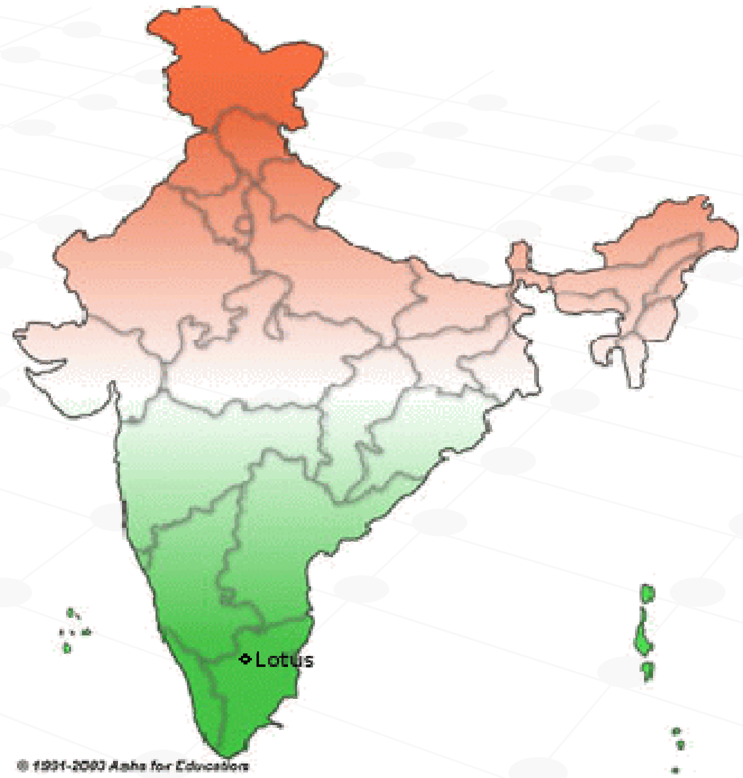
# Indian Mobile Industry

*New Paradigms in Telecom Tariff*

## *INTRODUCTION TO THE WORLD'S FASTEST GOWING TELECOM MARKET*

# THE WORLD'S SECOND LARGEST MARKET

- Area – 3,287,263 Square kilometers
- Population (July 2005) – 1.08 Billion
- 22 National Recognized Languages
- Literacy Rate (2005) – 65%
- Average Annual Growth Rate
  - Population – 1.4%
  - Labour Force – 2.5%
  - GDP Growth- 6.7%
- Trade (2004)
  - Total Exports (FOB) – USD 76 Billion
  - Total Imports (CIF) – USD 97 Billion
- Forex Reserves (including gold) =USD 155 Billion




Source : The World Bank Group

## ….& ONE OF THE FASTEST GROWING ONES

- One of the fastest growing economies in Asia.
- Annual GDP growth rate of ~8% over next 5-10 years
- Set to emerge as 3rd largest economy in the world by 2020
- Major global hub for IT & IT enabled services
- Mobile telephony transforming people's lives

# Background of Mobile Revolution in Indian Telecom

# Reforms (liberalization) started in telecom

**Status in 1994**

- 0.8% tele density – far below world average of 10% and other neighbouring countries.
- Total phones: 8 mn with a waiting list of 2.5 mn.
- Below 25% villages (1.7 lakhs) covered.

**National Telecom Policy 1994 announced.**

- Telecom a national priority for increased economic development.
- Plan targets revised to have telephone on demand and all villages covered.
- All services available internationally to be available in India by 1996.
- Value-added services opened in 1992 (cellular mobile, radio paging, email, etc.)
- Resource gap of INR 230,000 million to meet the revised targets necessitated private sector participation.
- Tendering process for selection of private players for Basic and Cellular services.

# Introduction of Privatization

- Licenses awarded (in 1995-97) after tendering and bidding process:
  - 8 GSM licenses in 4 metros (no bidding – beauty parade).
  - 34 GSM licenses in 18 state circles
  - 6 Basic Service Licenses in 6 state circles
- Results not satisfactory due to:
  - Actual revenue realizations far short of projections leading to operators being unable to arrange finance for their projects and complete rollouts.
- Government appreciates the concern of the operators and allows for mid-course corrections.

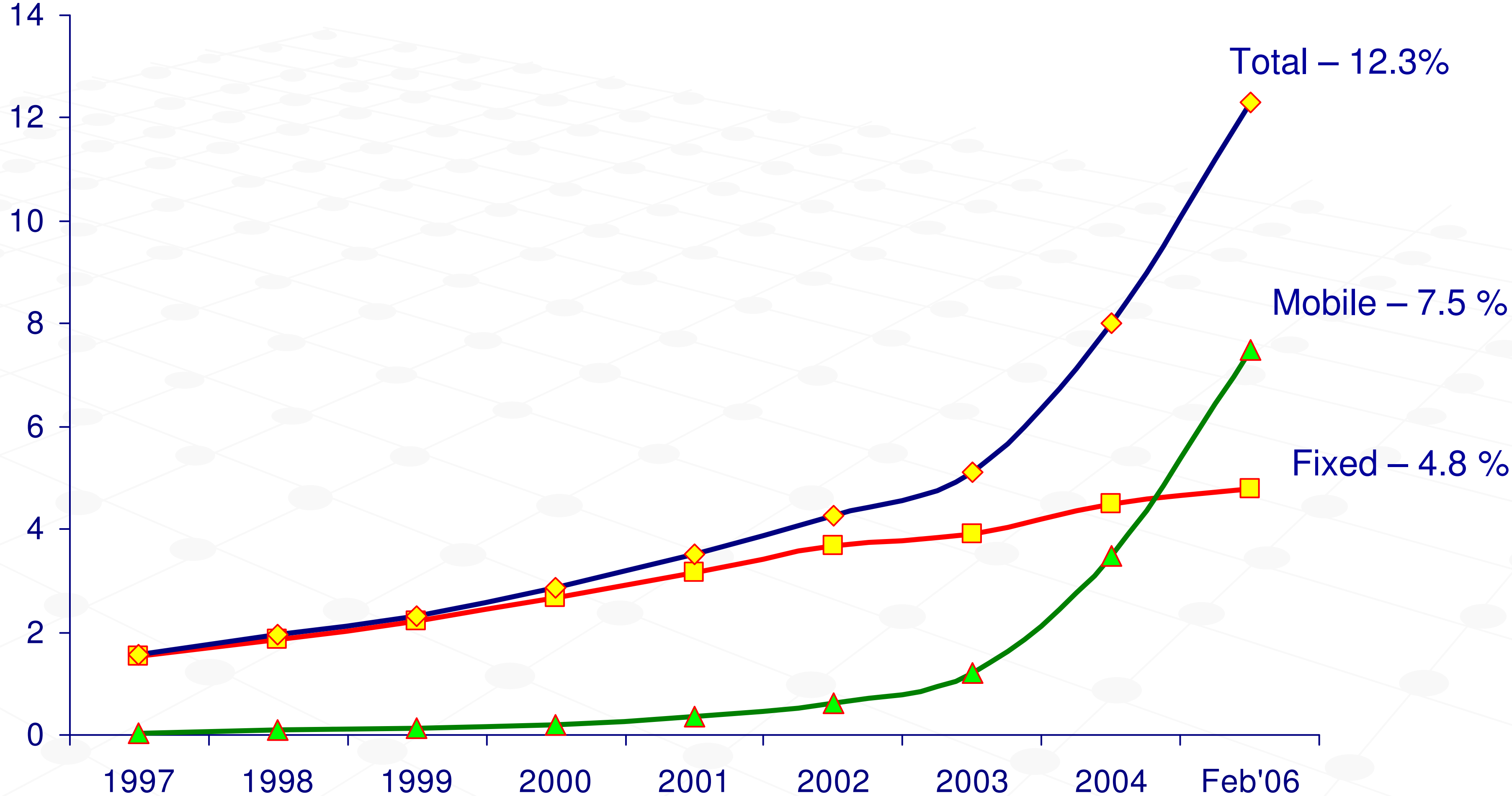
# 2001: the turning point

- Policy announced for additional licenses in Basic and Mobile Services (Jan 2001).
- Entry fee:
  - Basic Services: US$ 0.2mn – US$ 25.5mn (+ Bank Guarantees = 4 times entry fee for rollout obligations)
  - GSM Mobile Services (4th Operator bid): US$ 0.2mn – US$ 45mn
- License fee (revenue share) reduced from provisional 15% to 12%, 10% & 8%.
- Limited Mobility allowed to Basic Services (CDMA spectrum allotted to BSOs).
- Rollout Obligations to cover Urban / Semi-Urban / Rural areas in equal proportion.
- New licenses awarded in Jul - Sep 2001 : Basic (25), GSM Mobile (17).

# Tariff & Interconnection Regulations

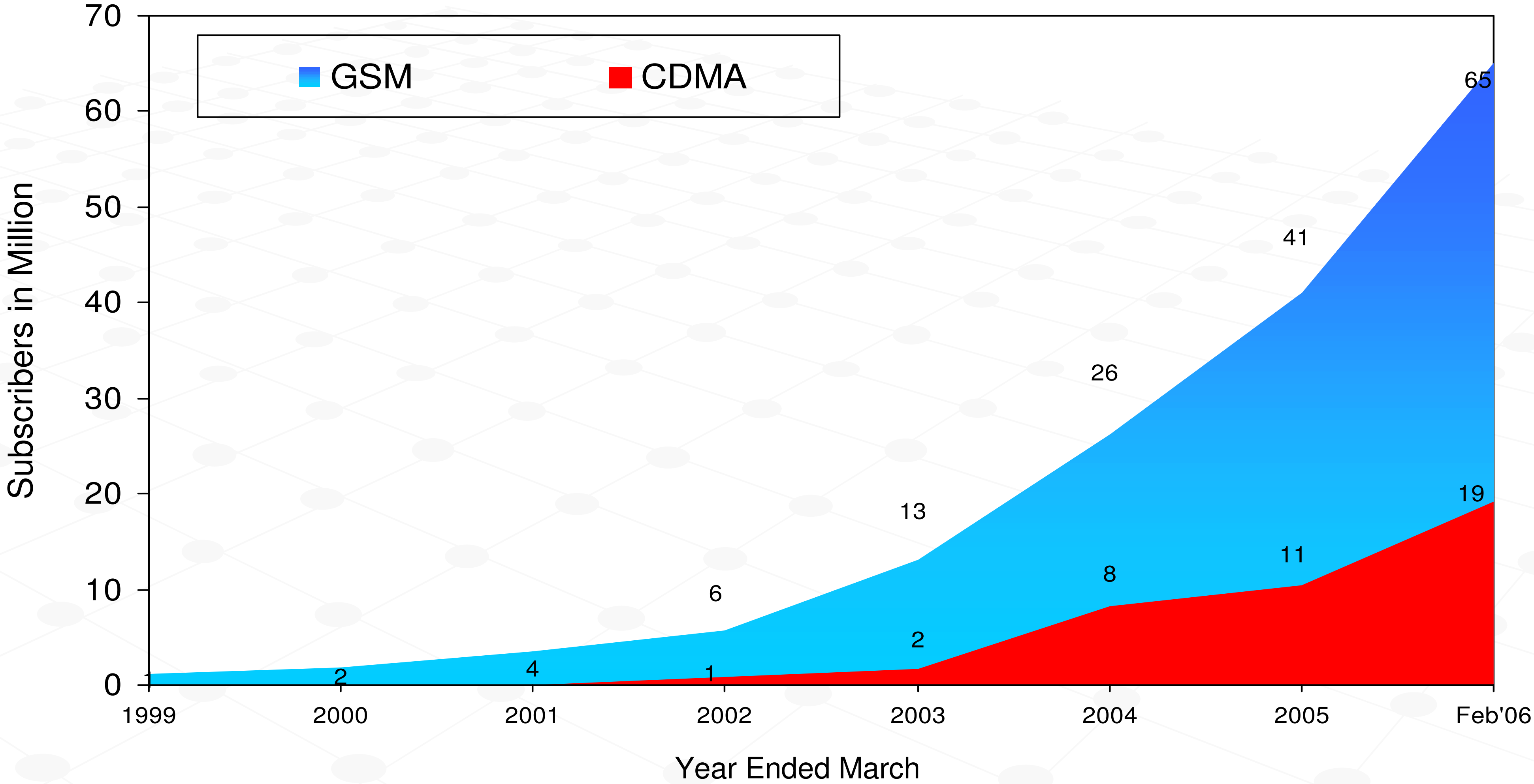
- Movement towards cost-based tariff.
- Tariffs closely regulated by TRAI between 1999-2002.
- Interconnection Usage Charges established on the principles of "work done" – termination charges introduced.
- Calling Party Pays (CPP) for mobile tariffs – free incoming calls ushered in.
- Access Deficit Charges (ADC) for cost-minus fixed line services.
- Forbearance allowed recently on all tariffs (except rural fixed line).

# *MOBILE – MAJOR CONTRIBUTOR TO TELE DENSITY*




- Cellular constitutes ~61% of current national tele density – has played an important role in taking overall tele density from 0.8 in 1994 to 12.3 in Feb’06.

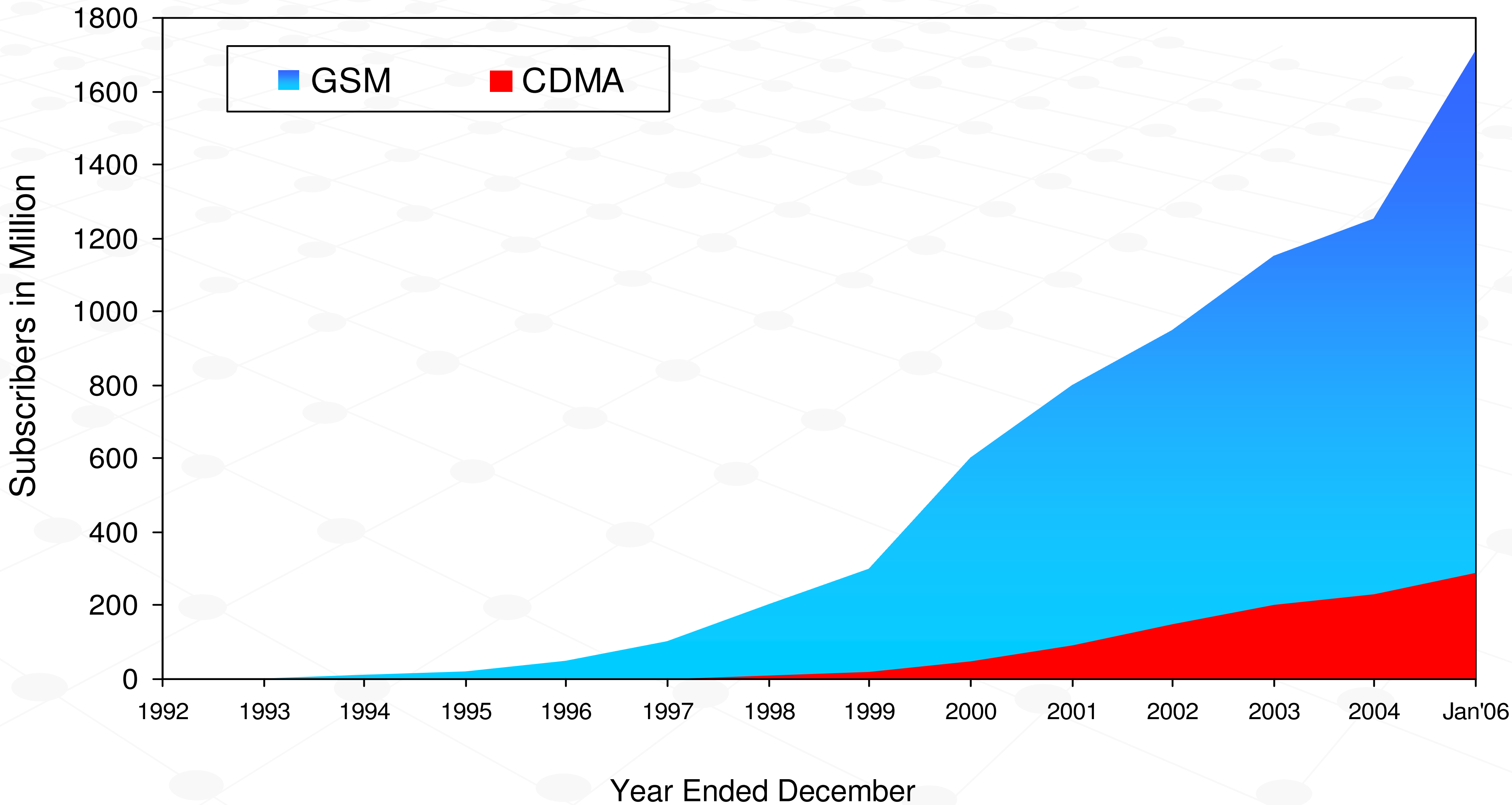
# *GSM DRIVING MOBILE GROWTH*



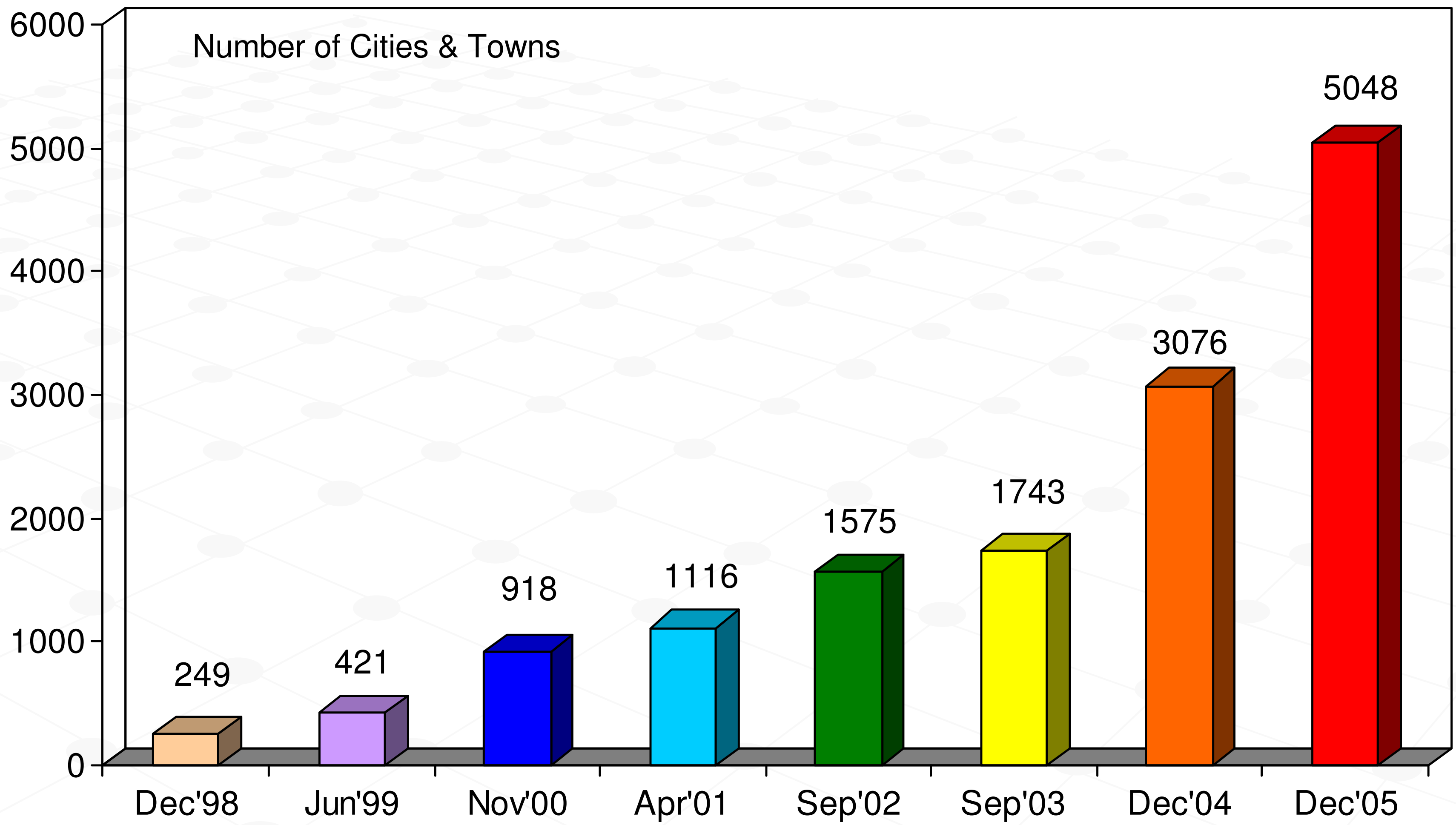

- **GSM driving growth** of Indian market with nearly 80% market share & about 75% of new additions

# *IN SYNC WITH WORLDWIDE TRENDS*

**Worldwide GSM constitutes 75% of the subscriber base and 80% of the monthly additions.**

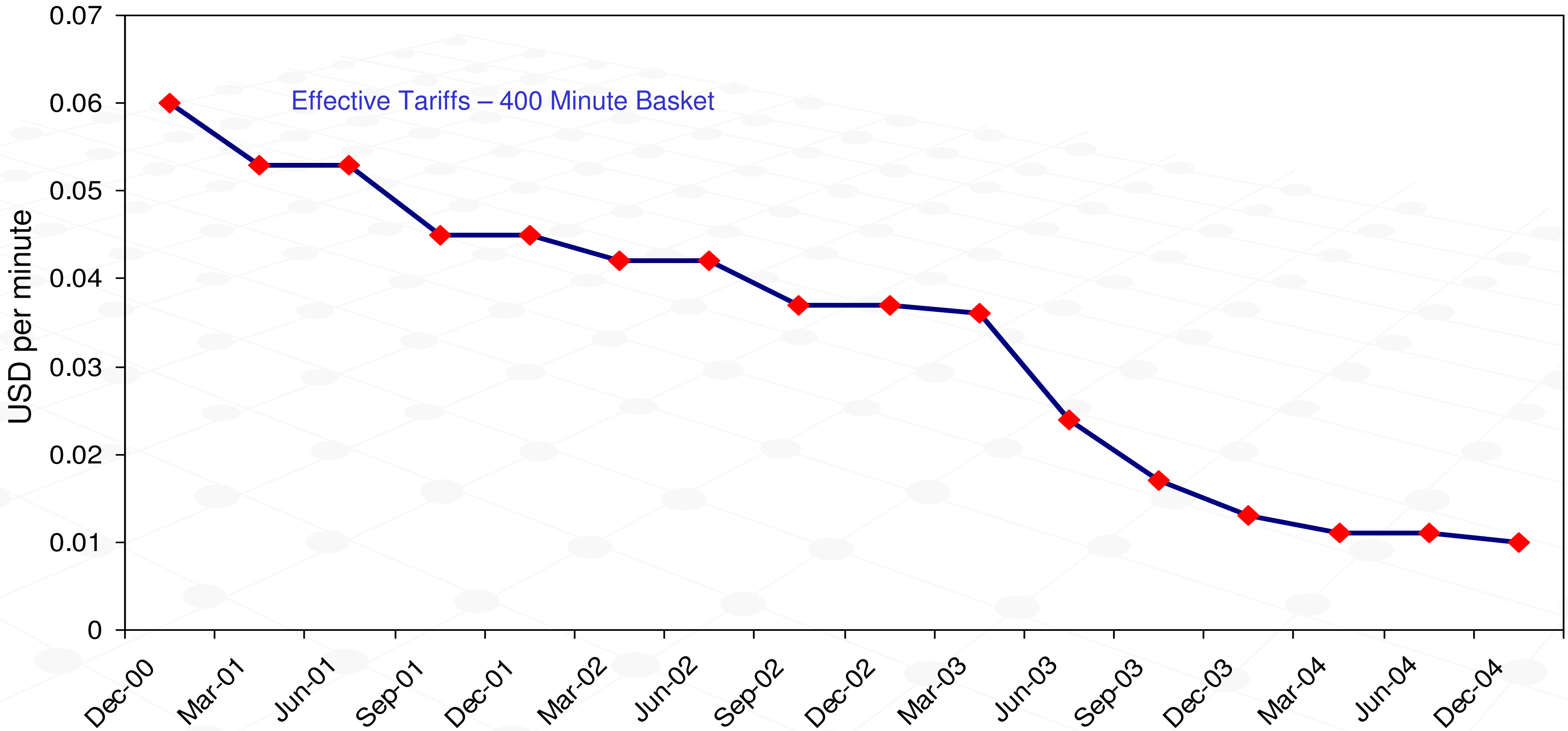


# INDIAN GROWTH FUELLED BY INCREASED COVERAGE




- **Estimated that service providers will cover 5,000 towns by mid 2006**
- **Ubiquitous coverage holds the key to future growth of mobile industry**

# AND CONTINUOUSLY IMPROVING AFFORDABILITY



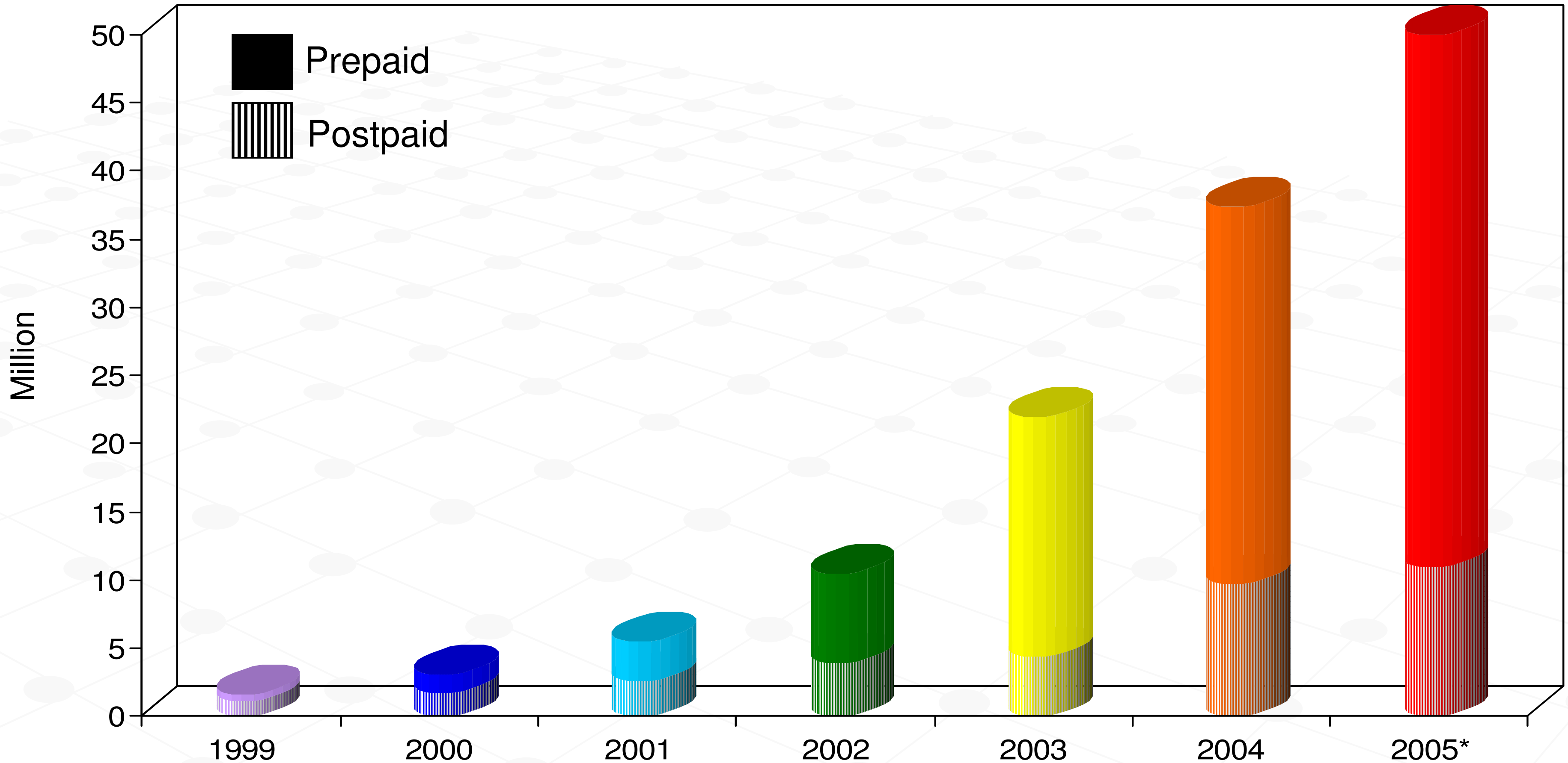

**In last 3 years alone, effective local call cellular tariffs have plummeted by 80% from USD 0.06 / minute in December 2000 to USD 0.01 / minute in December 2004. During 2005, tariffs have declined further by ~ 37%**

Source:TRAI Quarterly Performance Indicators, March 2005

# *INDIAN MOBILE INDUSTRY – CURRENT STATUS 2006*

- 133 state-of-the art Networks (GSM + CDMA) on Air: 91 on GSM
- Total Investments ~ USD 15 billion
- Nearly **85 million mobile subscribers** (GSM + CDMA) – end February 2006 – with GSM accounting for ~80% of the subscribers base.
- **4-5 million new** mobile phone subscribers added every month, Total adds in 2005 ~28 million, showing growth of almost 60% in last 12 months
- **Services** in ~ 5**000 cities & towns & ~1 lakh villages**
- Fixed Mobile Crossover in October 2004, GSM Fixed Crossover in April 2005
- Mobile the primary driver of growth, accounts for 7% tele density

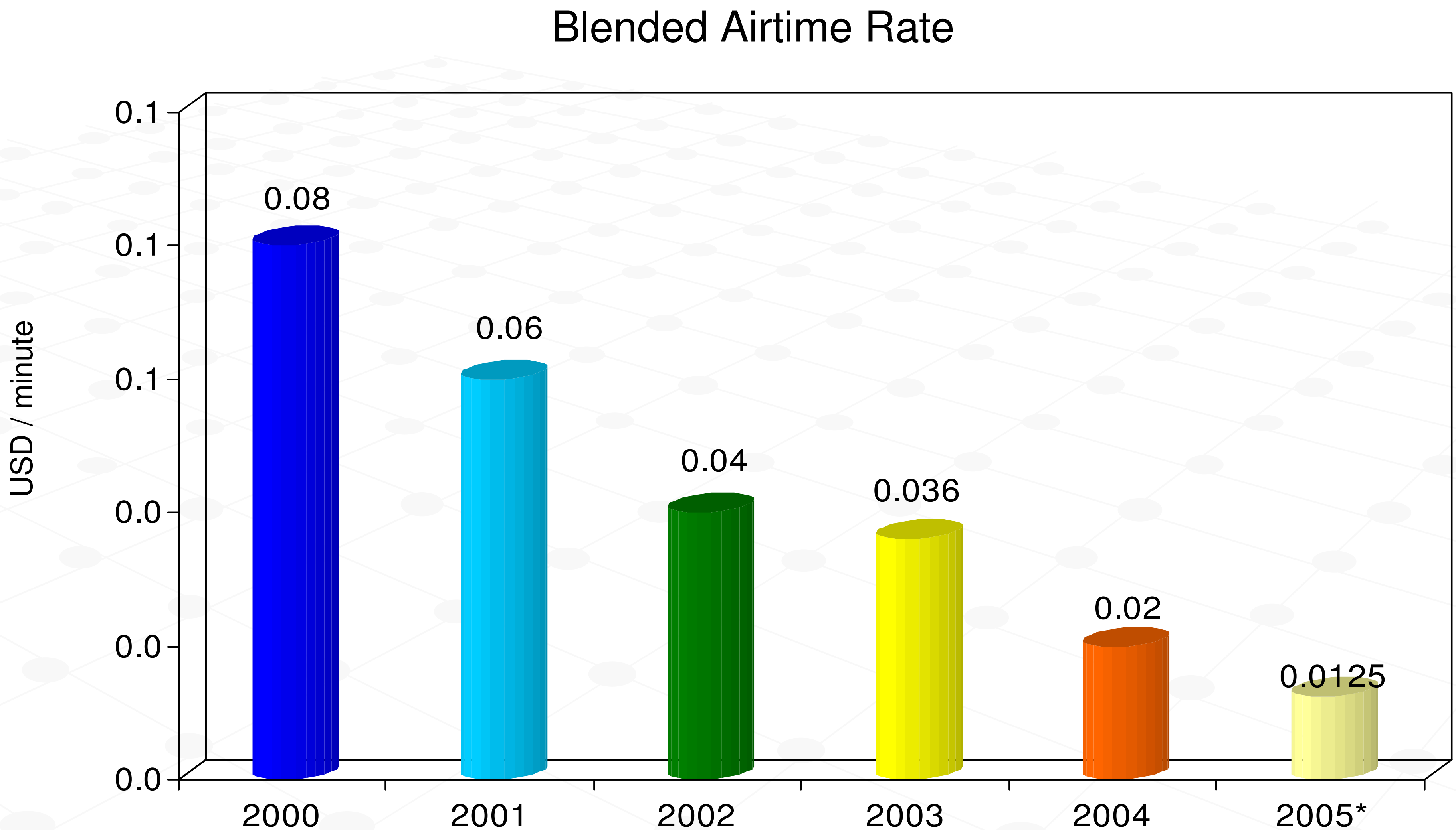
# GROWING SUBSCRIBER BASE




- **Subscriber growth predominantly on the prepaid plank**
- **Allows even credit challenged subscribers to take advantage of benefits of connectivity**
- **Mobile connectivity a common feature amongst blue collar segment**

COAI-PWC Benchmarking Reports
* COAI Estimates

# ...IMPROVED AFFORDABILITY




1USD=Rs. 44.3

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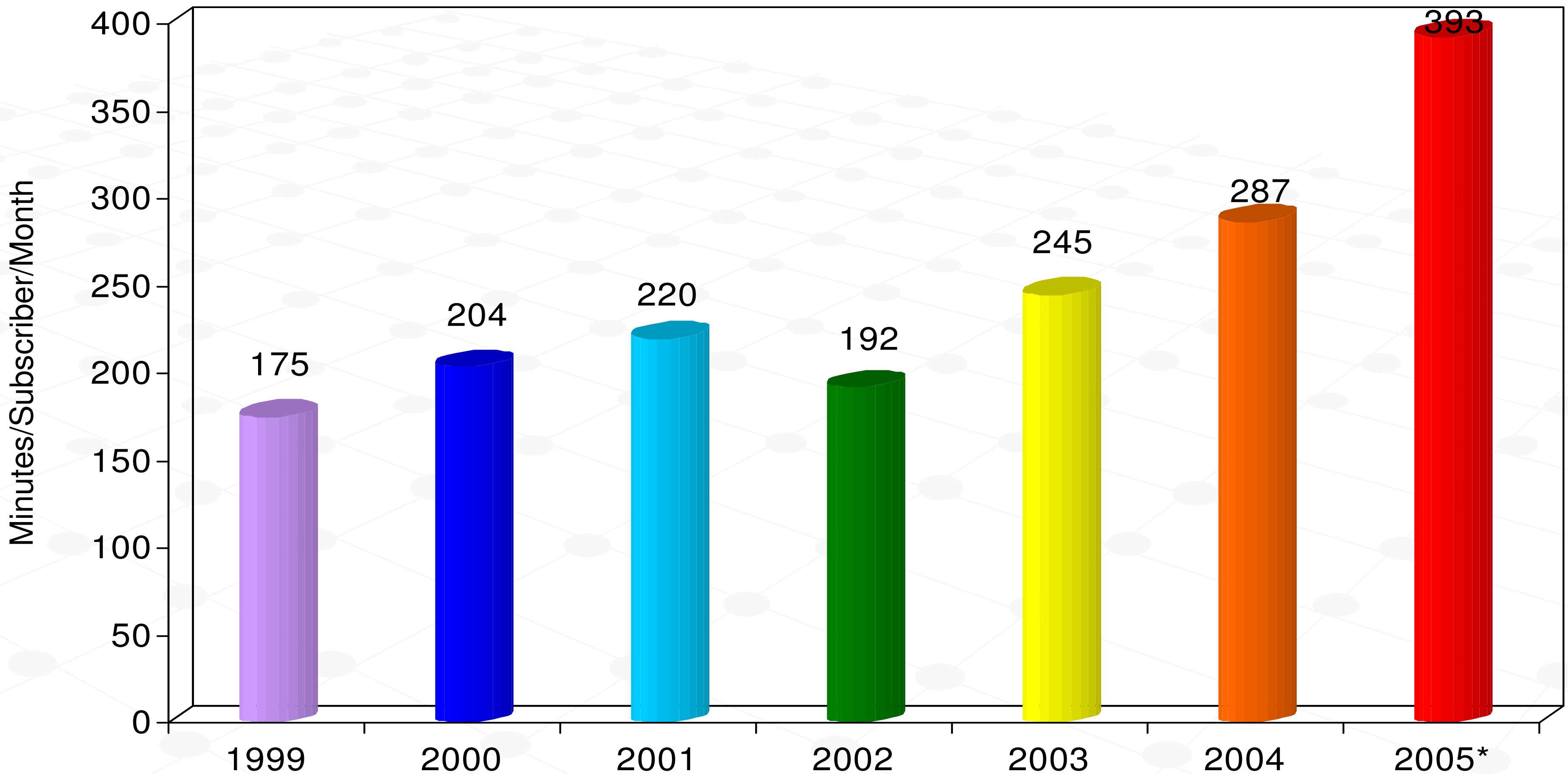
*TRAI Report Dec-05

# GROWING MINUTES OF USE

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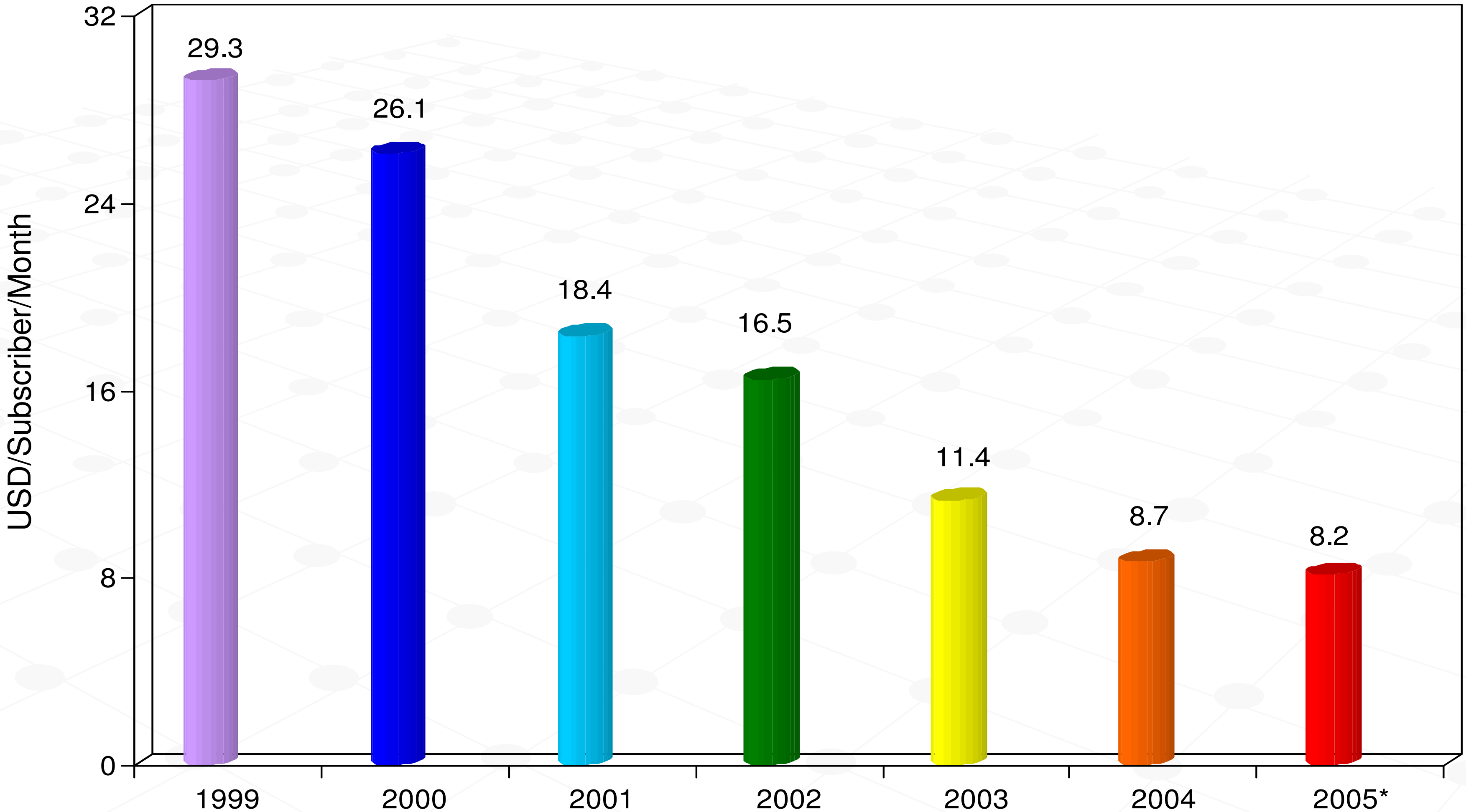
*TRAI Report on GSM

# DECLINING ARPUS




1USD=Rs. 44.3

- **Increased subscriber base accompanied by constantly declining ARPUs – demonstrating the increased acceptance of mobile services amongst low end consumers.**

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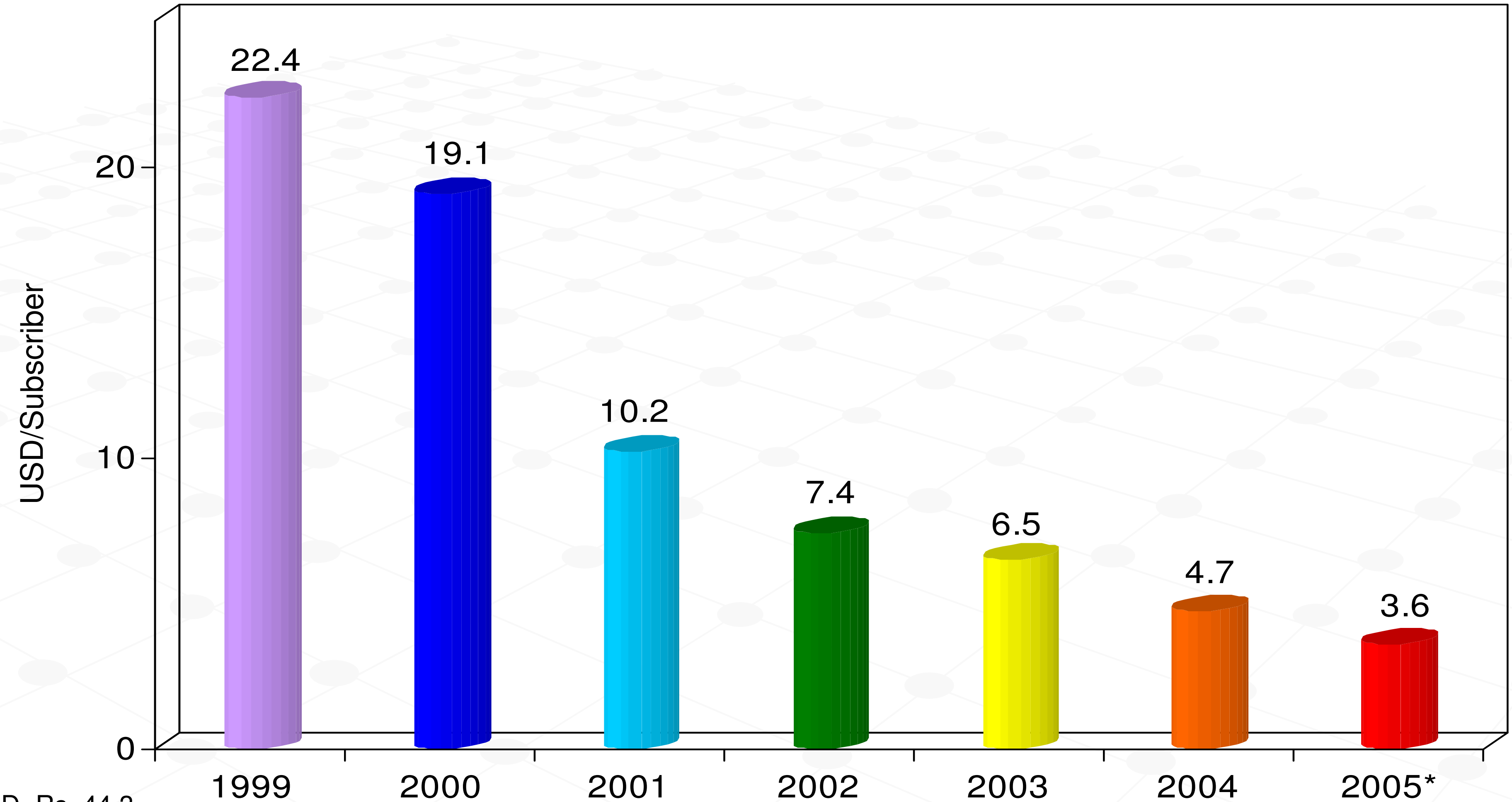
*TRAI Report

# REDUCED OPEX PER SUBSCRIBER




1USD=Rs. 44.3

- **Opex per subscriber brought down by 80% in last 5 years**
- **Result of better improved efficiency by operators as well as the benefits of economies of scale**

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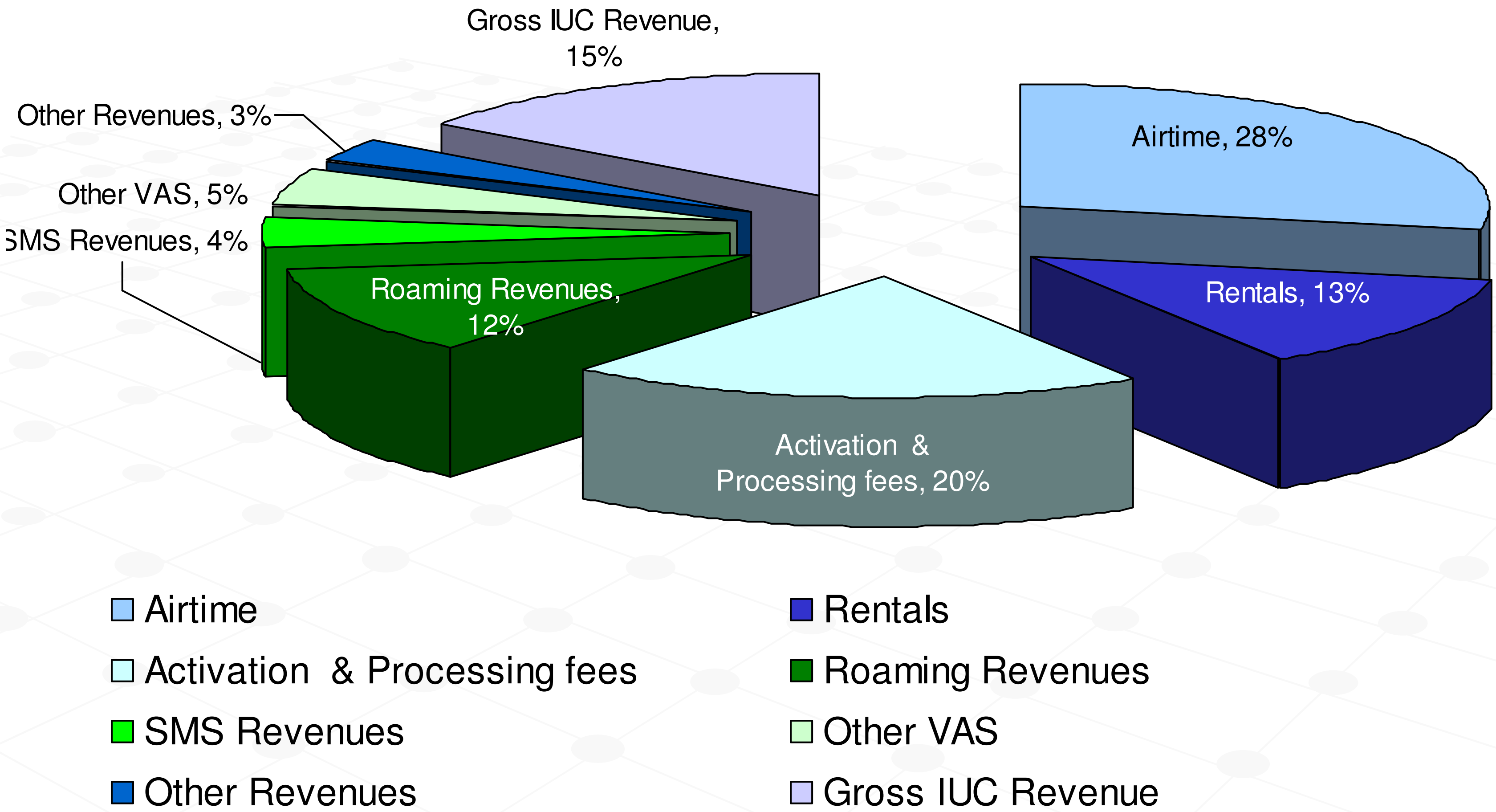
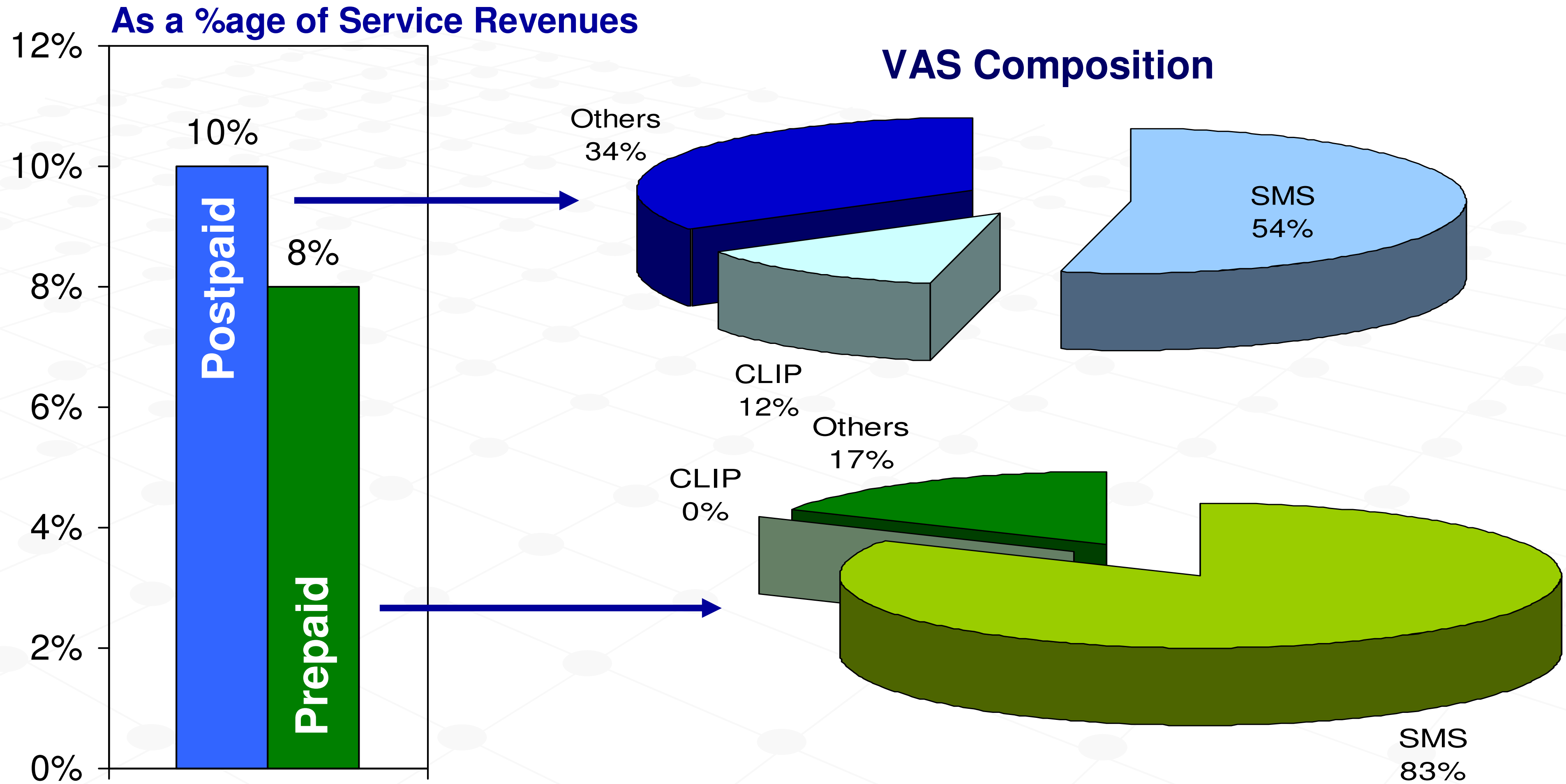
# COMPOSITION OF NET SERVICE REVENUES




**Roaming Revenues 12%; SMS Revenues 4%; Other VAS 5%**

Source: Price Waterhouse Benchmarking Study, December 2004

# *REVENUES FROM VALUE ADDED SERVICES*




- Prepaid subscribers are increasingly taking to value added services, Percentage of Revenues from VAS for prepaid subscribers has gone up from 3% in 2003 to 8% in 2004.
- Overwhelming proportion of this comes from SMS, which is the VAS of choice for prepaid subs.



Source: COAI-Price Waterhouse Benchmarking Study, December 2004

## *GROWTH IN VALUE ADDED SERVICES*

# *REVENUES FROM VAS*

- “**Revenue from the VAS segment is growing at the rate of 30 to 40 percent annually**. At present, this segment accounts for 10 to 13 percent of the total revenue of a service provider,”

  **- Tim DeLuca Smith, Communications Manager, SmartTrust.**

- “**Market for mobile VAS is currently about USD 85 million** and it is expected to grow around 800 million by 2010.”

  **- Arun Gupta, CEO Mauj Telecom**

- **Daily downloads** of around **1 million ringtones and ringback tones**.

  – average cost: Rs 9 per ringtone.

- **During festive season the figures skyrocket…..**

  – This Diwali, there was a six fold increase in value added service downloads, over a normal day.

  – Delhi circle alone saw 8.5 million SMSs being exchanged on Diwali day as against 5.5 million last year.

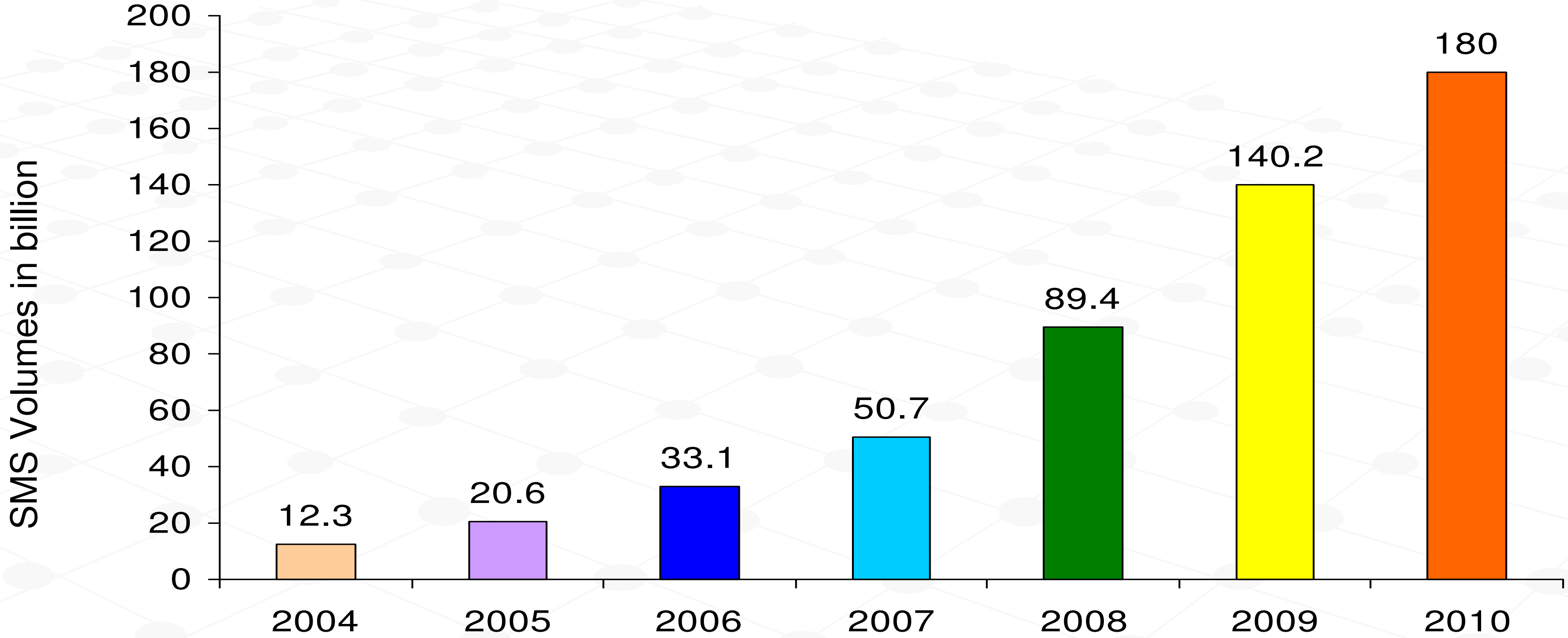
## *REVENUE GENERATED FOR OPERATORS FROM VARIOUS APPLICATIONS*

| Application | Charges (in USD) | Estimated monthly downloads (in million) | Operator Revenue Share |
|---|---|---|---|
| 2G – SMS | 0.02– 0.11 | 1,100 | 90% |
| 2G – P2A/ A2P | 0.05 – 0.23 | 50 | 70-75% |
| 2.5G Messaging | 0.07/MMS; 2.23 unlimited for 1 month | 5 | 80-90% |
| CRBT | 0.14-0.34 | 7 | 50-60% |
| Wallpapers | 0.23 | 14 | 50-60% |
| Games | 1.13-3.39 | 14 | 25-50% |
| IVRS | 0.07-0.14/minute, voice + transaction charges | | |

1USD=Rs. 44.3

Source: Global Equity Research

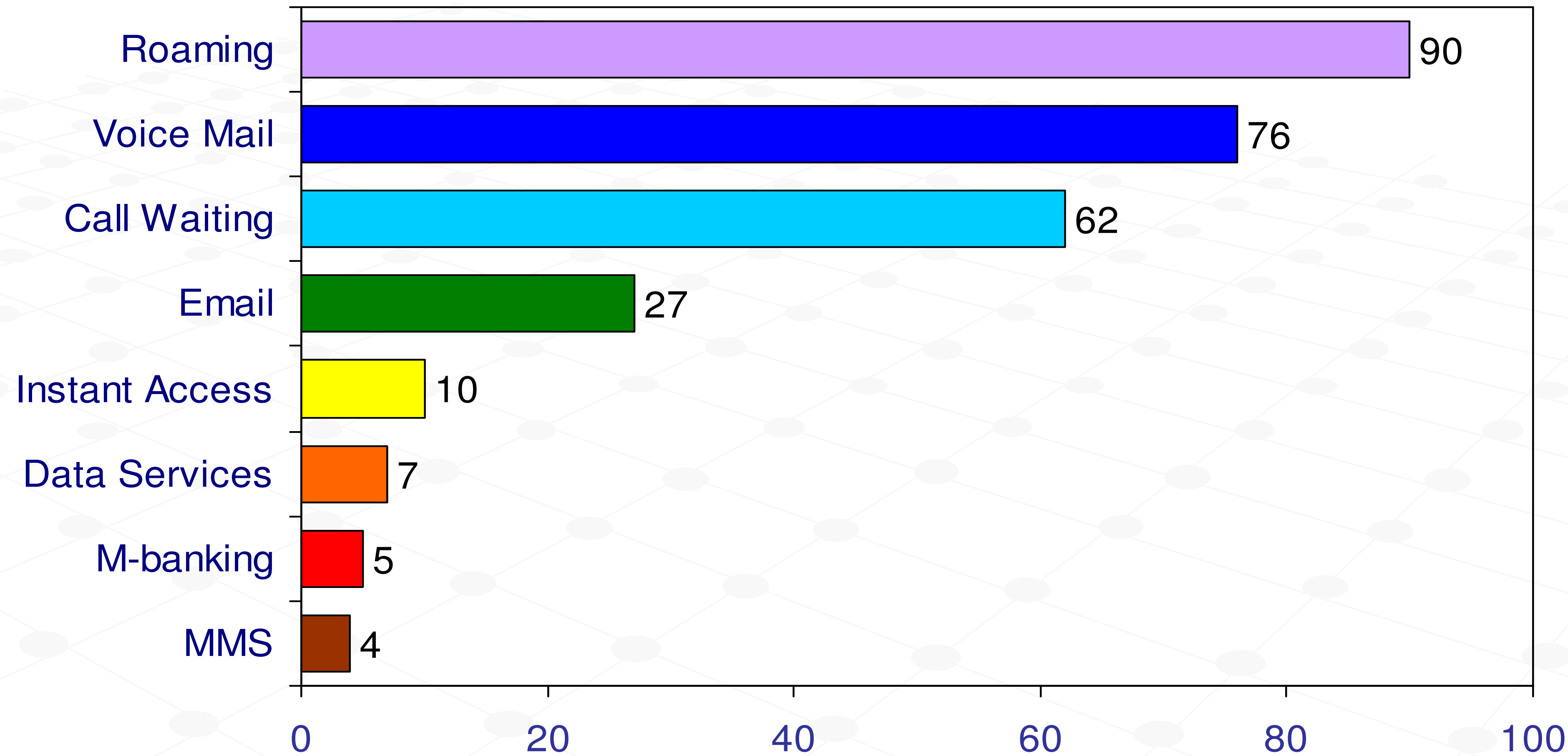
# REVENUES FROM SMS




- Expected to grow in the next five years due to –
  - falling prices,
  - increasing mobile penetration,
  - widening user demographic and
  - increasing number of SMS based services.

Source: Portio Research

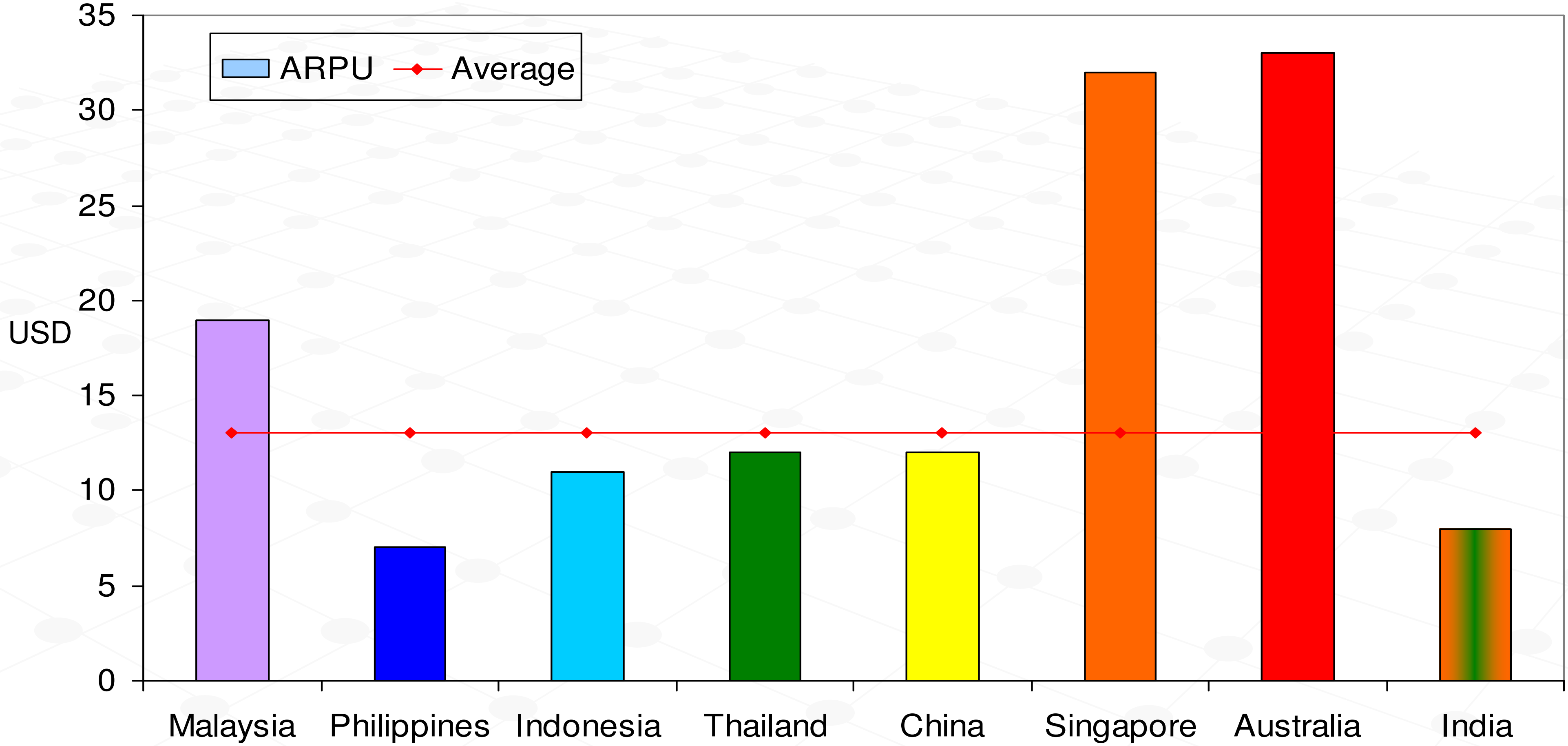
# CONSUMER AWARENESS FOR DATA SERVICES IN INDIA




Source: Portio Research

# INDIA'S PLACE IN  ASIA PACIFIC

# *ARPU*

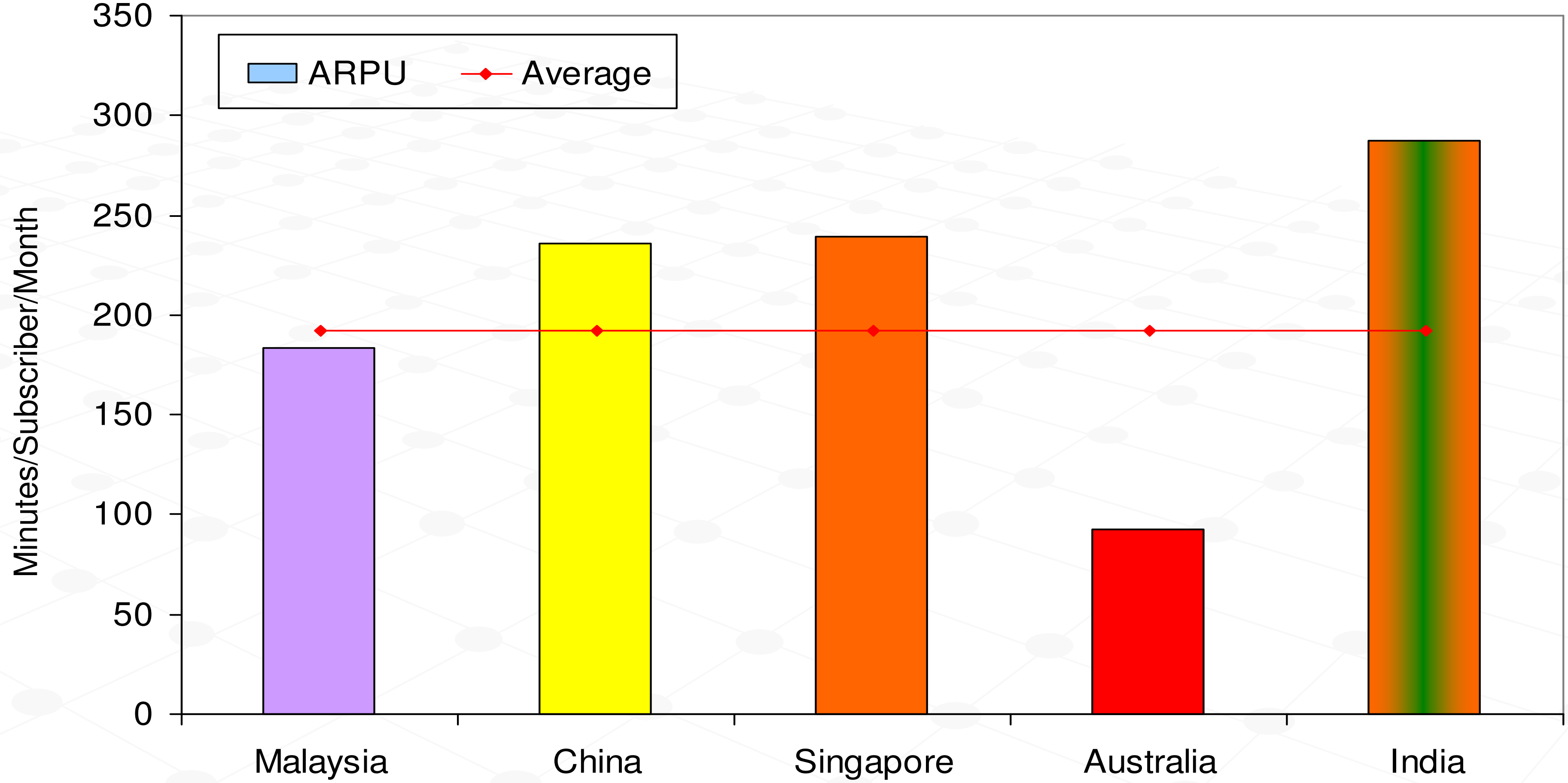



**INDIA**
- **ARPUs well below Asia Pac average**
- **Market driven by volumes not margins**



COAI PWC Benchmarking Study, December 2004

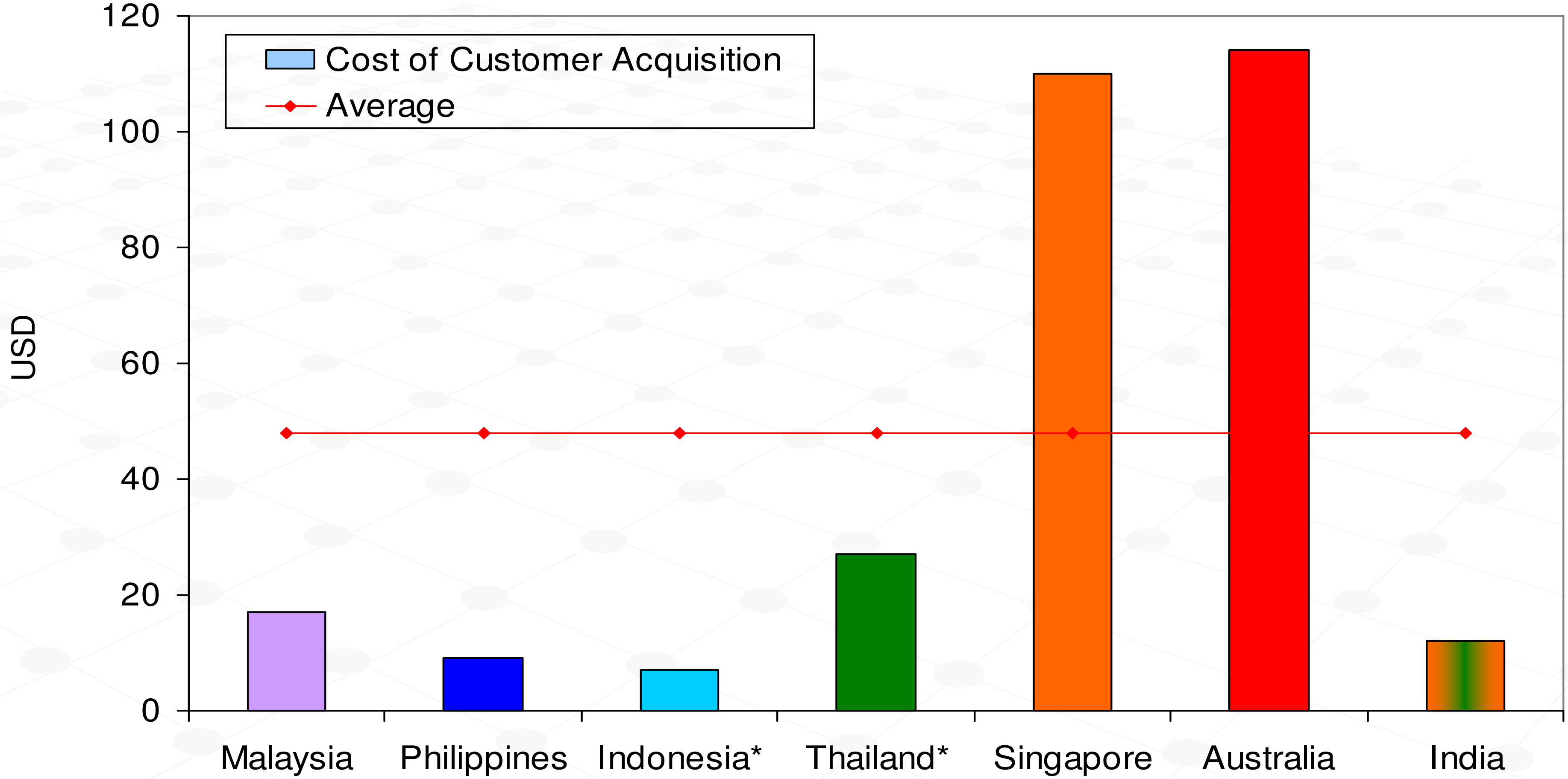
# MINUTES OF USE




**INDIA**

- **One of the most talkative markets in the region**
- **Increased use a direct result of affordability of service**

# COST OF CUSTOMER ACQUISITION




**INDIA**

- **One of the lowest costs of customer acquisition in the region**

* For the year 2002

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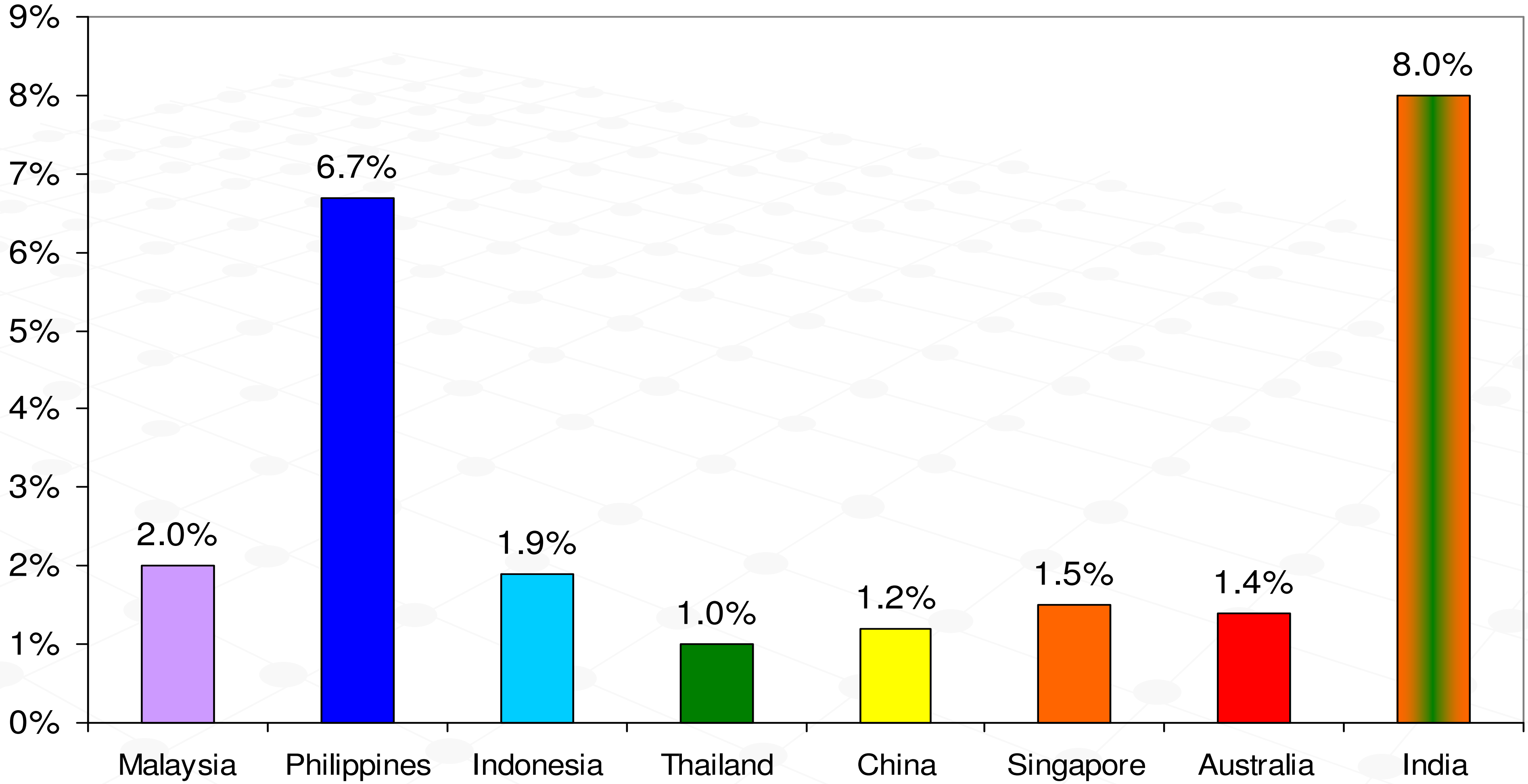
## *MONTHLY CHURN*




**INDIA**

- **The highest Churn in the Asia Pac Region – demonstrating existence of an intensely competitive & vibrant mobile market**



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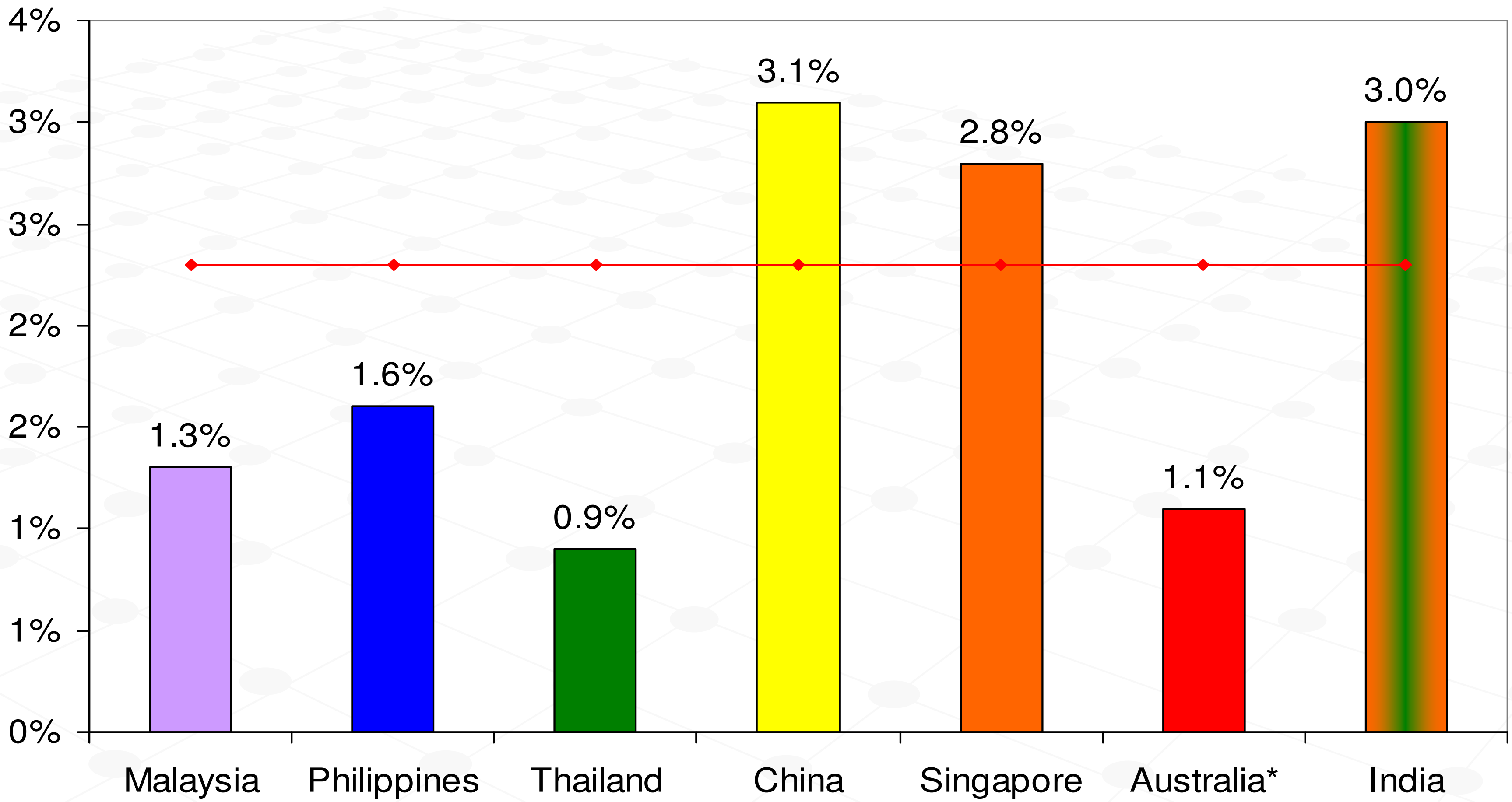
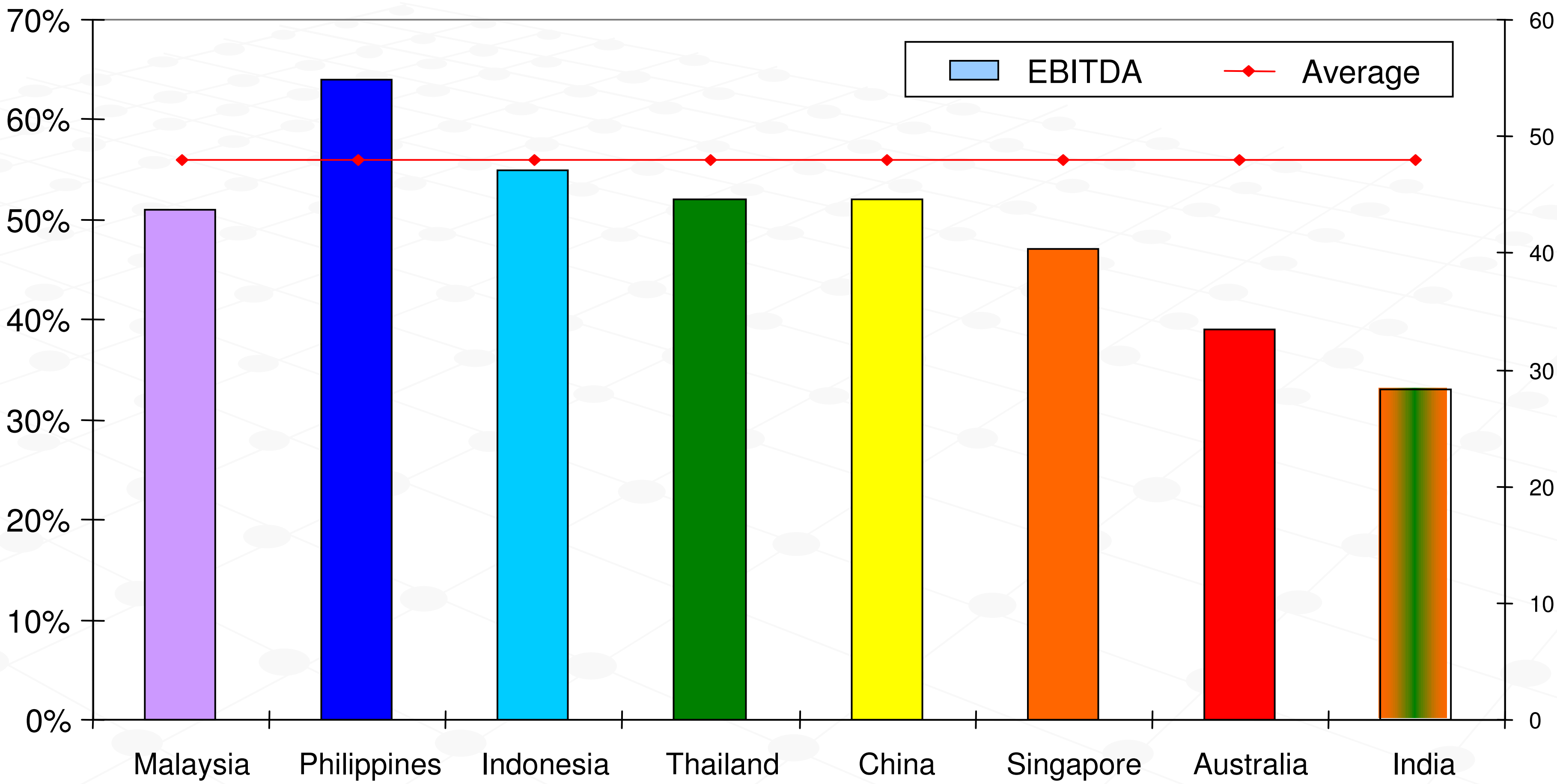
# BAD DEBTS AS A % OF NET SERVICE REVENUES




**INDIA**

- **Bad Debts above Asia Pac averages; need to be brought under control**

# EBITDA

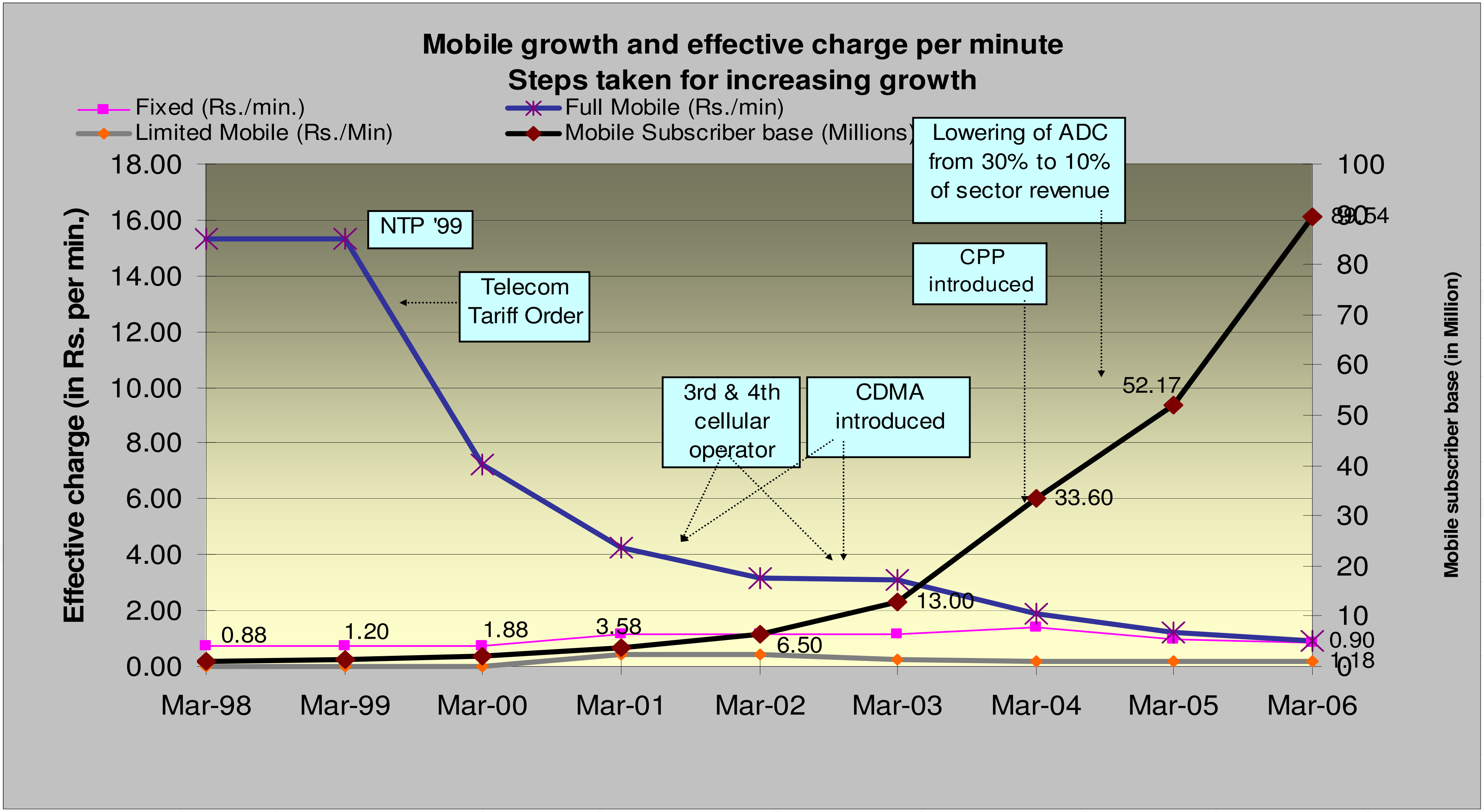



**INDIA**

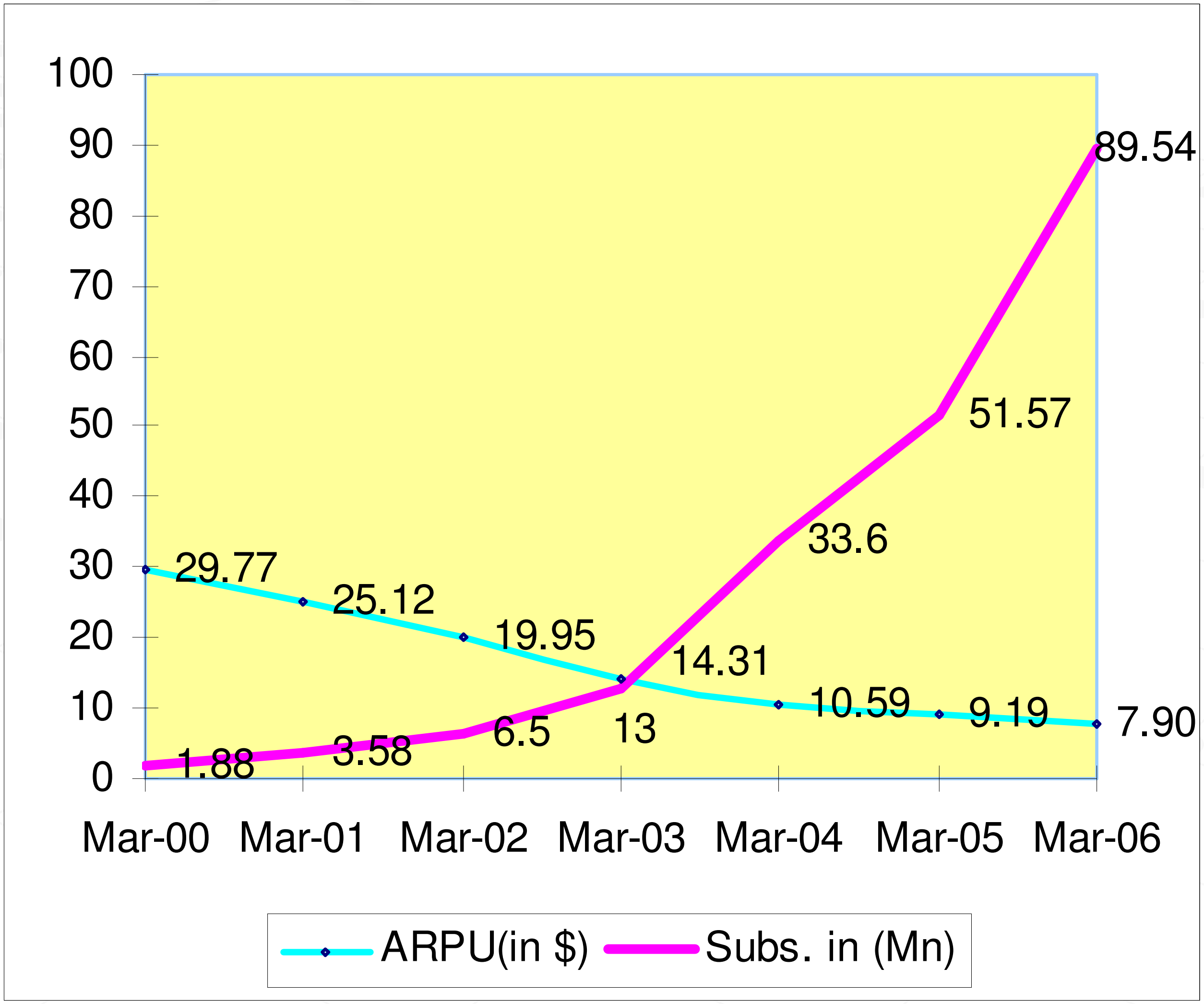
- **Lowest EBITDA in Asia Pac Region; Combined effect of lowest tariffs & highest costs**

# PAST PERFORMANCE AND FUTURE AHEAD

# Convergence of Tariffs and Growth of mobile services



# Falling ARPU vs. Rising Subscriber Base

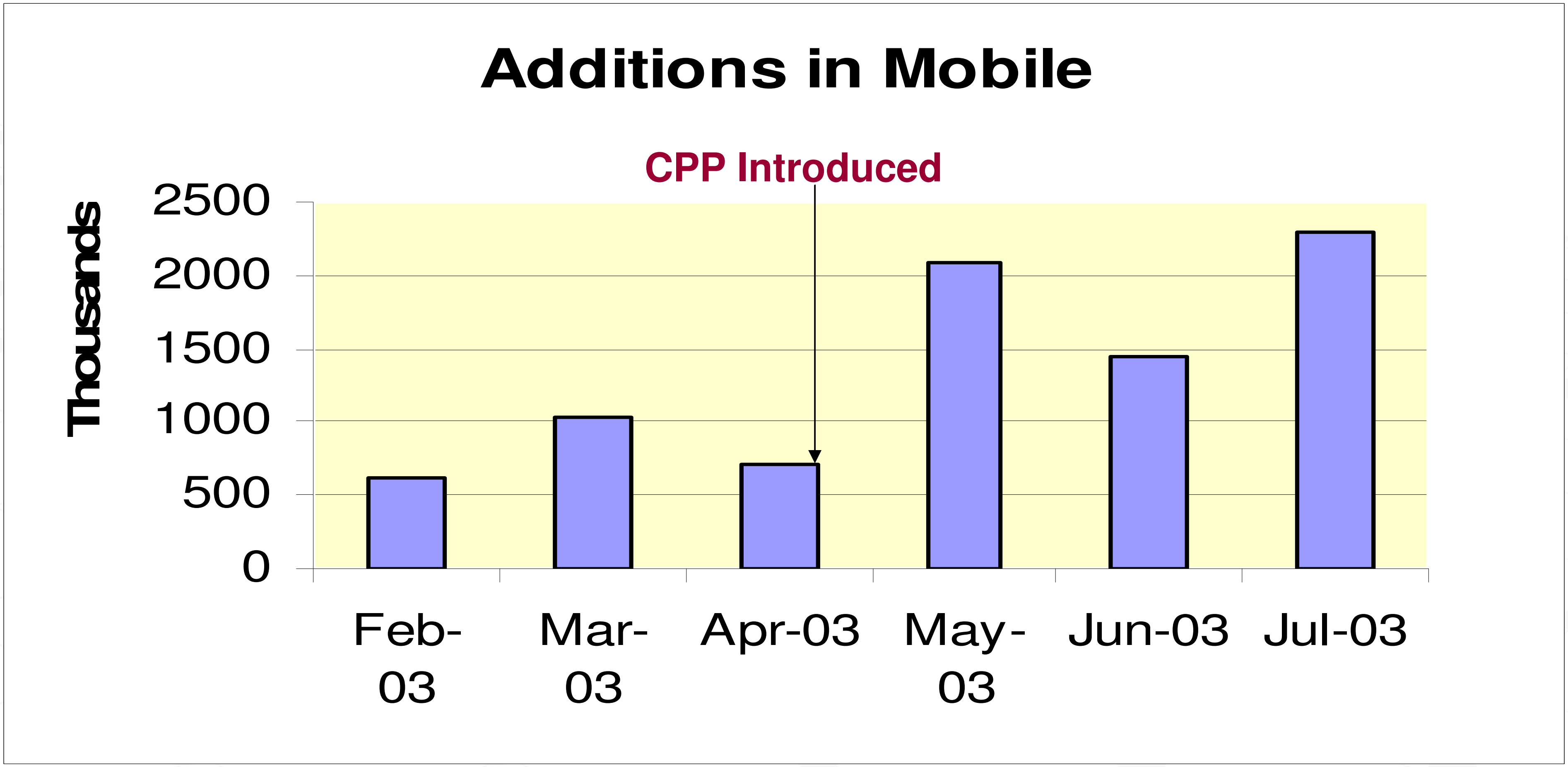



* ARPU of March-06 are Estimated

# Urban/Rural income-wise distribution of households

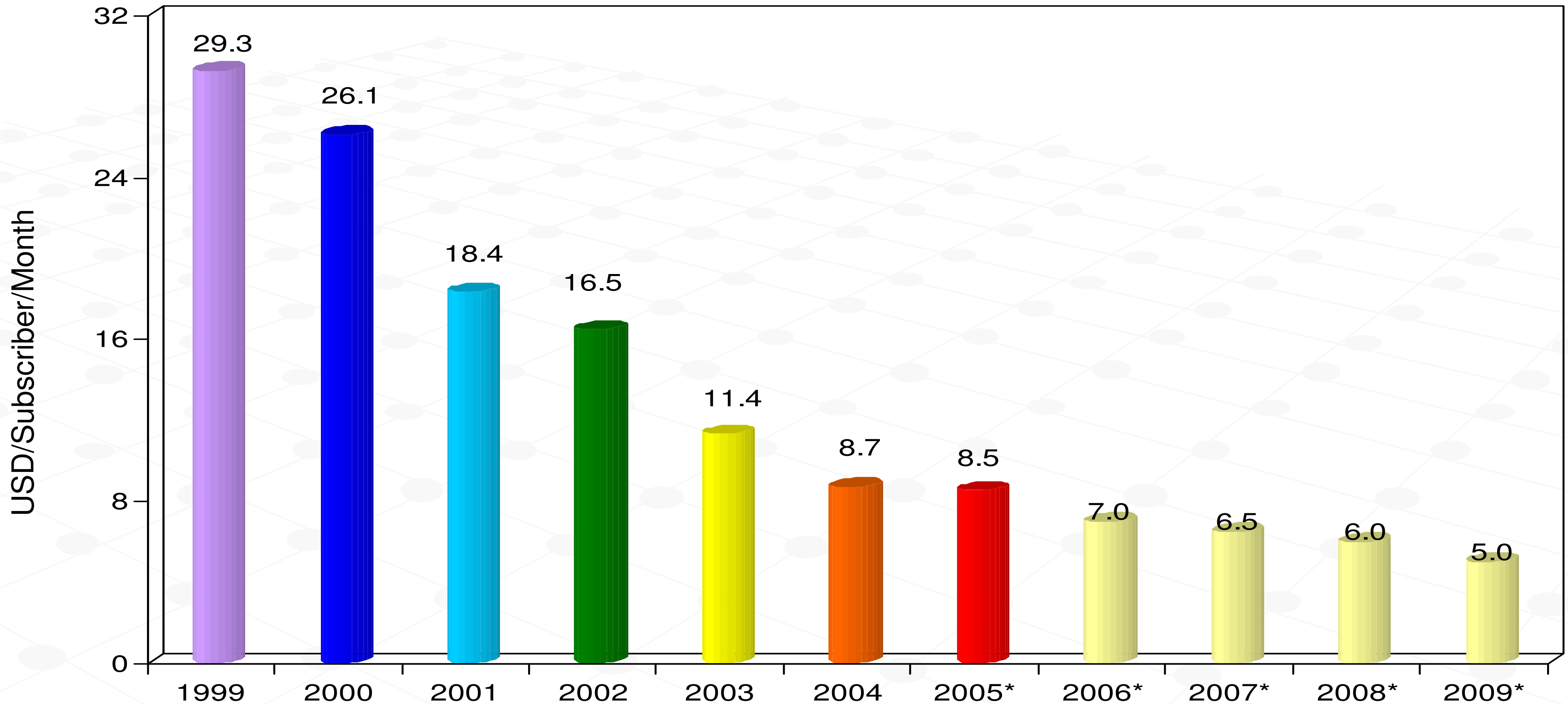
| Income Group | Rural Households | Urban Households |
|---|---|---|
| Lower | 60 (43.48%) | 10 (18.52%) |
| Lower Middle | 56 (40.58%) | 20 (37.04%) |
| Middle to High | 22 (15.94%) | 24 (44.44%) |
| Total | 138 (100%) | 54(100%) |

# Effect of CPP Regime




- *CPP was introduced in April 03, after introduction of Calling Party Pays Regulation, there was a spurt in mobile demand. In subsequent quarter the net increase in no. of Mobile were 245% of that of previous period.*

# DECLINING ARPUS




1USD=Rs. 44.3

- **Increased subscriber base accompanied by constantly declining ARPUs – demonstrating the increased acceptance of mobile services amongst low end consumers. To achieve the required growth, the focus will shift to villages with low teledensity, and ARPU will be going sub $5 mark I next few years.**

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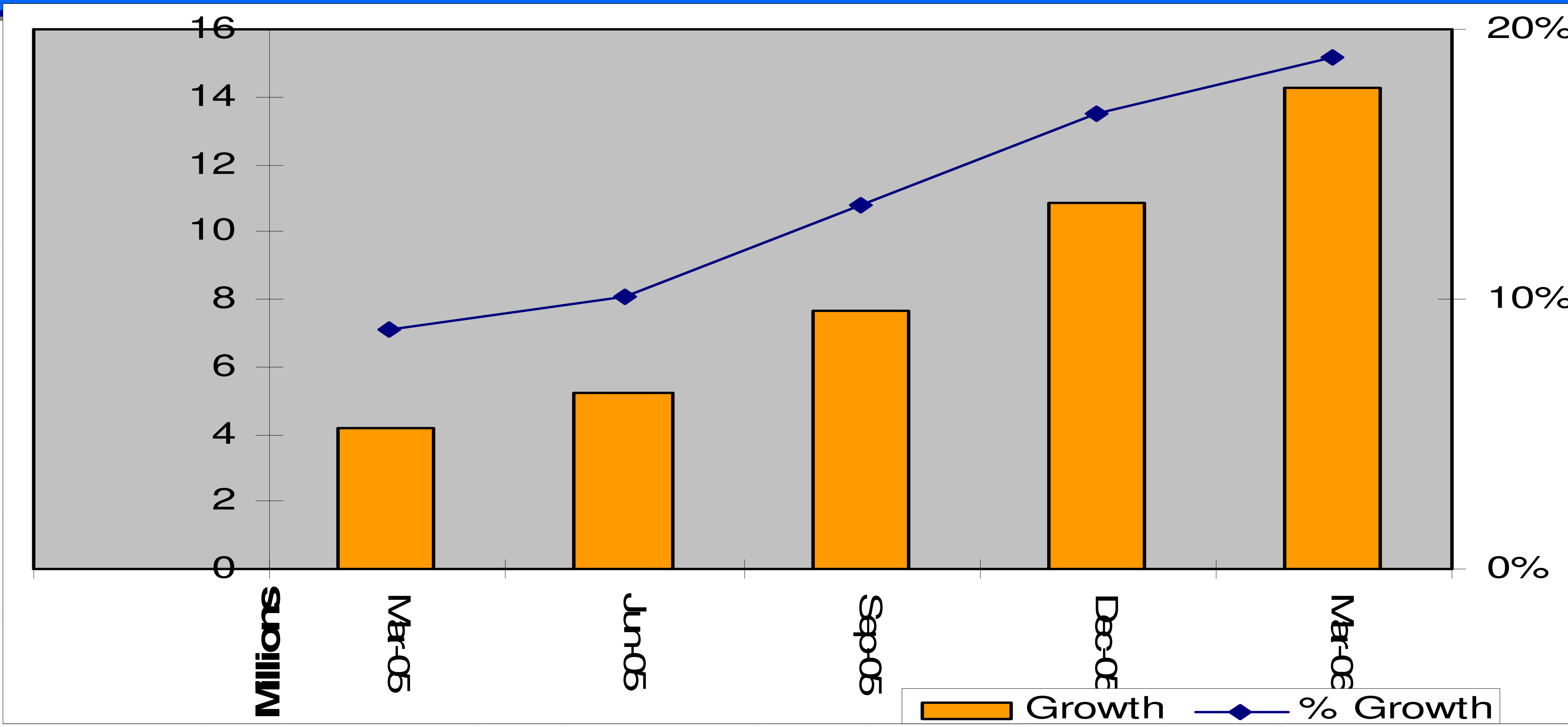
* Estimates

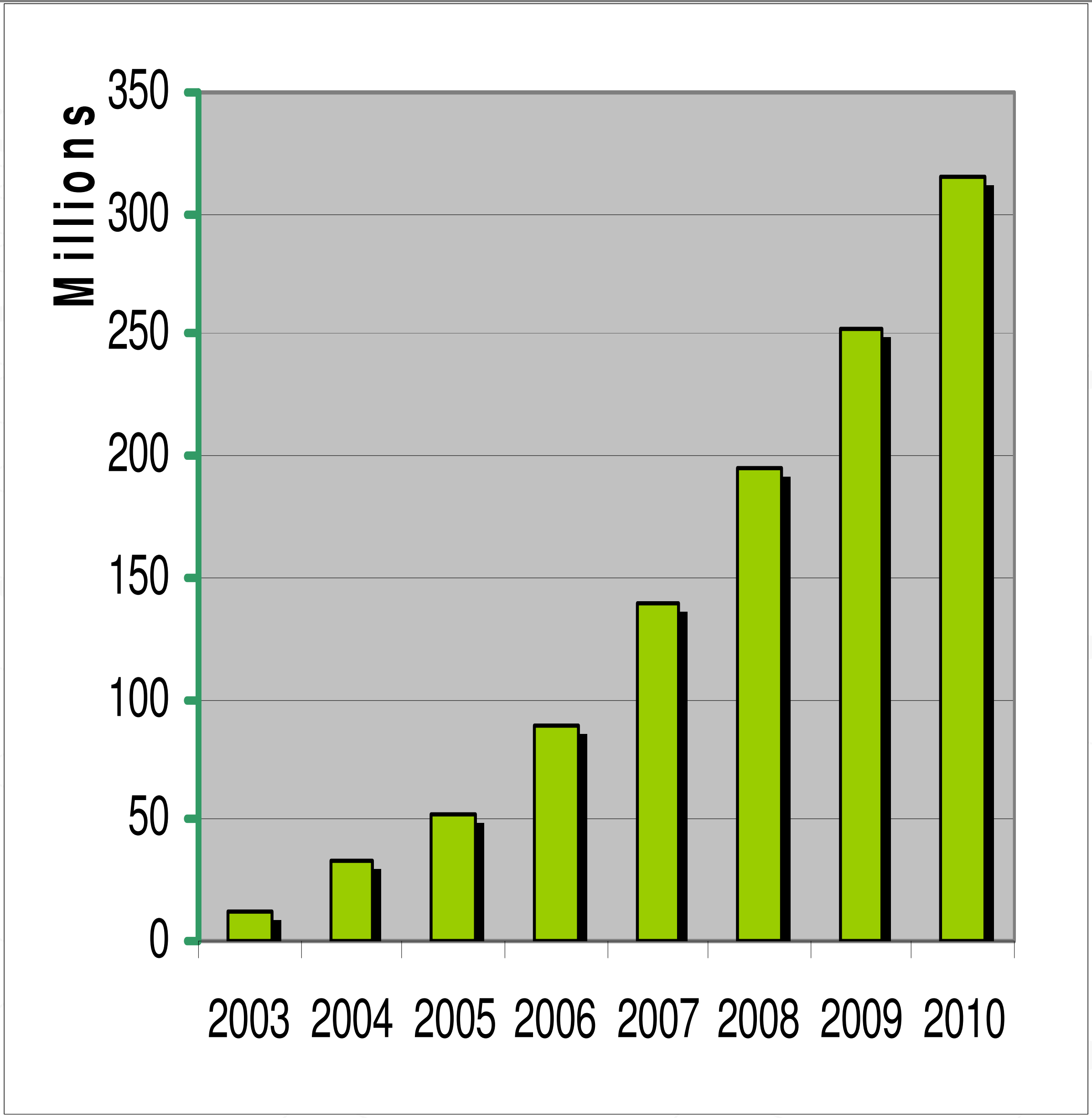
# Past Growth and future Expectations



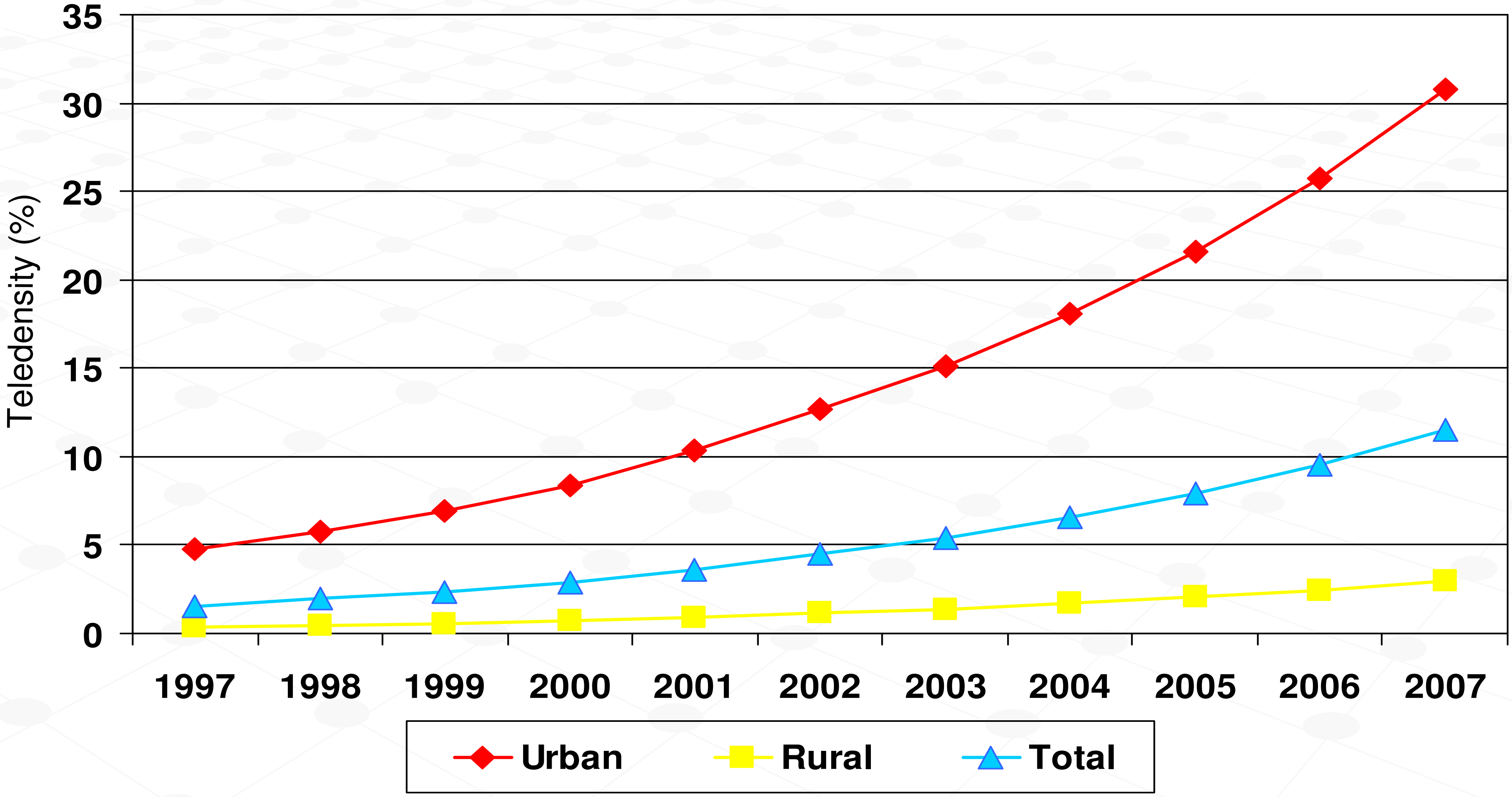

- *In past one year, total additions were 38M, 74% over Mar05 figures of these 3 fourth were GSM lines.*
- *In last quarter it was 18% growth, adding more than 14M connections*
- *Triggers: Growing younger Generation, Higher growth in GDP Disposable incomes, Hi-Tech Industries like IT, Pharma, Booming Service Sector*

## Growth (Estimates)

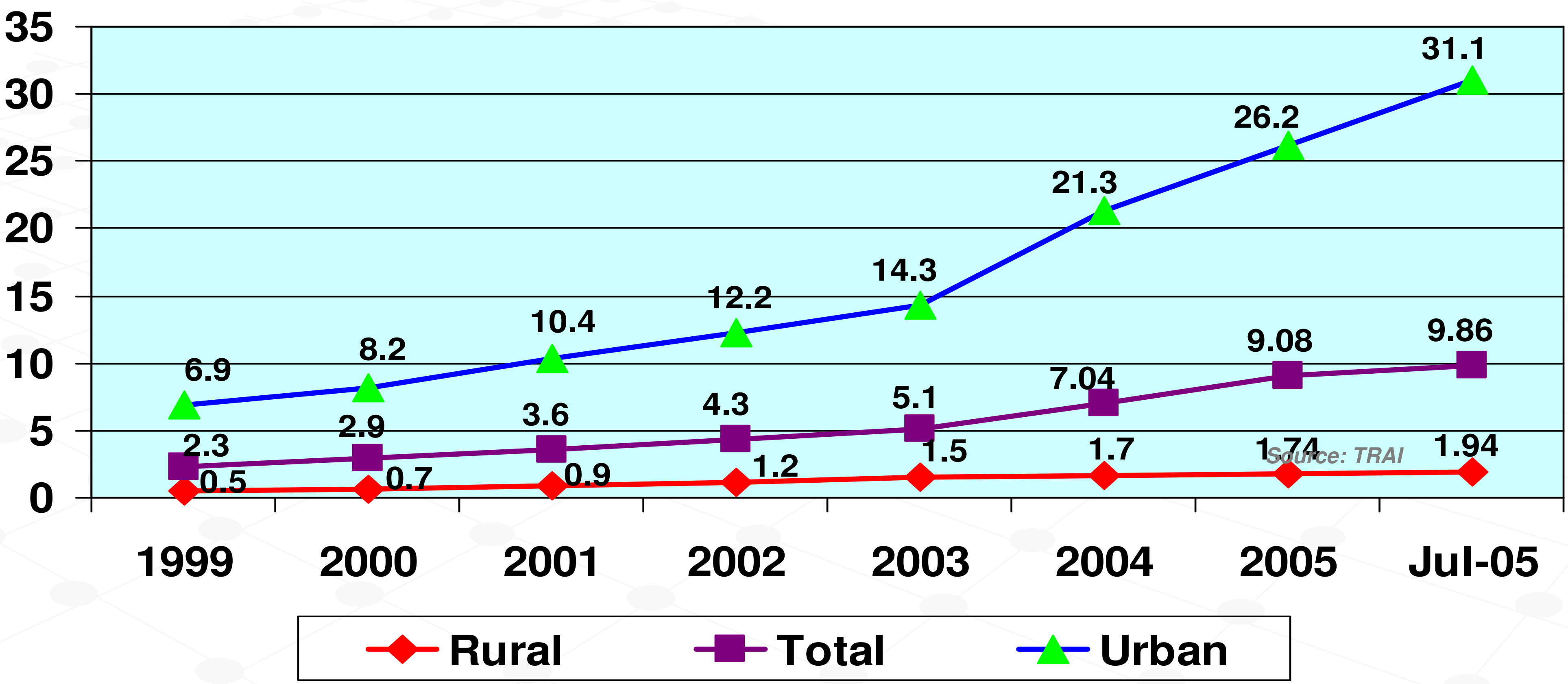
- *In past 3 years, growth was more than 50% p.a.*
- *If we take sustainable  and moderate growth at decreasing rate total nos. are likely to exceed 300M in 2010, and 500M before 2015.*
- *Potential Triggers: Lower entry Cost, Lower monthly expenditure commitment, Reach in villages and increase in teledensity current ~2%*



# *Teledensity - Urban vs Rural*

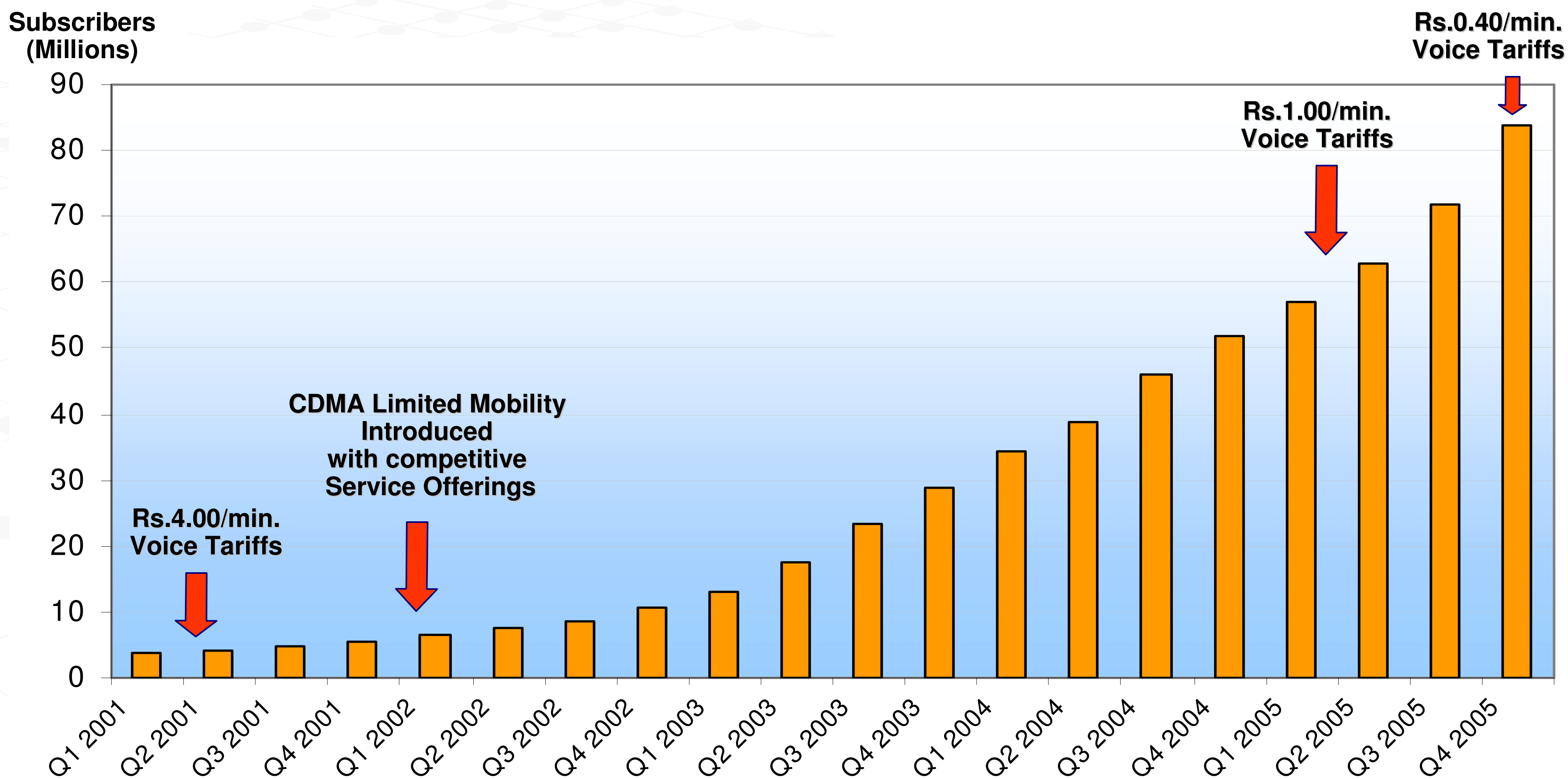


# Enhancement of Rural Density




- To bridge the Urban-Rural divide, Cost to Serve the Rural area should be reduced

# *Impact of CDMA on India's Wireless Industry*
### *Tariffs*

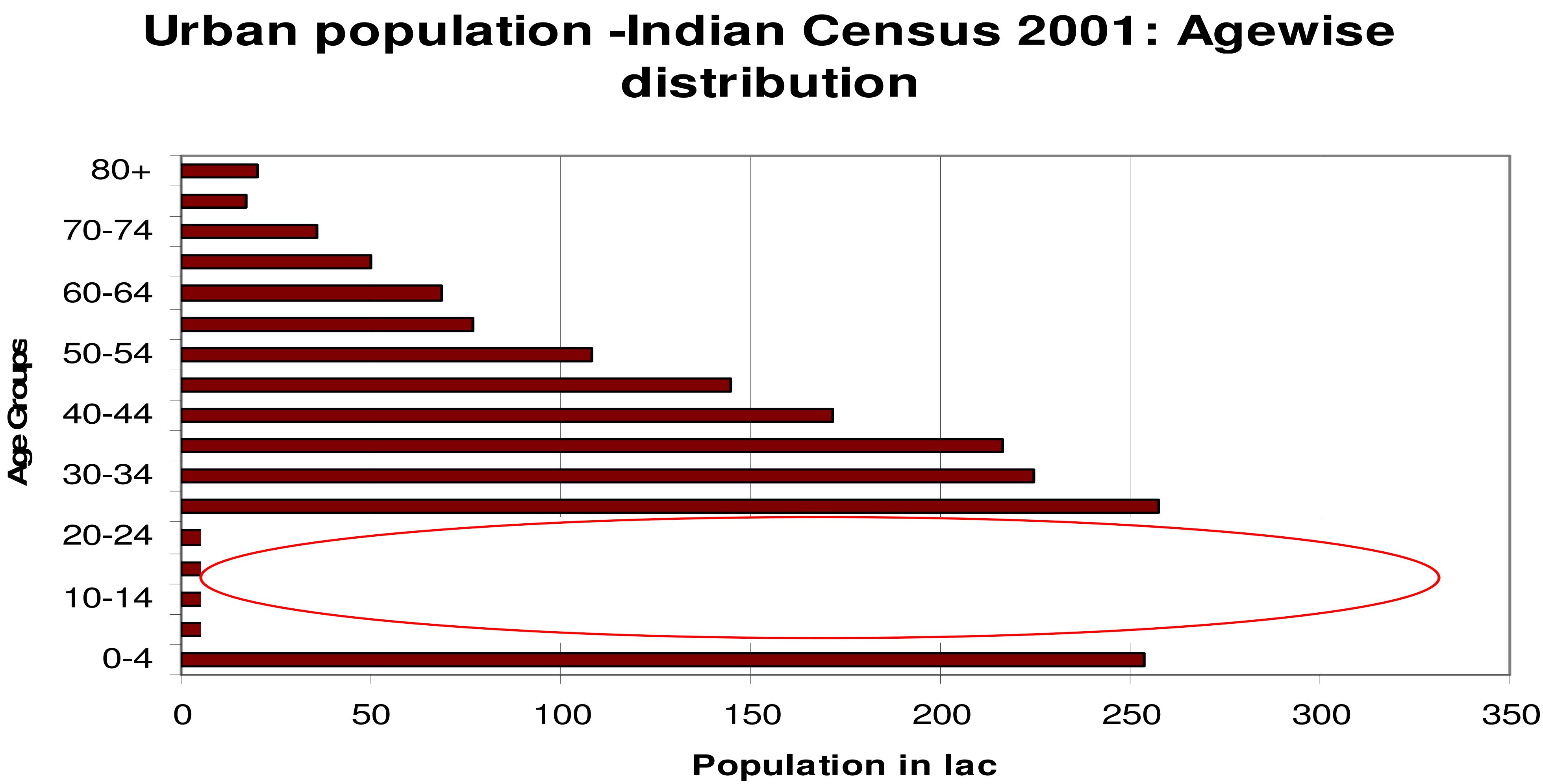



**83 million net wireless sub adds since competition from CDMA Limited Mobility was introduced**

Sources: TRAI study

***FUTURE GROWTH POTENTIAL***

# India Is Getting Younger



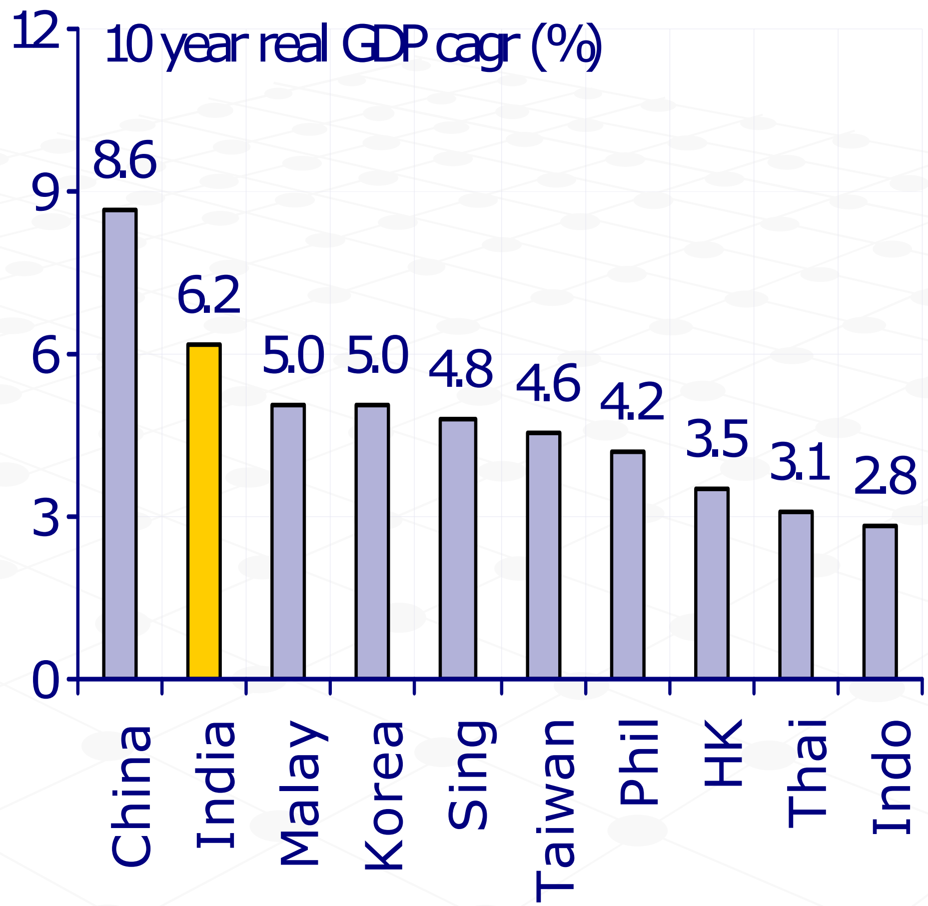

- Demographic shift
  - People currently in 14-30 years age bracket (**Next Generation**) will form the largest chunk of India's population in the coming years

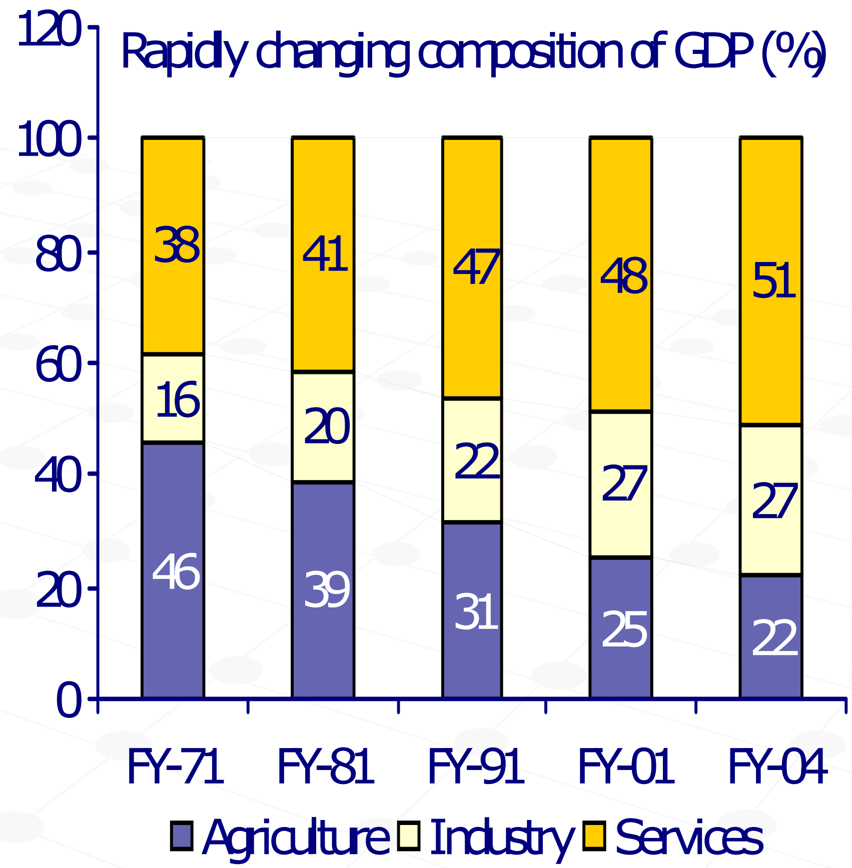
# *Great potential demand*

- The next generation → People born in 1980's & 90's
  - **Majority of these young people will be in their early twenties and thirties in the next ten to fifteen years**

- General profile of next generation
  - **Just started working or would start in near future**
  - **Single or just married with high disposable incomes**
  - **High Lifestyle Aspirations**

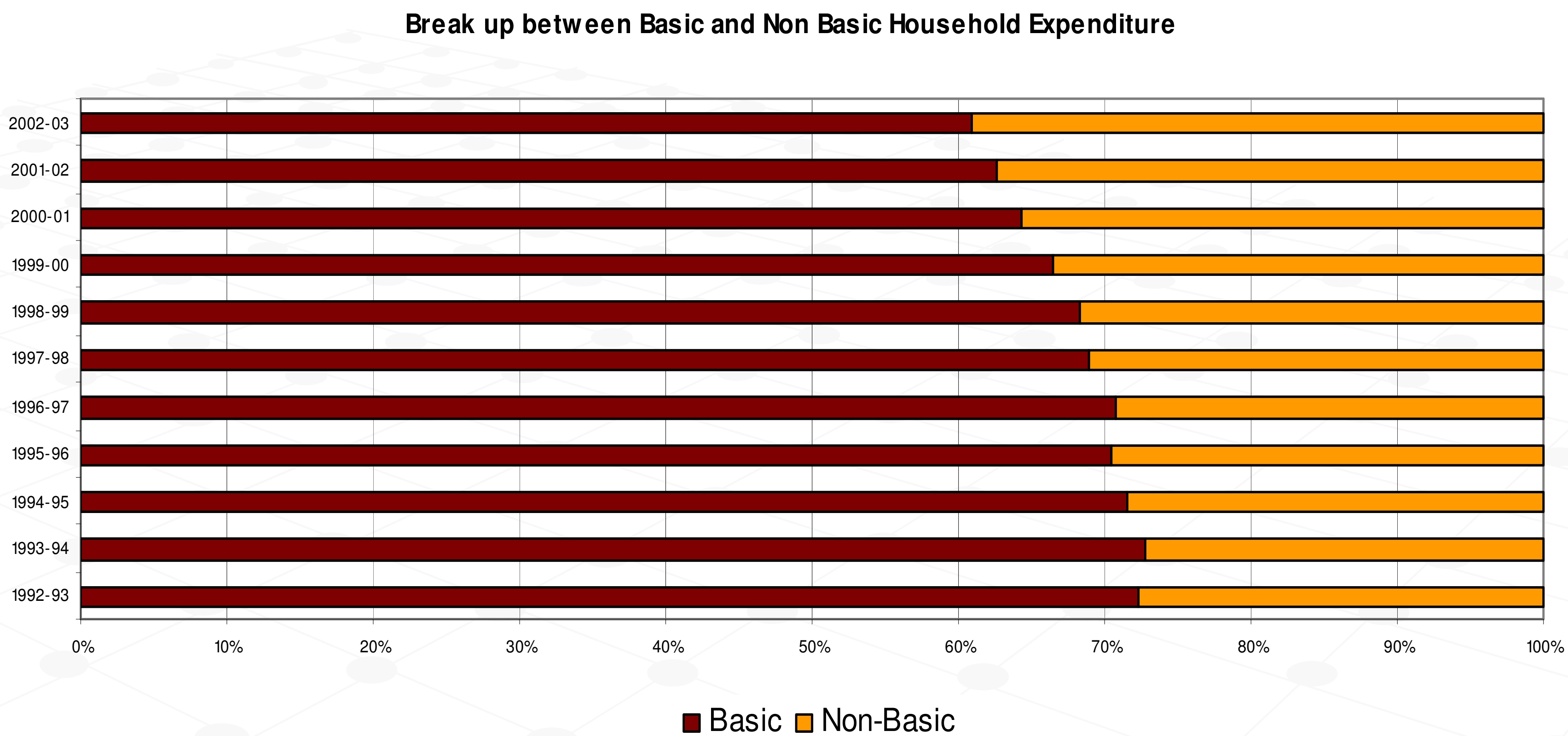
## And is Amongst the Fastest Growing Economies



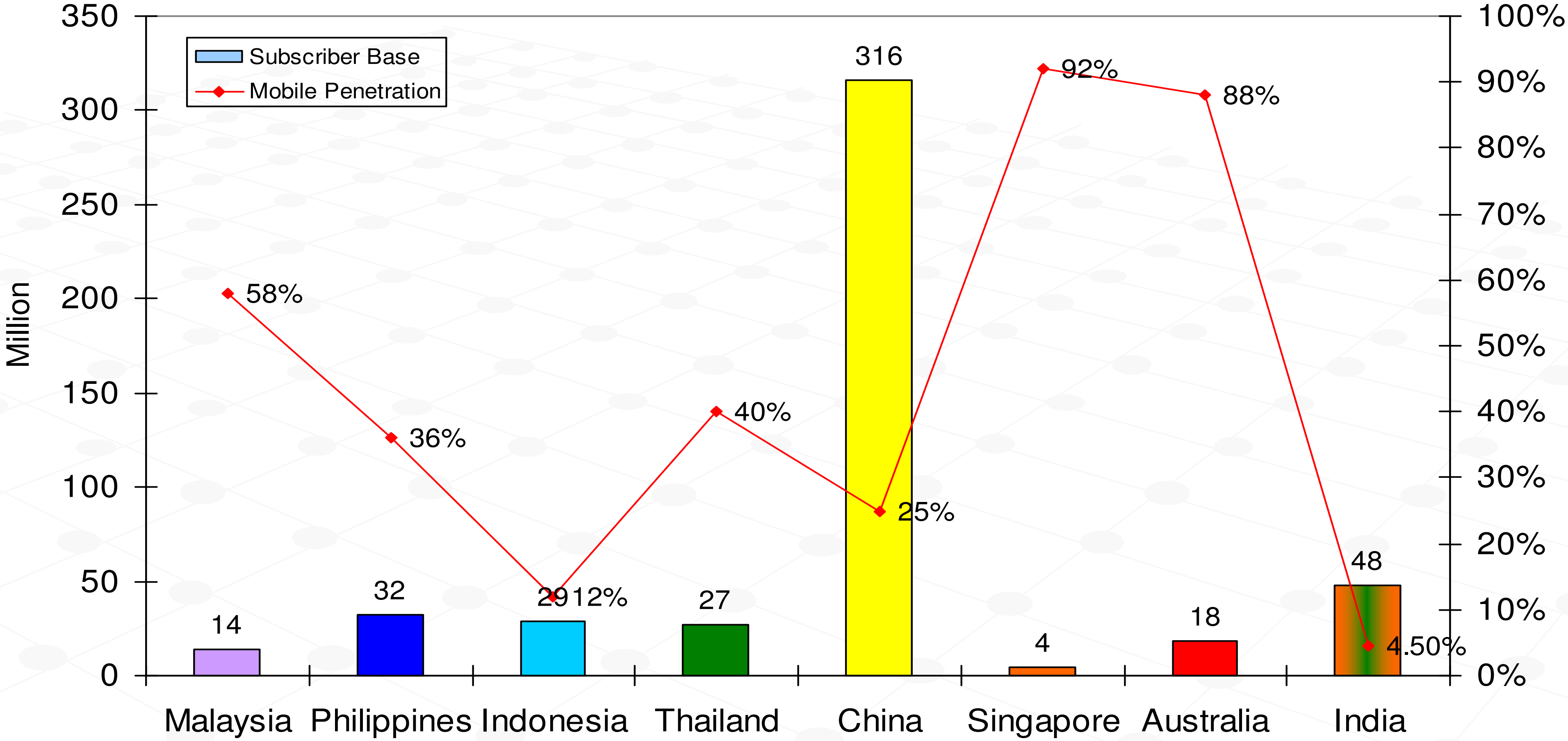

- Growth has been accelerating in each decade
- Industry + services (78% of GDP) growing at +8%
- Impact of agriculture on overall growth is steadily reducing
- Per capita income has grown by 7% CAGR over the past decade and is projected to cross $1,000 by the end of the decade

# Trends in Consumption Pattern




- Moving away from basic necessities
- Aspirations given wings by higher Disposable Income's have changed consumption patterns
- Decrease in outlay on basic: 16%
- Increase in non-basic items: 39%

# SUBSCRIBER BASE & MOBILE PENETRATION



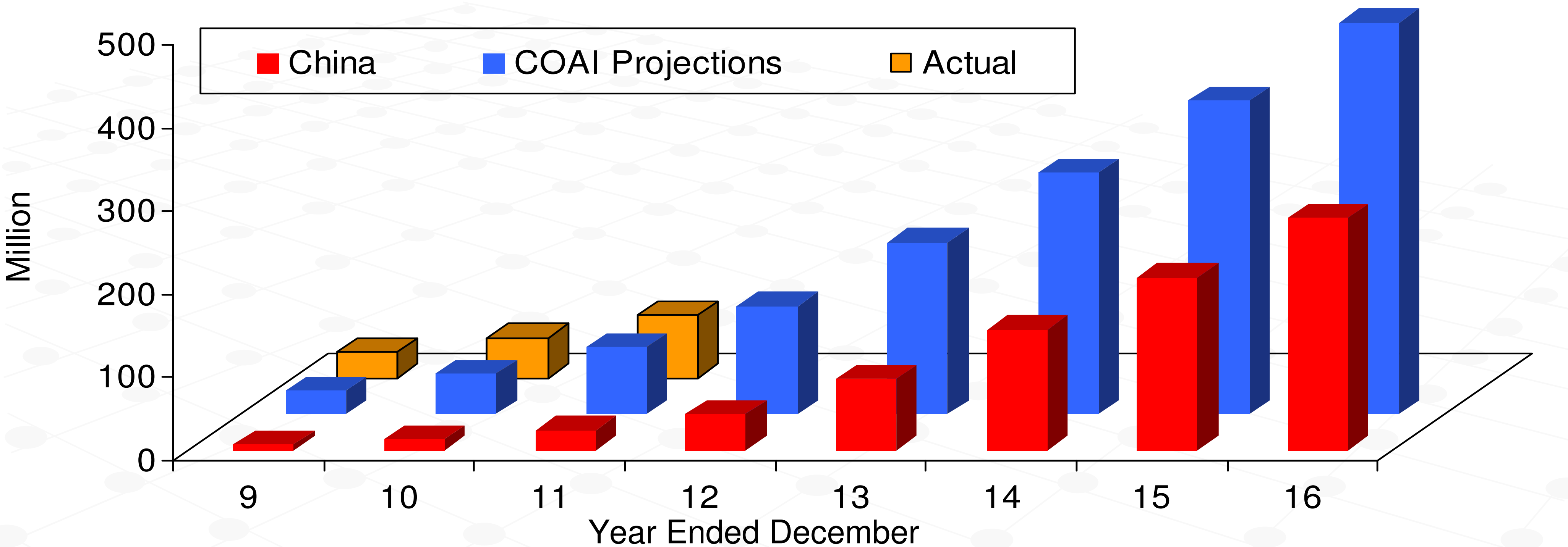

**INDIA**

- **2nd largest market in Asia Pac, in absolute terms**
- **With a mobile tele density of only 4.5% (now 6%) – the one with the highest untapped potential**



COAI PWC Benchmarking Study, December 2004

# *FUTURE SUBSCRIBER GROWTH*




| **Year** | **9** | **10** | **11** | **12** | **13** | **41** | **15** | **16** |
|---|---|---|---|---|---|---|---|---|
| India | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** |
| Sub (MLN) Actual | 31 | 48 | 76 | | | | | |
| Sub (MLN) Projected | 28 | 48 | 81 | 130 | 207 | 290 | 377 | **471** |
| China | **1996** | **1997** | **1998** | **1999** | **2000** | **2001** | **2002** | **2003** |
| Subs (MLN) | 6.8 | 13.2 | 24 | 43 | 85 | 145 | 207 | 279 |

# The tariff drivers

- Inspite of a burgeoning middle class as a potential movers of demand, the absolute affordability remains lower than the other economic success stories of the region.

- Hence Government of India through its incumbent operator implemented innovative tariff mechanism to leverage full potential of the telecom network by attracting large numbers of users.

## *Shift in tariff paradigms of cellular services*

- Concept of Fixed monthly charge shattered with life time plan.
- Revenue stream only through usage charge.
- This model sustains itself on the Interconnect revenue, with minimum margins.
- Greater margins on termination of calls than on origination of calls.
- Due to heavy competition , pressure is also mounting on usage charges.

# What's next

- Beginning of the era of mergers & acquisitions in Indian Telecom.
- Promoters have begun selling off their stakes to long time players of telecom operations.
- Sustainability of low tariffs is highly determined by the potential demand of Indian consumer.
- Tariffs are expected to move Back to basics.
- Unlimited usage with Fixed monthly Charge based on CUG concept.
  - Unlimited plans both in basic and cellular.
  - Revenue through VAS and Broadband
  - Interconnect revenue
  - Bundling and convergence of services
  - Enterprise service
  - Emergence of Indian MNCs in telecom Sector.

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# Thank you.

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