Whether the way state delivers services is redefined concomitantly with changes in the society that are mediated by ICT?

A case of supply chain management of Public Distribution System operations in the Chhattisgarh state of India

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T.R. Sreenivas, FPM 2011, Indian Institute of Management, Bangalore, India
Public Distribution System

- Policy to answer food security needs
  - Evolved from rationing of world war II
- How it works
  - Procure from surplus areas at assured prices
  - Store food grains in Warehouses
  - Transport to deficit areas
  - Distribute at subsidised rates
- Distribution sole responsibility of the state governments
Targeted PDS

- From Universal PDS to Targeted PDS in 1997
  - To reduce food subsidy, While central subsidy is limited, states can extend the benefits
  - Each Below Poverty Line (BPL) family gets 20 kg of food grains at 50% of economic cost; some poorest get 35 kg
  - Sales to Above Poverty Line (APL) families partly cross subsidise the scheme
- In 2000, APL prices increased to 90% economic cost
  - Drop in APL off take; quality concerns
- Bulging buffer stocks – 64 million
  - Ideal 22 million – storage issues
- Decentralised procurement of paddy
Problems with TPDS

- Conceptual
  - who are BPL families?
- How to identify BPL
  - exclusion and Inclusion errors
- Diversion of food grains
  - fake ration Cards
  - pilferage
  - reason? - price differential
Some stylised facts

- Food subsidy as a percentage of GDP rose from 0.4% in 1990–1991 to 0.9% in 2003–2004
- For each rupee worth of income transfer, the central Government spends Rs.3.65 in operations
  - consumer subsidy is only 27% of budgetary subsidy
- In Chhattisgarh while centre estimates about 1.9 million BPL families, the benefit is extended to 3.6 million
  - removing one fake card means reducing the burden by Rs.6,000 in a year
A Public Interest Litigation (PIL) in the apex court in 2001 brought the issues into limelight

The Supreme Court created a vigilance mechanism in 2003 for monitoring the PDS operations

States have responded by taking ICT route to comply with vigilance guidelines

States differed in their approaches

A study by the Court appointed Central Vigilance Committee recommended ICT in 2010

How does it impact interests of different stakeholders?
Availability of Food grains at FPS

- Depends on the efficiency of procurement, storage, transport and distribution activities
- Procurement efficiency – helping farmers – has its own positives
- Storage efficiency depends on the ability to monitor the movement to and from warehouses/mills
- Transportation is a major source of diversion
- Distribution depends on the viability of FPS and the way vigilance and monitoring mechanisms work
Stakeholders

* Government
* Farmers
* Millers
* Procurement agencies
* Storage and Transport interests
* Fair Price Shops (FPS)
* Other private dealers
* Bureaucracy
* Vigilance and oversight groups (including media)
* Technology providers
The Chhattisgarh model

- First ICT project in PDS that caught attention
- Many innovations to check pilferage
- Lack of village level connectivity addressed by data carriers on motorcycles
- Involving citizens in monitoring via web interface, SMS and toll free line
- Integrating operations of rice mills and warehouses
- Back office integration of state level and district level offices
- Use of GPS to monitor movement of food grains
- Beneficiary database
Web Interface
(Translated from Hindi)

http://cg.nic.in/khadya/
A sample web page (Translated from Hindi)

http://cg.nic.in/paddyonline/paddyonline11/
Grievance redressal interface
(Translated from Hindi)

Food, Civil Supplies and Consumer Protection Department, Chhattisgarh government
Grievances Redressal System

- Officer
- Receipt of Inquiry report
- Proceedings to be
- Complaints which are not related to food department
- Details of action taken on complaints
- District wise details of action taken on complaints
- The pending complaints
- Complaints officer appointed to the rest
- Complaints whose report is due
- Complaints on which the action is
- Complaints which have been abrogated
- The department is not related to complaints
- List of complaints
- The number of registered users (public participation)
- Registered User list (call center)
- Total number of Grievances
- District wise Number of Grievances
- Status of Complaints
- Change Password

http://cg.nic.in/complain/
Need to consider this in a broader framework

- SC itself is tired of monitoring the issue
- No tangible Pan India Model
- Perhaps the policy direction is from Judiciary has complicated the issue
- Need for more focused efforts as the finance and technology does not appear to be constrains
- The economic rationale is both from the welfare perspective (Amartya Sen) and also the neo-liberal model as technology is a key indicator of accelerated growth (Rostow)

The Deccan Herald, 31st Aug 2012
Benefits to different stakeholders
- Estimated 92% satisfaction rate among beneficiaries with PDS
- Elimination of fake ration cards
- Same day payment with computer generated cheques to 16 lakh farmers
- Involvement of public in vigilance

A Lot of hitherto inaccessible information in public domain
Lessons

- It is possible to implement ICT through local innovations enabling the community to reap early benefits
- Feasibility of ICT implementation merging with other low technology options
- Given an opportunity the community will take active interest in monitoring the end goal
Disturbing Features

- A policy option with judicial intervention
- Lack of stakeholder involvement
  - ICT has a key role to play but can not answer all questions
- Technology is in-house from NIC
  - The best available technology may not have been put in place
- Support of other infrastructure
  - No power means no data updating
- No talk of a threat to vested interests
- Inadequate checks at point of sale
Computerization of PDS would be taken up as a Mission Mode Project (MMP) under the National e-Governance Plan (NeGP) (July 2007)

Department of Food and Public Distribution has framed detailed guidelines for computerization of TPDS

Central Project e-Mission Team (CPeMT) on computerization of PDS has been set up
Identified areas

- Creation & Management of digitized beneficiary database
- Supply-Chain Management of TPDS commodities from Food Corporation of India (FCI) till Fair Price Shops (FPS)
- Sale of TPDS commodities at Fair Price Shops including identification and authentication of beneficiaries and recording of transactions
- Transparency and Grievance Redressal Mechanism
Task Force recommendations (Nov, 2011)

- Setting up of a National Information Utility, called the Public Distribution System Network (PDSN), which operates as a technology back-office and central system for central and state Governments
- To provide support in IT-intensive areas such as development, operation and maintenance of technology, supply chain management, transparency portal, and electronic payments
- To provide integration with the IT systems of other key stakeholders and other e-governance systems as and when they are designed over time