

# Village Kiosk and Impacting Role of ICT for Rural Areas

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# Village Kiosk

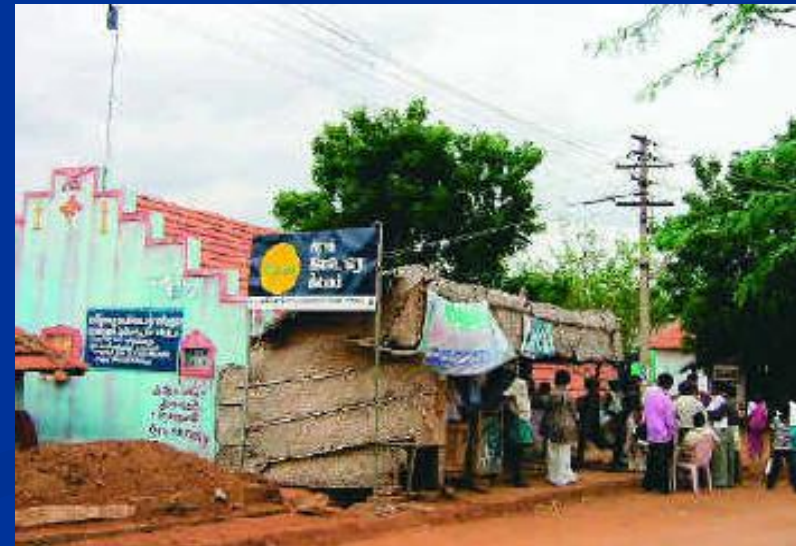
# Village Kiosk



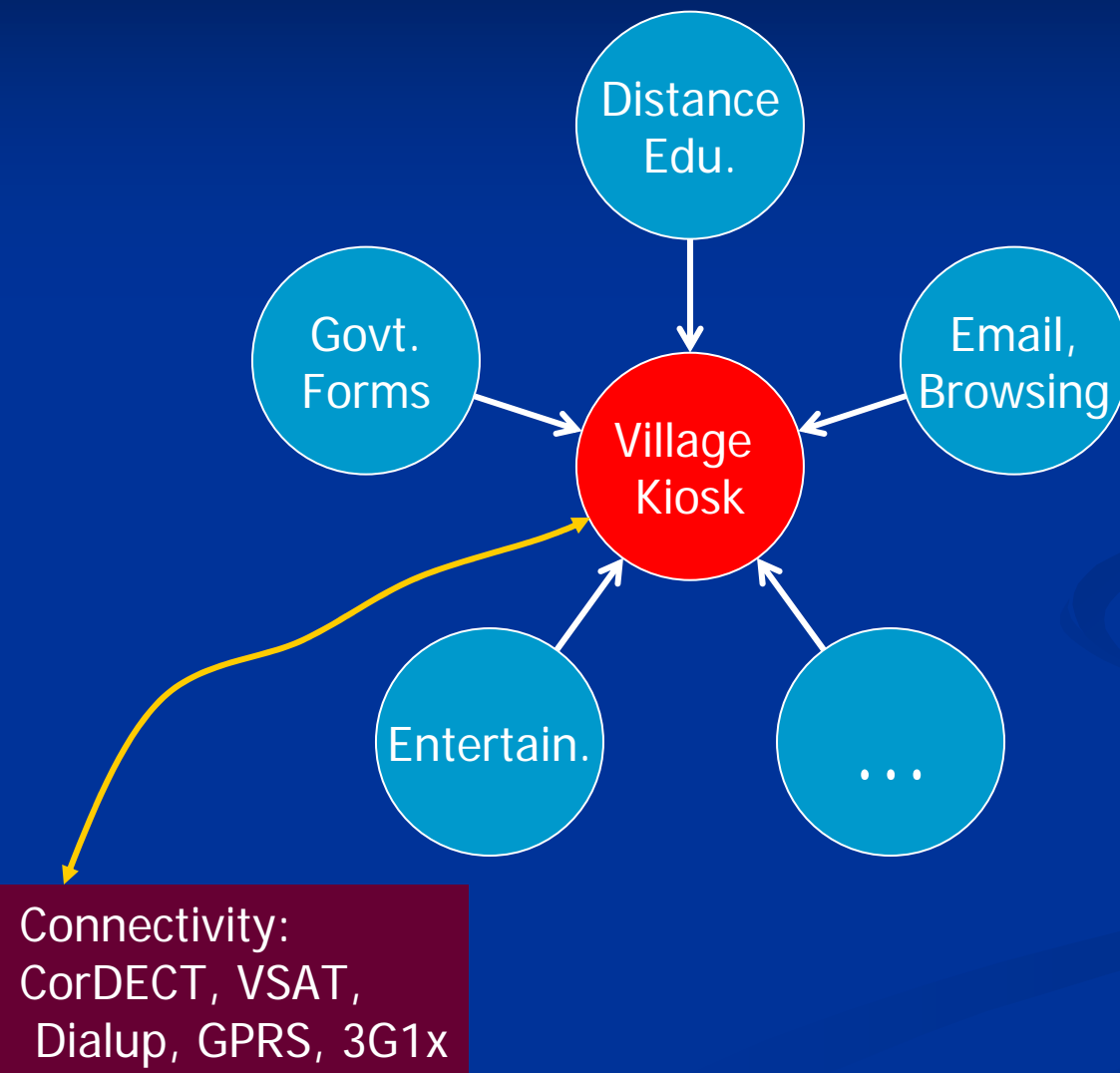
Aug 2006

# A village kiosk consists of

- Local Entrepreneur
- Equipment
  - Computer
  - Printer
  - Battery backup
  - Web-cam
  - Speakers, Microphone
  - Connectivity
    - Antenna assembly
- Cost of setting up a village Kiosk ~ Rs.50K to 1L



# Typical ICT4D Model



- Basically
  - Service model
  - Shared model
  - Aggregating model
- Motivated by PCO/STD/ISD booth and Cable TV model
- Research aspect:
  - Connectivity
  - Services
- Good Model
  - Nevertheless some research on the model may be in order

# Partial List of Some ICT4D Projects in India (based on Village Kiosk)

- eSeva, Integrated Citizen Services, Andhra Pradesh
- Lok Mitra and Jan Mitra Projects from Rajasthan
- e- BillPost and e- Post Services of the Department of Posts
- RASI (Rural Access to Services through the Internet) --- n- Logue Communications
- Gyandoot
- Community Information Centres (CIC) Project (Dept. of Info Tech., Govt.of India)
- Bhoomi
- Drishtee dot. com Ltd.
- ITC eChoupal
- Kuppam i- community, Andhra Pradesh (HP)
- Akshaya- Kerala Govt's Hundred Percent ICT Literacy Project
- Information Village Research Project- IVRP by M. S. Swaminathan Research Foundation
- Swayam Krishi Sangam (SKS)
- TARAhaat
- GRAMDOOT

## Partial List of Some ICT4D projects in India ...

### ■ ICT for Women's Empowerment

- SEWA
- Community Radio- Deccan Development Society
- Community Radio- Kutch Mahila Vikas Sangathan (KMVS):
- Sisu Samrakshak ICT-enabled Child health care by UNICEF
- Change Initiatives- Nabanna- Empowering women

■ ...

# aAQUA Q&A forum (DIL: IIT-Bombay)

Farmers can access Agri-extension services.

They can ask questions in their own language and get information more relevant to the local context.

**web-based  
archived  
searchable  
multilingual  
since Nov 03**

aAQUA - View Thread - khod kida - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail News RSS Feeds

Address http://www.projects.mlasia.iitb.ac.in/aquar/forum/viewthread?thread=883 Go

Links Customize Links Free AOL & Unlimited Internet Free Hotmail Liquid Music Network RealPlayer Welcome to Liquid Audio Windows Media Windows

Norton AntiVirus




0? aAQUA: almost All QuesTions Answered IIT Bombay KVK Baramati  
आक्वा: प्रश्नोत्तर मंच आई. आई. टी. बॉम्बे के वी के बरामती Welcome Guest | Login

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aAQUA » List all forums » Forum: पीकावरील रोग (crop diseases) » Thread: khod kida

Quick Go » पीकावरील रोग (crop diseases)

Total posts in this thread: 2 Post new Thread

Author		This topic has been viewed 22 times and has 1 reply
 dg_pawale Stranger India Joined: Feb 22, 2004 Posts: 4 Status: Offline	 khod kida Hello Cocount Tree has Khode kida . plz suggest the Medicine for this plant This trees have kida from last one month . [Jun 8, 2004 3:46:05 PM]	<a href="#">Reply to this Post</a>
 baramati Certified Expert	Re: khod kida नारळाच्या झाडावरील खोड किडा नियंत्रणासाठी खालील उपाय योजावेत. निंबोळी पावडर + कार्बरील + बारीक याळू (1:1:1 या प्रमाणात) मिसळून पानाच्या बेचक्यात एक ते दोन चमचे मिश्रण टाकणे असे ते 15 ते 21 दिवसांच्या अंतराने दोन ते तीन वेळा टाकणे. प्रा. लाखे कृषी विज्ञान केंद्र	<a href="#">Reply to this Post</a>

Done Local intranet



# Bhav Puchiye - What is the Price? (DIL: IITB)

http://agmarknet.nic.in/arrivals1.htm - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print Copy Paste Address http://agmarknet.nic.in/arrivals1.htm Go Links

Google Search Web Search Site PageRank Options Norton AntiVirus

## Market-wise Daily Report for Specific Commodity On 26/03/2003

NR: Not Reported FAQ: Fair Average Quality

### Commodity: Wheat


Market	Arrivals (Tonnes)	Origin	Variety	Grade	Minimum Price (Rs./Quintal)	Maximum Price (Rs./Quintal)	Modal Price (Rs./Quintal)
<b>Bihar</b>							
Muzaffarpur	3.3	NR	UP 308	FAQ	830	900	875
Patna (Musallahpur)	50	NR	UP 308	FAQ	675	775	725
Patna City	NR	NR	UP 308	FAQ	800	900	850
<b>Chattisgarh</b>							
Bhatapara	0.7	NR	Other	FAQ	617	641	630
<b>Gujarat</b>							
Bhavnagar	54	NR	Coarse	FAQ	765	950	855
			Lokwan Gujrat	FAQ	780	875	825
Dahod	393.7	NR	Other	FAQ	1000	1200	1150
Mahuva	144.3	NR	Kalyan	FAQ	785	1000	920
			Lok-1	FAQ	700	850	800
<b>Jharkhand</b>							
Chaibasa	5	NR	White	FAQ	850	925	900
Dhanbad	22.6	NR	Kalyan	FAQ	760	825	825
			Mill Quality	FAQ	740	780	780
			Other	FAQ	700	730	730
Ranchi	0.4	NR	UP 308	FAQ	825	860	860
<b>Karnataka</b>							
Bagalkot	5	NR	Sona	FAQ	763	763	763
Bangalore	206	NR	Bansi	FAQ	950	1250	1100
Basava Kalayana	2	NR	Local	FAQ	680	912	810
Bhadravathi	10	NR	Local	FAQ	800	1100	950

Done Internet

Start tu... D:... In... Ar... Mi... Ac... Bo... ht... C:... W... N... un... 6:04 PM

# Visual Acuity Test (HP-IITM R & D Labs)

Choose Language



Online Help

Language for Visual Acuity

Viewing Distance (in m)

English  
English  
Gujarati  
Hindi  
Kannada  
Malayalam  
Oriya  
Tamil  
Telugu


OK Main Menu

Use this screen to change the settings for the program. These include

1. Language Setting for the Visual Acuity Test : You can take the test in 9 different Indian Languages.
2. Viewing Distance for Visual Acuity Test : You should change this setting

Click on help for scroll bar

Visual Acuity Test For Literate



20/ 70 Right Eye

Increase Letter Size Decrease Letter Size

Record Observation

Online Help

ஒள ந ய ல


This is the Visual Acuity Test Screen. This will check your eye for sharpness of vision. To proceed with the test please follow the steps one by one ...


1. Please sit at required distance.
2. The test is to be taken first for the right eye with

2 m Tamil


Main Menu

# Voice Based News Group (HP-ITTM)







**CLICK HERE**



**SOFTWARE**




india




1 group(s)

wireless




0 group(s)

science




1 group(s)

cooperative




0 group(s)

agriculture



0 group(s)


healthcare






0 group(s)

English


தமிழ்




**HP IITM**  
**R & D Lab**

- dinakar
- msk
- dinakar
- msk
- ubdesai
- dinakar
- msk



Go to healthcare Home

Subject: Fitness    No. of articles : 7

Posted by	on	Post your Reply
dinakar	Nov11	<a href="#">reply</a>
msk	Nov11	<a href="#">reply</a>
dinakar	Nov11	<a href="#">reply</a>
msk	Nov11	<a href="#">reply</a>
ubdesai	Mar 18	<a href="#">reply</a>
dinakar	Nov11	<a href="#">reply</a>
msk	Nov11	<a href="#">reply</a>

# Project COW: Computers on Wheel



- Founded by Pingali Raja Rajeswari
- Experimented in Mehboobnagar (close to Hyderabad)
- Computer technology with digital imaging, solar power and wireless connectivity for Internet
- **New delivery method** - Intermediary based mobile motorcycle model.

## Revenue Distribution at an n-Logue Village Kiosk in Melur District

Email/Chat/Video Mail	15 %
Browsing	25 %
Govt. Applications	10 %
DTP	10 %
Printing	10 %
Entertainment	10 %
Computer Classes	20 %

Avg. monthly revenue for a commercially sustainable rural Kiosk needs to be about Rs.3000 to Rs.3500 (implying that the kiosk owner can pay back the monthly loan installment, and still have something to take home)

# Village Kiosks Reach in India

Out of 638,000 villages, about 6000 to 7000 have internet access; **about 1% villages are connected**

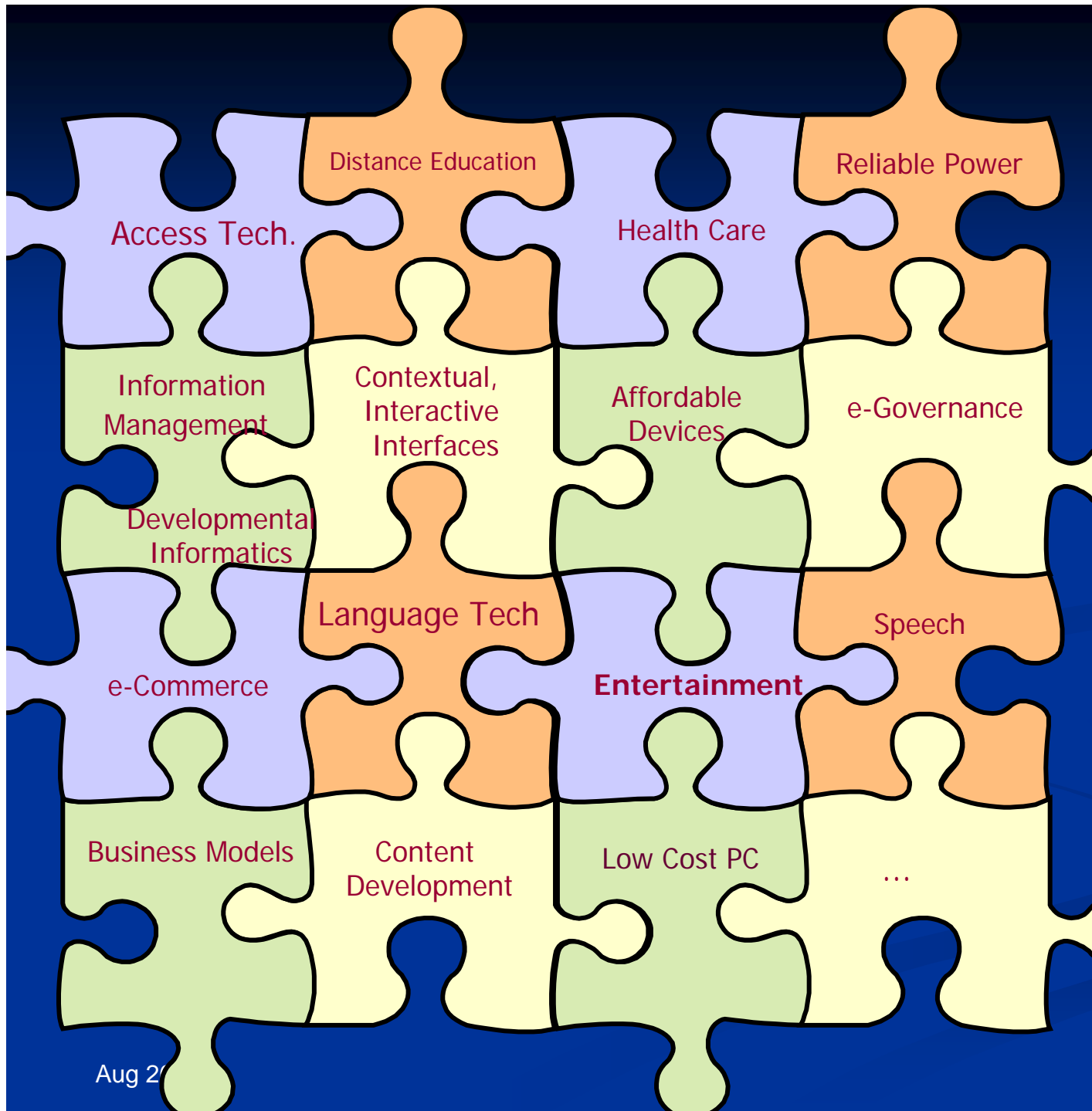
Mission 2007: (<http://www.mission2007.org/>)

- Connect 100,00 villages by 2008 (create VKC: Village Knowledge Centers)
- Phase I:
  - Finance Minister has set aside Rs.100 Cr. for creating 10,000 more VKCs by Feb 2006 – tall order

# Some Questions

- What are the research issues?
- Is village Kiosk based on PC the best possible model?
- In which domain ICT can play a key role to profoundly impact the village economy?

# Research in ICT4D

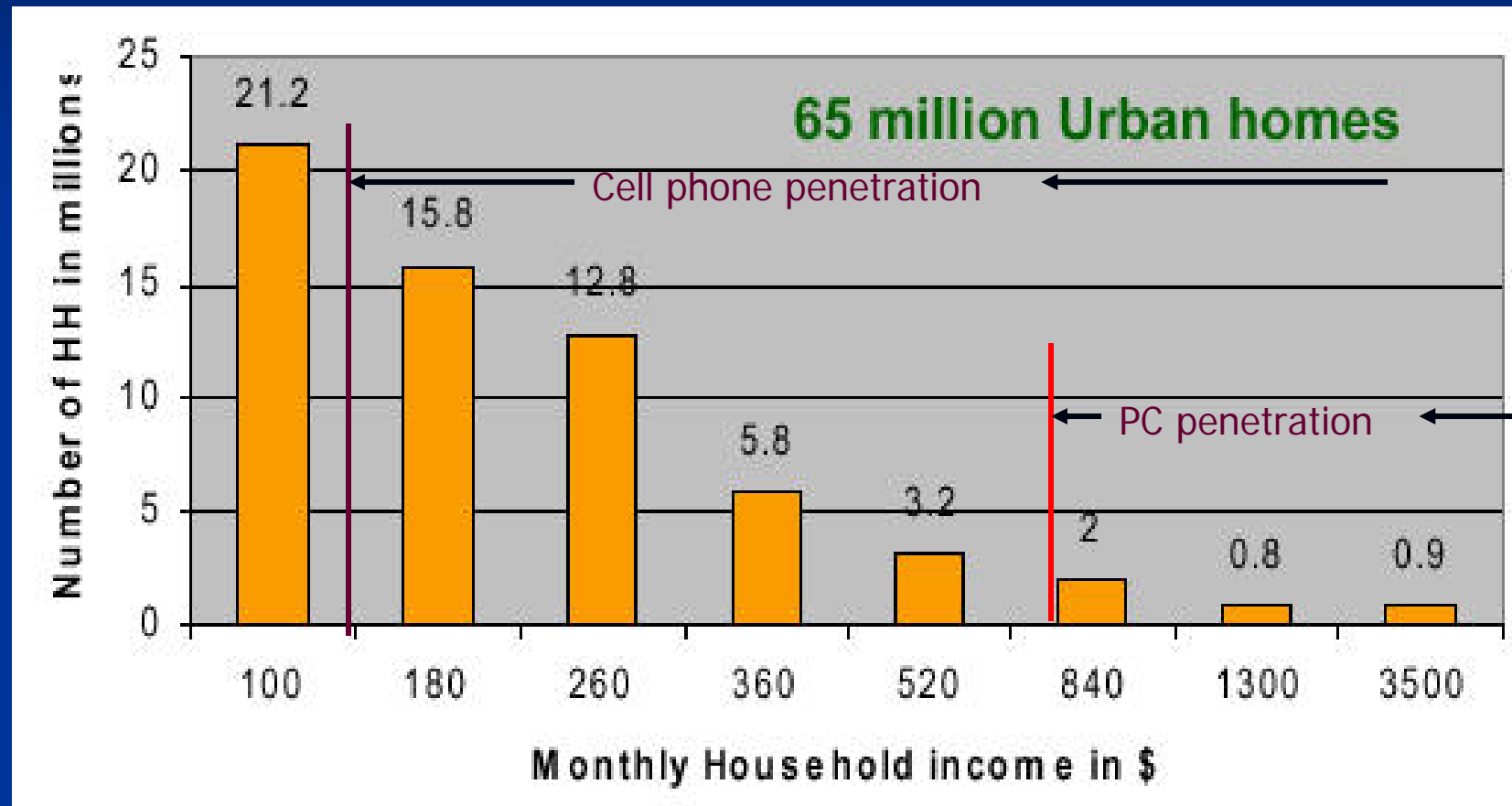


A Plethora of  
Research Areas

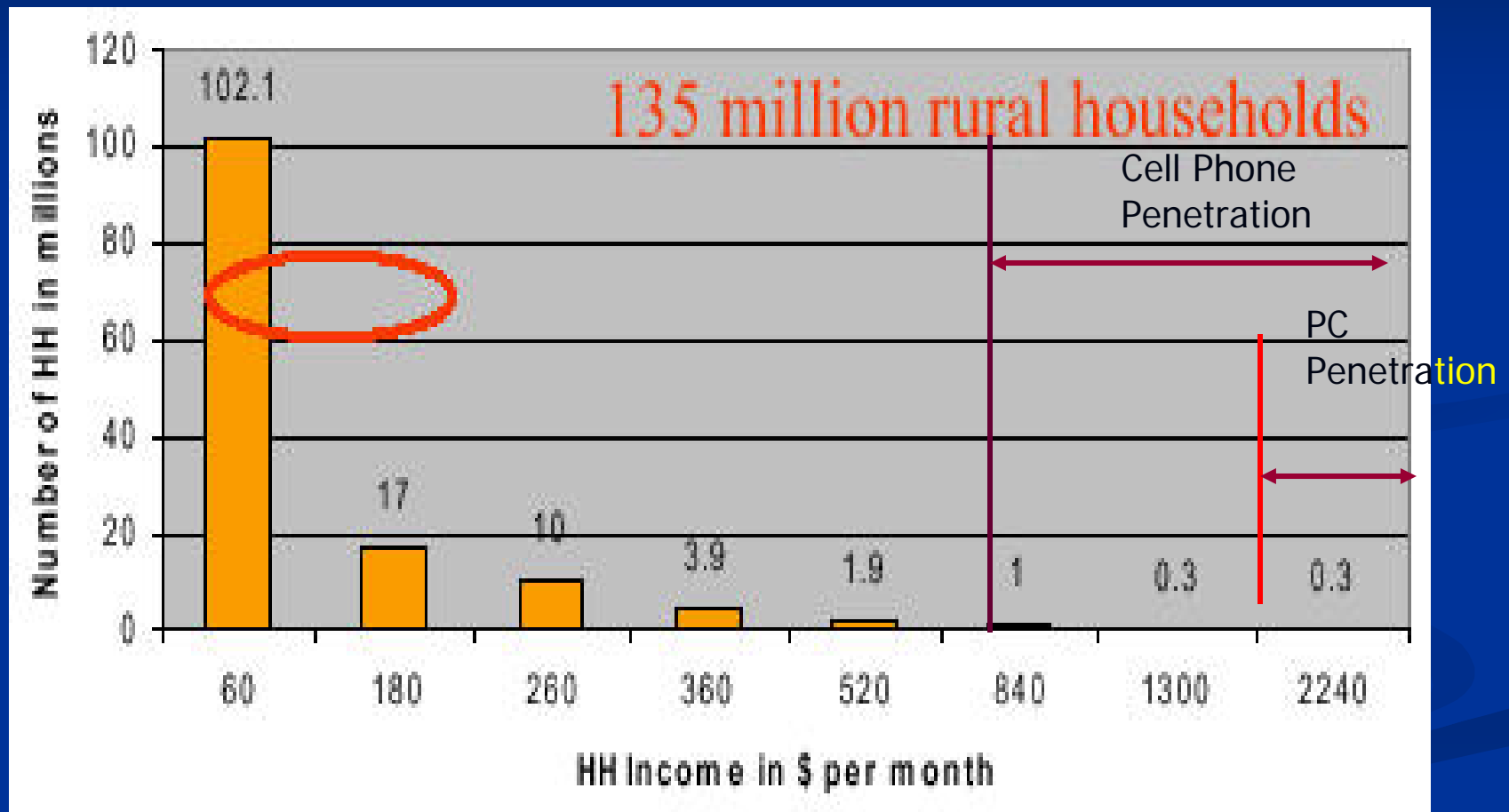
Challenge is to  
make this an  
attractive and  
acceptable area for  
research at  
academic  
institutions and  
research labs

# PC as Platform for ICT?

# Urban PC and Cell Phone Penetration



# Rural PC and Cell Phone Penetration



# Some Observations

- PC penetration is about 12 million in 20 yrs
- Internet users 30 million
- Cell phones about 100+ million in 10 yrs, and we are adding about 1 to 1.5 million every month
- Lowest cell tariff (voice calls) in the world, ~ 2 cents a minute
- Telephone density expected to cross 25% (250 mil) by 2008, and most of these will be cellular
- SMS: Very popular in India → one is comfortable with the cell phone as platform for messaging.

# PCs vs. Cell Phones

## PCs

- Focus has been on PC as the most desirable platform
- But scalability in rural areas is a major issue
- Extensive work on low cost PCs
  - Amachi PC (~Rs10K)
  - PCTVT (PC-TV-Telephone, expected price Rs.10K)
  - Networked Linux based PC (Novatium)
    - Dumb terminals
    - Rental model
    - Requires Broad band
  - OLPC (One Laptop Per Child)

## Cell Phones

- Mobile phones have scaled phenomenally in India
- View mobile phones as a computer
- Use mobile phones as the platform for taking ICT to masses --- the platform is already there.

# Impacting Role for ICT in Rural Areas

# Some Observations

- In order to improve the village economy
  - Need to increase the cash flow
  - Need to generate employment
    - India will have 500+ million citizens below the age of 25
  - Need to provide alternatives for fair loans (not informal sources like chit funds, money lenders, bishi's, etc.)
  - Need to generate trade

Question: How can ICT enable the above?

*Share of Different Sectors in GDP  
(GDP at factor cost, 1993-94 Prices)  
Rs. In crores*

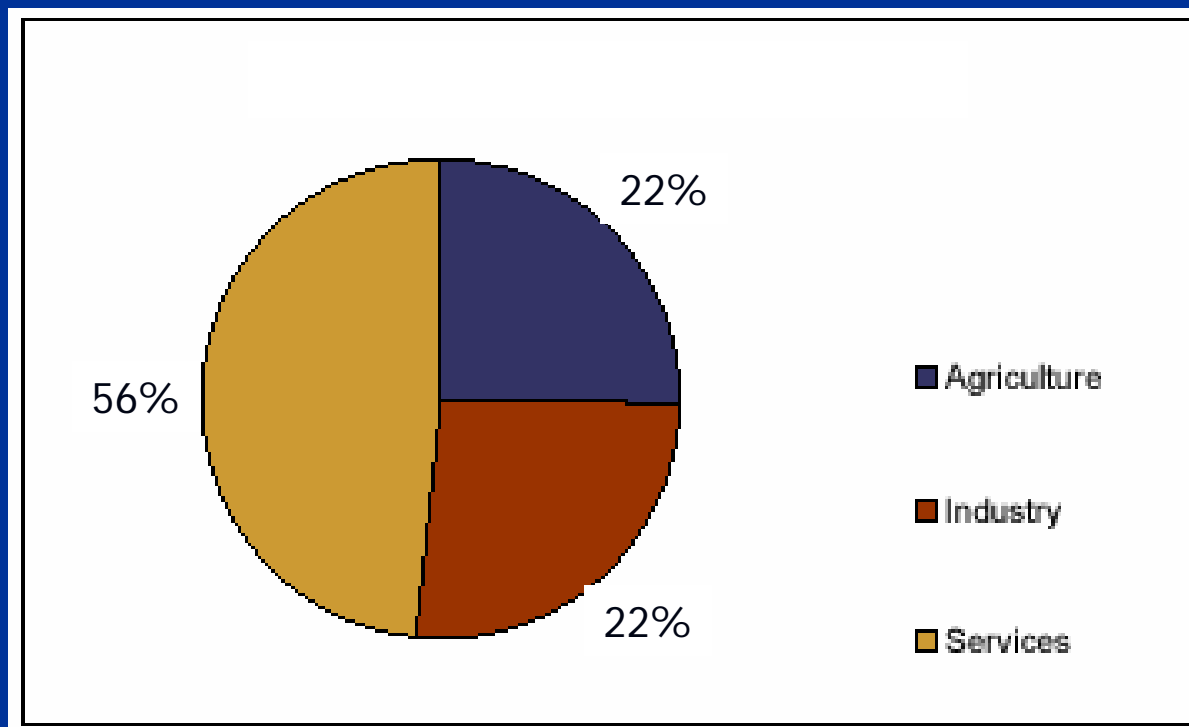
	Agri.	Industry	Services	Total	Services%
<b>1970-71</b>	137320	46151	113438	296278	38%
<b>1980-81</b>	159293	70687	171148	401128	43%
<b>1990-91</b>	223114	150383	319374	692871	46%
<b>2000-01</b>	285877	263797	649011	1198685	54%
<b>2001-02</b>	302054	272359	691016	1265429	55%
<b>2002-03</b>	292625	288266	739842	1320733	56%

-- RBI, *Handbook of Statistics on the Indian Economy*

# Indian GDP

- GDP for India: \$600 billion
- Rural GDP: \$150 billion (25%)

Compare this with  
IT industry, which is  
~ \$ 20 billion



# Rural ATM

An Attempt to facilitate cash flow and expand rural banking

# Rural ATM – Providing ICT based Rural Banking



- Developed by the TeNet group of IIT-Madras
- Deployed in rural kiosks in collaboration with ICICI bank
- Low cost rural bank
- Deposits, withdrawal, and loans
- Cost: \$800/=
- Conventional ATM costs: \$15,000/=
- Uses extremely low cost finger print authentication system (\$1/=)
- Use of plastic ID cards "smart or otherwise" not viable in rural areas

# Open Issues

- Rural
  - Microfinance
  - Micro-loans
  - Micro-payments
- ICT along with financial institutions will have to play a major role
- Very little work on use of ICT for generating trade
  - At best there is some work on providing prices (e-Choupal, etc.)

# Concluding Remarks

- Need to explore alternate platforms for large scale use of ICT in rural areas
  - Believe cell phone is the alternate platform
- ICT in rural areas must deal with
  - Cash flow
  - Trade
  - Employmentto make a significant impact
- Information by itself has little value; it must be generate trade!