End-line Evaluation of Reforms in the Targeted Public Distribution system in Bhubaneshwar, Odisha

Background
The Targeted Public Distribution System (TPDS) in India provides highly subsidized food grains to more than 800 million beneficiaries through more than 500,000 Fair Price Shops (FPS) across all states and Union Territories in India. (PIB G. o., 2011)

In order to improve the efficiency and effectiveness of this large-scale operation, the Government of India introduced reforms, including End to End Computerization of the TPDS, in line with India’s National Food Security Act 2013. This reform was expected to address issues such as leakages, targeting errors and inefficiencies in the supply chain system of the TPDS.

In the state of Odisha, with more than 32 million beneficiaries and 13,300 FPS, the TPDS reforms were supported by the World Food Programme (WFP). In partnership with the Government of Odisha, WFP formulated and implemented a plan using technology and automation as the means to improve the overall efficiency and performance of the TPDS between 2014 to 2018.

In order to evaluate the impact of these reforms, WFP undertook a decentralized evaluation in 2019 in rural & urban areas of Bhubaneshwar.

Objectives
The evaluation was conducted for both accountability and learning purposes. The evaluation assessed whether the project:

a) improved the supply chain management;

b) improved beneficiary identification;

c) improved beneficiary satisfaction

Supplementary objectives also included whether:

• the reforms were able to change inclusion and exclusion among the existing group of beneficiaries across rural and urban areas;

• reforms were able to improve the receipt of services through FPS; and

• reforms were able to improve accountability and transparency in the system.

Methodology
The baseline was conducted in 2014 and the end line in 2019. The end-line was conducted between November 2018 and June 2019. The evaluation employed a mixed-methods and a pre-post longitudinal design.

• Quantitative structured interviews were conducted with 3,300 randomly selected households (including both beneficiaries and non-beneficiaries) and 80 FPS owners to understand the beneficiary and FPS-level outcomes.

• Qualitative In-Depth Interviews (IDIs) were conducted with purposively sampled FPS owners, female members of the household/female beneficiaries, local government representatives and officials involved in the TPDS supply chain to understand their insights on the reforms.

• Qualitative Focus Group Discussions (FGDs) were conducted with female beneficiaries in purposively sampled areas to understand the effect of reforms and its gender implications.

Limitations
The end-line evaluation does not provide insights around the leakage of commodities that may be occurring at various junctures of the supply chain (for instance; between depots and FPS) as the design was not suited to estimate such an issue.
Findings:

**RELEVANCE**

The findings suggest that the TPDS reforms have led to increased efficiency, reduced leakages and fostered transparency and public accountability in the system and therefore it can be concluded that the programme is highly relevant for the settings it has been initiated.

**EFFECTIVENESS**

Increase in ration card ownership: The prevalence of ration cards increased from 59% in the baseline (2014) to 66% in the end-line (2019), suggesting an overall expansion of the state’s food security net in the last 5 years.

Beneficiary convenience and satisfaction: Overall, 97% of ration card beneficiaries (96% urban and 99% rural) reported their satisfaction with the functioning of their respective FPS.

FPS owner convenience and satisfaction: Approximately 98% of the surveyed FPS had a functional Point of Sale (PoS) device installed and 93% of FPS owners said that PoS was useful.

Awareness of beneficiaries on TPDS: Findings observe an increase in awareness among beneficiary households on eligibility criteria for TPDS, with 69% (66% urban; 77% rural) being aware of at least one criterion in the end-line compared to 17% in the baseline.

Grievance redressal and community oversight on FPS: Findings suggest that only 2% (3% urban and 1% rural) beneficiaries had registered their complaint regarding their FPS at any point in time. In addition, only 11% (8% urban and 17% rural) beneficiaries were aware of the role of local vigilance committees operating in their community and none of the areasFPS under assessment had undergone social audit from the time of implementation of the TPDS reforms.

**IMPACT**

Decrease in exclusion error: The exclusion error (eligible households under NFSA, defined by the state government criteria of eligibility not receiving ration cards and excluded from food security net) decreased from 27% in baseline to 14% in the end-line, indicating that a greater number of vulnerable households have been included in the PDS.

Stagnant inclusion error: The inclusion error (ineligible households, defined by the state government criteria of eligibility as owning a valid ration card) remained almost stagnant during the same period, with urban inclusion error as a major contributor to this trend. (overall 12% inclusion errors in baseline and 16% in end-line; within end-line, 17% in urban and 14% in rural areas).

Increase in FPS Profitability: This was measured by subtracting commissions earned by the FPS with their expenses. The overall proportion of profitable FPS has increased from 14% in baseline to 76% in the end-line. However, a deeper assessment of FPS profitability reveals that only 16% of the FPS earn a profit of more than INR 10,000 (USD 143) or more per month, which can be considered as a benchmark for viability. Additionally, it was found that FPS with ≤ 820 ration cards did not make any profits.

**SUSTAINABILITY**

Perception of supply chain officers on the reforms: Qualitative analyses of supply chain officers’ response on the reforms point towards two emerging themes; reduction in leakages and, enhancement in transparency and public accountability.

Women empowerment: The ownership pattern underwent a drastic change from baseline to the end-line, with all the ration cards surveyed during the end-line verified to be owned by female members of the household. Qualitative insights suggest that most women found the reforms beneficial and changed household gender dynamics positively, giving them more power on ration related decisions.

Recommendations

Recommendation 1: Update the existing beneficiary list to remove ineligible beneficiaries to reduce the targeting errors through dynamic updating/revision of criterion itself and periodic matching with the databases such as Income tax, vehicle registration etc.

Recommendation 2: Rejuvenate social audit and augment grievance redressal (GR) mechanism to improve community’s participation and ownership of the TPDS.

Recommendation 3: Augment service at FPS to include food security allowances as mandated under NFSA in case of stock-outs. Additionally, ensure that FPS runs for the 20 days as mandated by the government and other steps to a similar extent can be explored to avoid long queues at FPS.

Recommendation 4: Further augment the reliability of the transparency portal by increasing the frequency and timeliness of updating database on the transparency portal.

Recommendation 5: Conduct Periodic research on factors affecting TPDS performance.

Recommendation 6: Conduct independent research on potential food grain leakages.

Recommendation 7: Independent evaluation of TPDS reforms in far distant and poorer areas of the state.

The evaluation is available at: WFPgo – WFP.org
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Endline Evaluation of TPDS Reform Project in Bhubanehswar, Odisha