal workers overall (including private and informal services, and parts of courier services).

31.1.1.2 Postal establishments round the world offer diversified services . As per **Universal Postal Union**, the letter-post volume still accounts for the lion's share of Post's revenues' average, however, the share has been declining in recent years, from 52 % in 2005 to 48 % in 2011. In 2011, the decline of global domestic mail volumes has accelerated. In 2011, the contraction was around 3.7% and thereby higher than the annual average decrease of minus 1.5 % from 2000 to 2010. By contrast, the decline in the international letter post service has slowed in 2011 and amounted to minus 2.2%, compared to an annual average of minus 4.1% from 2000 to 2010. However, the letter-post volumes are not declining everywhere in the world. In Latin America and Caribbean as well as in Asia and Pacific, the volume of domestic service of letter-post items grew in 2011 by 1.0% and 1.1%, respectively. Services like EMS – the Express Mail Service –a global brand designating the postal product with the fastest delivery, augur well for the industry . Posts in around 200 countries and territories worldwide offer this premium end-to-end service for documents and merchandise. Posts is also seen as a possible instrument in achieving financial inclusion as some 1.5 billion people worldwide are already using the financial services provided by Posts.

31.1.1.3 Some key figures as per **International Postal Corporation** are indicated below:

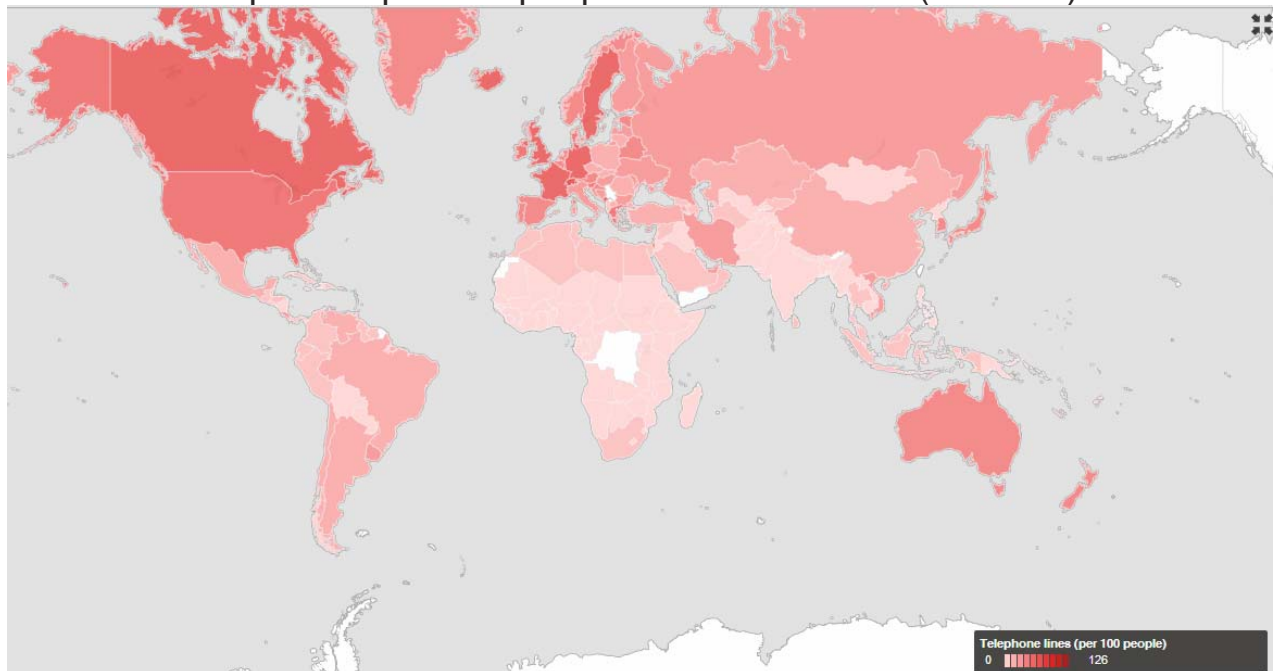
Key figures 2012



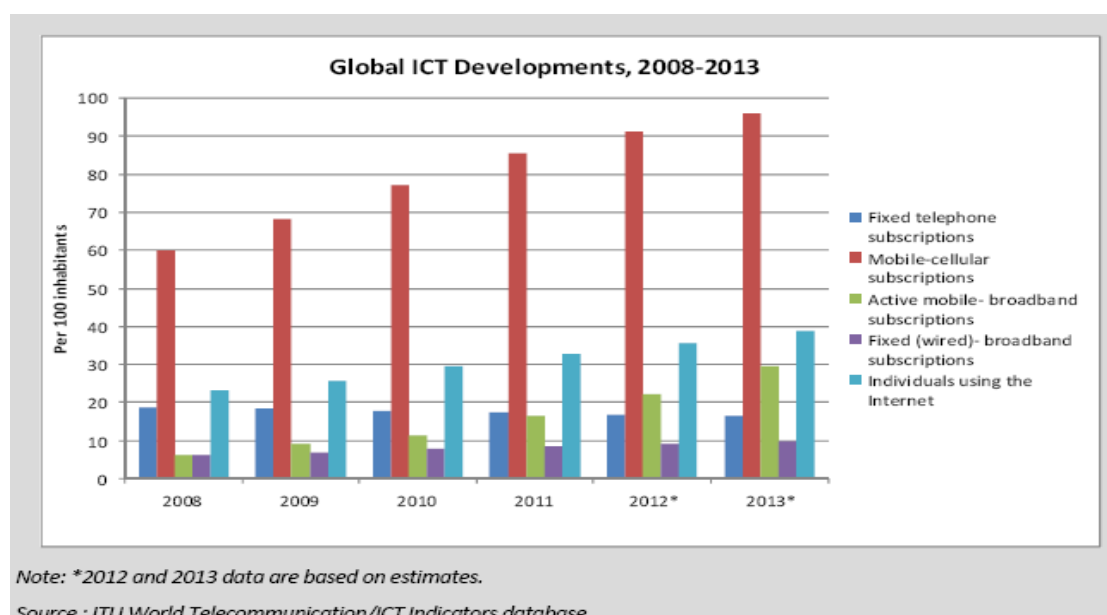
31.1.2 Telecommunication services – 31.1.2.1 Use of telephones, radio and microwave communications, as well as fibre optics, satellites and the Internet plays a crucial role in the world economy. The worldwide telecommunication services revenue of the industry was estimated to be around \$1.8 trillion in 2010. The total workforce in telecommunications services is estimated to be about 6 million, of whom 20 per cent are women.

31.1.2.2 About 4.5 million workers from the postal and telecommunications services sector are affiliated to global union federations. Major trends include rapid technological developments, deregulation and privatization, and the proliferation of new high-value services.

Telephones per 100 people – IMF Database (2009-13)

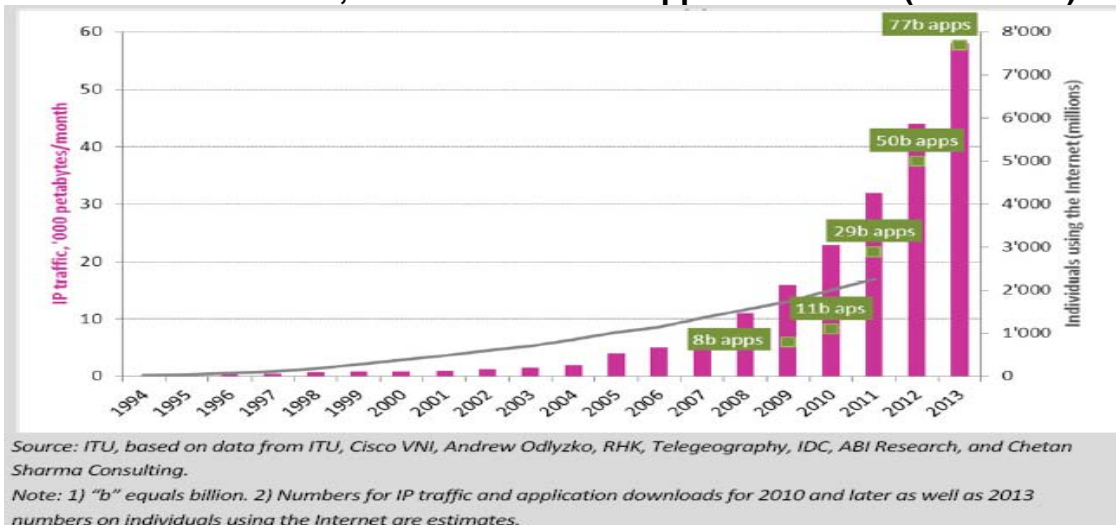


31.1.2.3 Growth in ICT Market : International Telecommunication Union (ITU) estimates that by end of 2013, the number of fixed-broadband subscriptions will have climbed to more than 688 million, corresponding to a global penetration rate of 9.8 per cent. At the same time, the number of active mobile-broadband subscriptions will grow by 21 per cent between 2010 and 2013, to an estimated 2.1 billion by end of 2013; representing nearly three times the number of fixed-broadband subscriptions, but still much fewer than mobile cellular subscriptions, which will reach an estimated 6.84 billion by end of 2013. ITU estimates show that mobile broadband penetration in the developing world will reach 20 per cent while penetration levels in the developed world will represent 75 per cent by end 2013.



31.1.2.4 Triggered by the growing number of Internet connections over mobile and fixed platforms, monthly Internet protocol (IP) traffic has skyrocketed from the modest 1 petabyte two decades ago, to an estimated 44'000 petabytes in 2012. These tremendous volumes are driven by growth in the number of connected people and devices, and the growing availability of abundant, diversified, and in most cases free, online content . In 2012, the number of individuals using the Internet reached the milestone of 2.7 billion people and the total number of applications downloaded over all types of mobile devices is estimated to have surpassed 50 billion. As in recent years, data still generates over 90 percent of consumer traffic, through video streaming, file sharing or online gaming. Online gaming and video calling, boosted by new mobile devices providing a richer user experience, are the rising stars in IP traffic growth, with over 40 percent year-on-year increase from 2010-2015. File sharing has also been experiencing dynamic growth, despite recent issues with major OTTs such as Megaupload.

Growth in IP traffic, internet users and apps downloads (1994-2013)

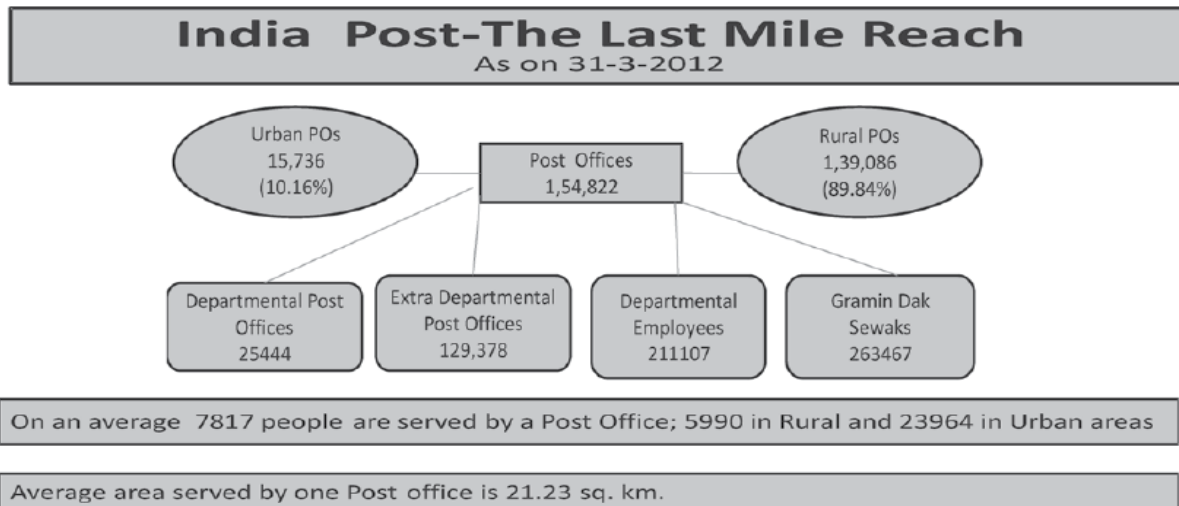


31.2 Postal Services in India : 31.2.1 The postal system in India is the synthesis of many influences. Its origins include elements of systems established from the Maurya era and those added by the British, the Princely States, the District postal systems and the Zamindari dak. The British Postal system in India was established by Lord Clive in 1776, and further developed by Warren Hastings, who established the Calcutta GPO in 1774 . Mail order services were started with the value payable service introduced in 1877, while fund remittances at the doorstep became possible from 1880 through money order services. With the introduction of the Post Office Savings Bank in 1882, banking facilities were accessible to all and by 1884 all Government employees were covered by the **Postal Life Insurance**. 1854 marks a watershed in the history of Post in India. On 1st October, 1854, India Post, as we know it today, was born with a skeletal network of 701 post offices under the control of a Director General.

31.2.2 The postal system, which we have today, became effective with the spread of roadways and railways as means of transport. In India, until 1837, the postal service was used solely for sending official mail. After 1837, the postal services were made available to the public. In course of time, Post Offices offered several other services including remittance of money, delivery of parcels, banking, insurance and many other such services. Postal services are administered by Government of India throughout the country and the charges for all these services are minimal, which the common man can afford. It is viewed as the most dependable means of written communication. It is also used by the common man as the most reliable means of sending money through money orders to persons staying at far off places.

31.2.3 Performance Of Postal services : 31.2.3.1 India Post has the largest postal network in the world with 154822 post offices across the length and breadth of the country as on 31 March 2012, of which 139086 are in the rural areas. Mail is collected from more than 5.62 lakh letter boxes, processed by network of Mail Offices and conveyed by rail, road and airlines all over the country to reach the addressee. Similarly, money is moved from sender to receiver through eMO door to door money remittance service, iMO Instant Money Order which reaches money in minutes and

Mobile to Mobile Money Order. The post office has thus evolved as a countrywide service provider.



31.2.3.2 The number of post offices , both rural and urban , has declined during 2011-12 . A brief comparison is tabulated below :

Year	No. of Post Offices	
	Urban	Rural
2007-08	15862	139173
2008-09	15871	139144
2009-10	15797	139182
2010-11	15826	139040
2011-12	15736	139086

31.2.3.3 Maximum number of Post offices are in Uttar Pradesh (11%) followed by Andhra Pradesh (10%) and Maharashtra (8%). Likewise the largest number of letter boxes is in Uttar Pradesh (15 %) followed by Maharashtra (9%), Andhra Pradesh (8%).

31.2.3.4 Postal Traffic: The number of total mail traffic has decreased from 14243.4 million in 2000-01 to 6371.8 million in 2011-12. The decline is most prominent in case of unregistered articles as , during the period, the use of postcards decreased from 3441.2 million to 1345.6 million and unregistered letters from 8438.8 million to 2993.2 million. The number of Speed Posts increased about ten times during the period from 37.8 million to about 391.9 million & Express Posts also increased to about 4 times to reach about 10 million in 2011-12 .

31.2.3.5 Although over the years 2000-01 to 2011-12, the number of **Money Order** has declined from 10.96 crores to about 7 crores, the amount issued under Money Order has increased from 5851.8 crores to 10201.5 crores. In 2011-12, total number of Money Orders was largest in Tamil Nadu, followed by Karnataka as both recorded more than 1 Cr money orders (3.35 & 1.44 Cr respectively) amount issued was high also in case of Kerala as Kerala along with Tamil Nadu & Karnataka saw money orders issued worth more than 1000 Cr (Rs 3440 – Tamil Nadu, Rs 1873- Karnataka and Rs 1479 Kerala)

31.2.3.6 Post Office Savings Bank (POSB) has a customer base of more than 260.16 million account holders other than Zero Balance accounts as on 31.03.2012. The banking services provided by Post Offices attract a large number of people both from rural and urban areas due to easy accessibility and wide network of post offices. The Post Office Savings Bank operates Savings Accounts, Recurring Deposit (RD), Time Deposit (TD), Monthly Income Scheme (MIS), Public Provident Fund (PPF), National Savings Certificate (NSC) and Senior Citizens Savings Scheme (SCSS). The outstanding balance under all National Savings Schemes and Saving Certificates in Post Office was over Rs 6056974.27 million as on 31.3.2012. As on 30th December 2012, nearly 55.70 million MGNREGA accounts existed in Post Offices and wages amounting to nearly Rs 10065 crore were disbursed to beneficiaries through 97709 Post Offices across the country.

31.2.3.7 Number of Depositors in the Post Office saving Banks swung during 2000-01 to 2006-07 and stood at around 61-61.5 million at both the beginning and end of the period. It has increased steadily thereafter to 78.05 million in 2009-10, 88.6 million depositors in 2010-11, 96.5 million depositors in 2011-12 and 115.8 million in 2012-13.

31.2.3.8 Postal Life Insurance : Maximum sum assured limit of PLI was raised from Rs 10 lakhs to Rs 20 lakhs and in RPLI from Rs 5 lakhs to Rs 10 lakhs from January 2012. The status of PLI / RPLI Funds as on 31.03.2012 and the business procured during the year 2011-2012 is as under :

PERFORMANCE OF PLI/RPLI				
Name of Plan	No. of Policies procured	Sum Assured (₹ in million)	Aggregate No. of Active Policies	Aggregate Sum Assured (₹ in million)
PLI	482423	132881.5	5006060	765913.3
RPLI	2714856	90889.9	13547355	697541.7

31.2.3.9 Total Revenue earned by the postal departments from various services increased by 13.46 % to Rs 78993.47 million during 2011-12 compared to 2010-11 whereas the net expenditure (expenditure – recoveries) increased only by 2.99 % resulting in decrease of deficit by 8.5 %.

REVENUE AND EXPENDITURE (for the years 2010-2011 & 2011-2012) (₹ in million)			
Particulars	Actuals 2010-2011	Actuals 2011-2012	% age Inc(+)/ Dec(-) over previous year
Revenue			
Sale of Stamps	6143.07	6630.33	7.93%
Postage Realised in Cash	23149.5	22776.17	-1.61%
Commission on Money Orders and Indian Postal Orders etc	4005.45	4907.79	22.53%
Remuneration for Savings Bank/ Saving Certificates Work.	35627.67	43040.80	20.81%
* Other Receipts	697.63	1638.38	134.85%
Total Revenue	69623.32	78993.47	13.46%
Net Expenditure	133079.48	137052.70	2.99%
Deficit (Net Exp - Revenue)	63456.16	58059.23	-8.50%

31.2.4 Modernization: 31.2.4.1 In view of the increasing use of technology whereby emails, sms call, voice chats etc increasingly replace conventional communication through letters, Department of Posts has been diversifying its services besides attempting integrated use of IT so that its infrastructure and outreach can be used in a better way. The Department of Posts has launched **Project Arrow**, to lay the foundation for a comprehensive, long-term transformation of India Post. Project Arrow aims at comprehensive improvement of the core post office operations as well as the ambience in which postal transactions are undertaken. The response of the general public and the staff of the Department to these initiative have been overwhelmingly positive and Project Arrow offices have shown significant increase in revenue earnings. The initiative 'Project Arrow— Transforming India Post' has also won the Prime Minister's award for Excellence in Public Administration for the year 2008-09. The scheme operating since 2008 was extended to 18600 Post Offices in 2012-2013 by adding 3039 Post Offices for improvement and monitoring of core operations.

31.2.4.2 The Government has approved the Department of Posts' IT Modernization Project with a total outlay of Rs 4909 crore in November,2012. The IT Modernization Project aims at modernization and computerization of all post offices in the country including more than 130000 Branch Post Offices in rural areas. The project will create national asset of 155000 networked Post Offices. It involves development of scaleable, integrated and modular software covering all operations of the Department of Posts including Post Office Savings Bank, Postal Life Insurance, Mail Operations, establishment of the required IT Infrastructure including Data Centre, WAN Networking of the Departmental Post Offices, development of Rural Information Communication Technology (Rural ICT) in rural Post Offices and providing rural Post Offices with handheld devices which are Aadhaar enabled and will also act as micro-ATMs. The project will make the post office the focal point of delivery of social security and employment guarantee schemes including disbursement of wages under MGNREGS Schemes of the Centre and State under Direct Benefit Transfer, will provide biometric authentication of financial transactions ,provide multiple channels like ATM, mobile

banking, net-banking for savings bank customer. It will provide an electronic and secure mode of money transfer particularly in rural areas.

31.3 Telecommunication in India : **31.3.1** The popular meaning of telecom always involves electrical signals therefore, the history of Indian telecom can be started with the introduction of telegraph. The first experimental electric telegraph line was started between Calcutta (now Kolkata) and Diamond Harbour in November 1850. A year later the line was completed and opened for the East India Company's traffic. In 1881, a license was granted to the Oriental Telephone Company Limited of England for opening telephone exchanges at Kolkata, Mumbai, Chennai (Madras) and Ahmadabad and the first formal telephone service was established in the country. While all the major cities and towns in the country were linked with telephones during the British period, the total number of telephones in 1948 was only around 80,000. While certain innovative steps were taken from time to time, as for example introduction of the telex service in Mumbai in 1953 and commissioning of the first [subscriber trunk dialing] route between Delhi and Kanpur in 1960, the real transformation in scenario came with the announcement of the **National Telecom Policy in 1994**, the setting up of the **Telecom Regulatory Authority of India**, the opening up of basic telephone services to the private sector, the announcement of the **new ISP policy**, and the separation of the Department of Telecommunications into the Department of Telecom Services and the Department of Telecom Operations.

31.3.2 After March 2000, the government became more liberal in making policies and issuing **licenses to private operators**. The government further reduced license fees for cellular service providers and increased the allowable stake to 74% for foreign companies. This was a gateway to many foreign investors to get entry into the Indian Telecom Market. Because of all these factors, the service fees finally reduced and the call costs were cut greatly enabling every common middle class and below middle class families in India to afford cell phone.

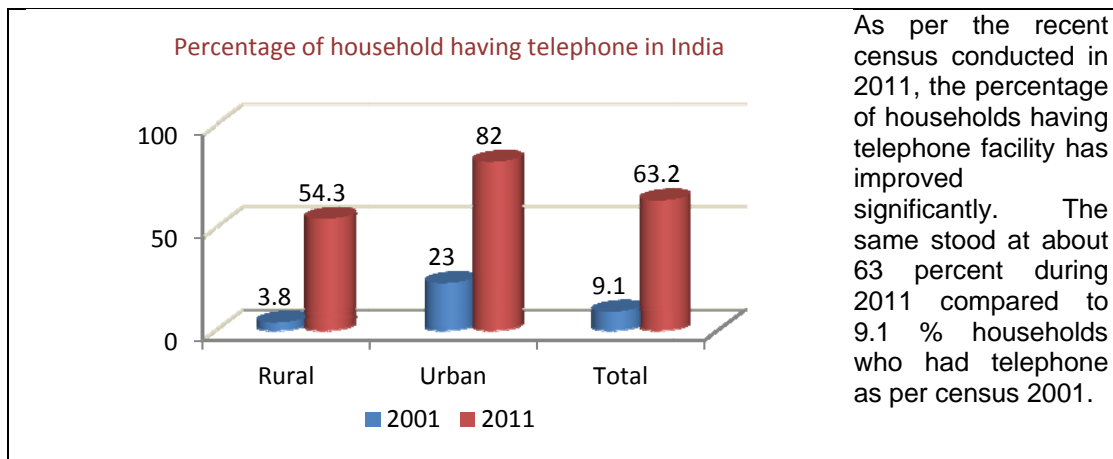
31.3.3 Recent Initiatives : 31.3.3.1 The Government approved **National Telecom Policy-2012** (NTP-2012) on 31st May 2012 which addresses the Vision, Strategic direction and the various medium term and long term issues related to telecom sector. Amongst several objectives NTP-2012 are :

- Strives to create **One Nation - One License** across services and service areas
- Achieve **One Nation - Full Mobile Number Portability** and work towards **One Nation -Free Roaming**
- Increase rural tele-density from the current level of around 39 to 70 by the year 2017 and 100 by the year 2020
- To recognize telecom, including broadband connectivity as a basic necessity like education and health and work towards '**Right to Broadband**'.
- *Provide affordable and reliable* broadband-on-demand by the year 2015 and to achieve 175 million broadband connections by the year 2017 and 600 million by the year 2020 at minimum 2 Mbps download speed and making available higher speeds of at least 100 Mbps on demand.

- Achieve substantial transition to **new Internet Protocol (IPv 6)** in the country in a phased and time bound manner by 2020

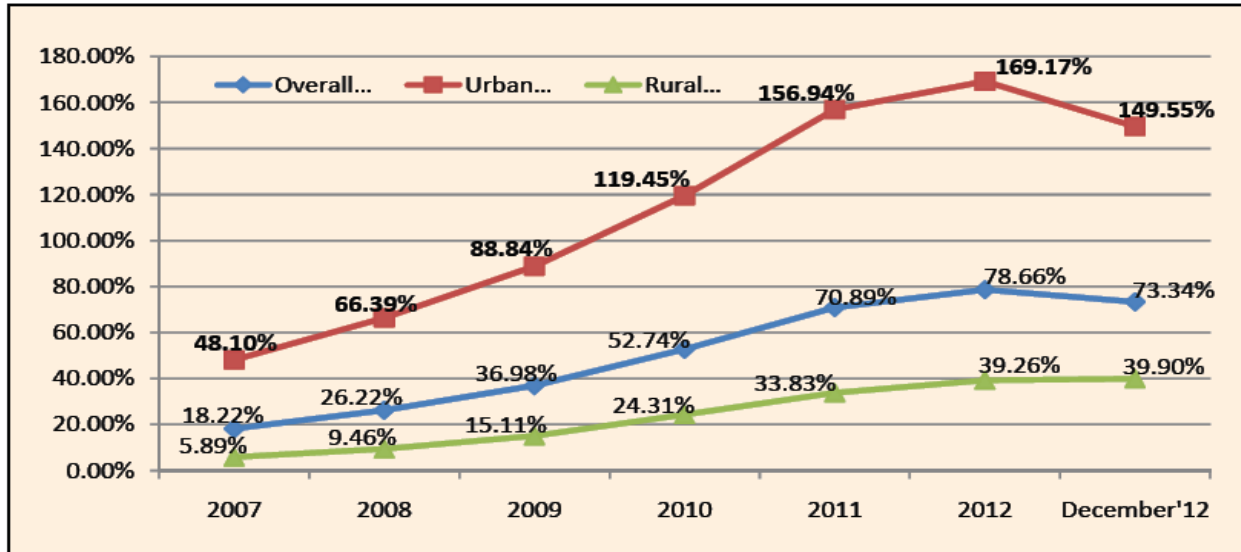
31.3.3.2 To give impetus to the rural telephony, Government formed a **Universal Service Obligation Fund (USOF)** by an Act of Parliament. A total amount of Rs 47273.77 crore has been collected under USOF, out of which Rs 22472.21 crore has been utilized, till 31.12.2012 and available potential balance was Rs 24801.56 crore. Government approved a project, at a cost of Rs 20,000 crore, for creating a '**National Optical Fiber Network**' (**NOFN**) to connect all the 2,50,000 Gram panchayats in the country through optical fiber.

31.3.4 Trends in Telecommunication Sector : 31.3.4.1 With a population of over 1.1 Billion, India has become one of the most dynamic and promising. Telecom markets of the world. In recent times, the country has emerged as one of the fastest growing telecom markets in the world. It has third largest telecom network and the second largest wireless network in the world. People are increasingly getting mobile and switching to technologies enabling the same. Consequently, the number of wire line phones in India has decreased from about 40.92 million as on 31st March 2004 to 30.21 million as on 31st March 2013 even though the wireless phones have increased manifold from 35.61 million to 867.81 million during the period. Number of telephone subscribers had reached a record high of 965.5 million in June 2012 and had declined thereafter, largely due to disconnection of inactive mobile numbers. The share of wireless telephones in total telephones is 96.6% whereas the share of private sector in total phones is about 85.5 % . Operator-wise classification, at the end of December 2012, reveals that PSUs still have a large share of nearly 79.57% in the wire line segment. Private operators, on the other hand, have a share of 87.83% in the wireless segment.

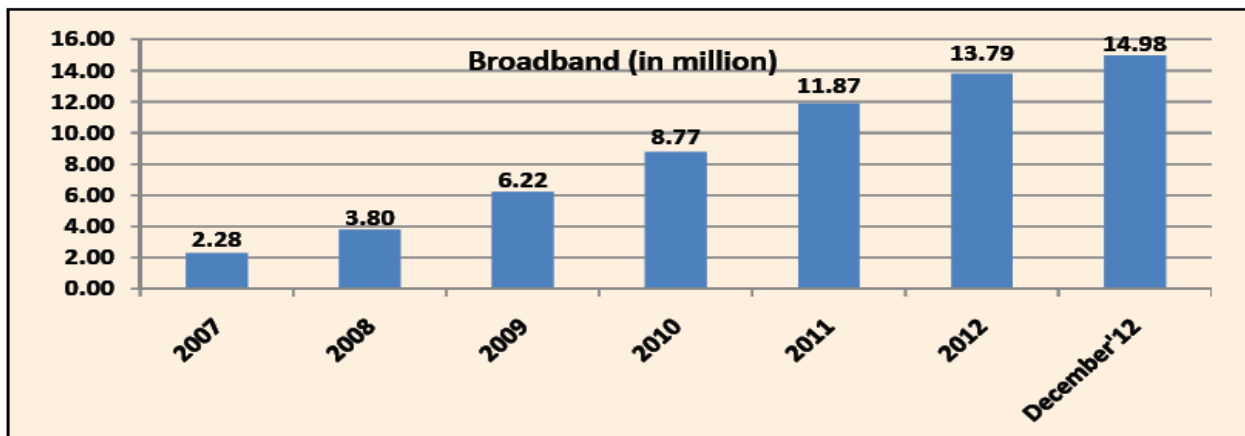


31.3.4.2 **Tele density** (number of telephones per 100 populations) is showing noticeable improvement over the years. It has increased at all India level from 2.86 in 2000 to over 73 in 2013. Despite of rapid penetration of phones in rural areas , the rural-urban differential persists with Urban tele-density being 149.55% compared to rural tele-

density with about its half the value at 39.90%. In 2013, Delhi , Tamil Nadu , Punjab & Himachal Pradesh recorded teledensity over 100 with 221, 108, 103 & 105 phones per 100 people .Karnataka, Kerala & Gujrat with teledensity of 91, 96 and 87 also had just under one phone per person.



31.3.4.3 There were 14.98 million Broadband subscribers in the country by the end of December 2012.



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