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.

The Public Distribution System (PDS) is the flagship food security programme of Government of India that has been totally revamped as the Targeted PDS (TPDS) in 1997. The scheme works in a decentralised fashion. While the centre takes up procurement through Food Corporation of India (FCI), formulates policy on quantum of food grains allotted to states from FCI procurement, decides subsidy on food grains supplied to Below Poverty Line (BPL) population, the state governments are responsible for administration of the scheme like identifying the beneficiaries, issuing ration cards, managing the network of retail shops for supply of food grains etc. Many state governments also have policies to supply subsidised food grains above the limits supported by TPDS and take up procurement and storage of food grains, especially of paddy, in what is known as the decentralised procurement.

The Supreme Court of India, examining a public interest litigation filed in 2001, ordered that the administration of PDS be improved under close monitoring of vigilance committees and one of the key measures suggested for improvements is ‘computerisation of PDS operations’. Since then many state governments have initiated policies in that direction, which are mostly considered as ‘pilot projects’, as the policy of the union government is yet to be formulated.

In this context, The ICT project of the state of Chattisgarh, a socially and educationally backward state, that bagged many awards in e-governance at national and international levels, gives an opportunity to analyse and suggest future policy directions for such interventions.

**KEY RECOMMENDATIONS**

1. Policy makers should **actively push for reforms** in PDS operations leveraging on the strength of ICT interventions as ordered by the Supreme Court to take the economy into next orbit of growth

2. Efforts are needed to gain **experience in managing the transactional stage of ICT** implementation to be able to sustain and expand the system.

3. More innovations will enable the flow of benefits of ICT successfully **overcoming local constraints**, with shorter time lags

4. **Stakeholder involvement** needs to be encouraged in a more **structured and transparent fashion**. ICT in PDS can be a vehicle for community empowerment than merely a facilitator of operations

**JUSTIFICATION FOR THE RECOMMENDATIONS**

- The future trend of economic development in India is likely be in the direction of empowering the poor. Such a scenario appears to be consistent either looking from the Rostow’s view of stages of economic growth or from the Sens’s perspective of enhancing capabilities. The PDS policy remained more or less static during the pre-1991 era. Initiatives like targeted delivery emerged, but the emphasis was more on fiscal discipline than empowerment. While the judiciary appreciated the value of computerisation in...
PDS, the executive did not show any urgency. The focus of e-governance efforts had been computerisation of processes like utility bill payments, land records management etc. As a matter of fact, Judiciary did not intervene during 1980's when the Kalbandi starvation deaths had been reported. It is plausible that Indian Judiciary realised the present policy vacuum in the area. There is a thinking that dysfunctional institutions like PDS need immediate attention, if the country has to take a higher growth trajectory. The GDP to savings ratio in India that hovered around 20% during the decades of 80's and 90's reached a level of 35% during 2009-10, a level comparable to other emerging economies. Further, the structure of savings is slowly shifting from non-productive assets like jewellery to more productive financial assets. In the Rostwoian sense, with increased availability of financial capital, better physical and social infrastructure need be created for the future take-off stage and that includes removal of poverty, malnutrition along with better health and education. ICT has the potential to improve life of millions, if the deployment happens in a committed fashion. There may not a need to depend on direct cash-transfers for ensuring food security. This is a real leadership challenge to the policy makers.

- The ICT in PDS project is taking up the horizontal integration, without coming to grips with the challenges of the transactional stage. Transactions in the system is limited to the area of mill registration and vigilance, with total transactions not exceeding a couple of thousands in a year. A citizen can register herself to be part of the vigilance group and receive an SMS on dispatch of food grains. Complaints can be registered on-line or through other means. Other possible on-line transactions like applications for on-line registration for a ration card, online tendering for transport or submission of particulars of a farmer are not possible. The technology is used more to facilitate working of officials who would use the system to improve their efficiency. Web content is also of limited informative value for active citizen involvement. While individual ration card details and details of farmers are available online, some critical details like paddy dispatched to a particular mill are not available. Only some aggregate reports on the PDS operations are available. At the same time, the system has forayed into vertical integration by linking various official agencies state and district offices and rural procurement centres.

- Involving motorcycle riders to overcome connectivity barriers and GPS technology for monitoring movement of trucks are two key innovations of this project. Other infrastructure limitations like skilled manpower to maintain the system, availability of electric power can disrupt functioning of the system. Power failures delayed data entry in the past. Such delays can be deliberate also. Replacing good quality goods with inferior stuff can be happening during such delays. Innovations like solar power back up and training of local talent in a structured manner can overcome some limitations.

- Major stakeholders, indeed, have been befitted by the ICT implementation; there are no delays in payments to farmers; consequently loan recovery has improved. Diversion of paddy through fake rice mills and diversion of food grains through fake ration cards has been minimised benefitting, the government. Public service delivery has improved as food grains are reaching the end user in time and public are informed about the movement. All this has happened even when none of the major stakeholders like farmers, beneficiaries, rice mill owners, transporters or fair price shop managers have a forum to discuss their priorities and expectations from the system. The vision for ICT adoption in PDS, is guided more by administrative exigencies. By default the same is projected as public interest. It is mandatory for state governments to implement ICT with the help of government owned National Informatics Centre(NIC). Although some projects of NIC see private outsourcing, no non-governmental partnership is evident in the present project. Consequently, the ICT adaptation has not provided a platform to discuss more efficient technology options.

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