

# Do Developing Nations require a **Different Approach** towards Policies and Regulations?

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# Advanced Nations have done it before

- While we struggle with Policy and Regulations
  - We must learn from those who have done it before us
    - **Largely the West**: Scholars have worked on it and data is available
    - Push to learn from the literature – weigh all our policy and regulation options against these
- When we mess up
  - Often pointed: Why did we not learn from them!

# Are we different?

- Income levels and affordability
  - Often technology and policies are designed assuming certain income levels and affordability
    - Telecom
      - While USD50 a month would be a reasonable spend in West
      - In India **over 50% of families** can afford to spend less than USD4 a month
        - Can same equipment, operating practice, policies and regulation provide service to customers who can not pay more than USD4!
    - Electricity
      - While USD50 a month would be a reasonable spend in West
      - In India **over 50% of families** can afford to spend less than USD4 a month
        - Can same energy sources, electricity generation and distribution technologies, policy and regulations provide quality service to both!

# Are we different?

- Interest Rates on Loans and finance availability
  - In West, it s 4% or could be lower
  - In India, it could be even 14%
  - Example: Solar cell with installed costs of USD1500 per KW (p)

PV cost per KW	USD1500	Life	20 years		
Interest rate	14%	Sunshine/ yr	1800 hours	Cost per unit	14 cents/unit
Interest rate	4%	Sunshine/ yr	1800 hours	Cost per unit	7 cents/unit
Interest rate	14%	Sunshine/ yr	1000 hours	Cost per unit	25 cents/unit
Interest rate	4%	Sunshine/ yr	1000 hours	Cost per unit	12 cents/unit

- Cost of electricity could vary from 7c/unit to 25c/unit
  - As interest rates and conditions (sunshine peak hours) differ

# Example: ICT policy & regulations

## Goals

- ICT must **reach each nook and corners** of our nations
- ICT must be **affordable for everyone** in our nations
  - As ICT is empowering
  - It will make economy grow
    - Will contribute to higher taxes and revenue for government
- Multiple Operator Scenarios: Competition required so as to bring down costs
- Transparency

# Do does auctions deliver?

- Policy is not about making maximum revenue immediately for government
  - Then why auctions?
  - Most transparent way of selecting when there are more bidders than operation slots
- But what should they bid on?
  - Maximum charges for spectrum?
    - But that may conflict with goals of universal reach and universal affordability
- So why should one not design auctions on?
  - Fastest attainment of service in all areas
  - Most affordable Services
  - Best QoS: how does one measure?
    - And not on spectrum charges ...
- Has not been done in the West: so what
  - Is complex: so what?

# Technology, Economics and Policy

- At times **policy options are limited**
  - Only certain social goals can be met
  - CAPEX / OPEX too large to meet larger goals
- **Innovative Technology** opens up new possibilities
  - CAPEX / OPEX can be significantly reduced: technology strongly linked to economics
  - And provides new policy options
    - Larger Goals can now be taken up and fulfilled
    - Policy / Regulations have to be agile to leverage the new possibilities
- In fact, social goals and policy should continuously pose new challenges for technology
  - **Encourage** certain kind of investments in S&T Innovations
  - Watch early signs of techno-economic break-through **and incentivize**

# Technology, Economics and Policy

- Examples
  - What Wireless did to telecom and ICT
  - What Solar PV is likely to do for Power generation and distribution



# To Sum Up

- Approach to Policy / Regulations can not be divorced from
  - Specificities of specific nations..
    - Income levels, affordability, availability of finance, interest rates etc.
  - National Goals
  - Technology and Innovations
  - Economics
- Require Innovation and Agility in policy-making
  - Not limited by experience of others....