

Envisioning a role for Aadhaar in the
Public Distribution System

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1 Aadhaar and the PDS

The Unique Identification number (Aadhaar) was conceived by the Indian government as a means for residents to clearly and uniquely verify their identity anywhere in the country. The mandate for the UIDAI includes defining the usage of the number across critical applications and services¹. The Public Distribution System is one such application, and the UIDAI has accordingly laid out the potential role Aadhaar can play within the PDS.

The UIDAI recognizes that implementing the Right to Food is a priority today for the Indian government. The functioning of the PDS – the mainstay of India’s food programs – is critical to the implementation of Right to Food in India, and is the focus of this note. The Aadhaar-linked mechanisms that are outlined here however, can be adapted to other programs at a later date.

Aadhaar is best translated to mean a ‘foundation’, and the number would play precisely this role in the PDS. The number would be a foundation, over which the government can build more effective PDS processes, and ensure that the program helps fulfill the broad and admirable vision of India’s proposed national food security act.

Perhaps the greatest value of Aadhaar for the PDS stems from how it can be easily integrated into the existing infrastructure. Aadhaar presents governments with a highly flexible solution – states can choose to implement Aadhaar within the PDS in stages, beginning with Aadhaar-based identification, and progressing towards Aadhaar-based authentication and an Aadhaar-enabled Management Information System (MIS).

The eventual nature of an Aadhaar-linked approach in PDS would depend on the particular benefits the government hopes to gain. Using Aadhaar solely for identification would enable clear targeting of PDS beneficiaries, the inclusion of marginal groups, and expanded coverage of the poor through the elimination of fakes and duplicates. Implementing Aadhaar-based authentication across PDS would enable the government to guarantee food delivery to the poor. In addition to powerfully streamlining PDS processes, an Aadhaar-enabled MIS would make possible a more transparent, flexible system, and enable the government to fulfill the objective of food security in times of crises. Aadhaar would thus be a tool – albeit, a powerful one – in fulfilling the government’s overall objectives for the PDS and in ensuring food security for the poor.

¹ ‘ Notification – Constituting the Unique Identification Authority of India’, Part I, Section 2, Gazette of India, 28th January 2009

2 Areas for PDS reform

The Indian government and the Department of Food and Public Distribution have pinpointed critical aspects of the PDS that need reform, for the program to function more effectively. These include:

- i) Beneficiary identification, and addressing inclusion/exclusion errors
- ii) Addressing diversions and leakages
- iii) Managing foodgrain storage and ensuring timely distribution
- iv) Effective accountability and monitoring, and enabling community monitoring
- v) Mechanisms for grievance redressal
- vi) Ensuring food security

2.1 A role for Aadhaar within the PDS

Aadhaar can be a potent tool for the government, in making the PDS more effective across these identified areas. The following features of the number would be instrumental for delivering food entitlements to the beneficiary:

- i) **One Aadhaar = one beneficiary:** Aadhaar is a unique number, and no resident can have a duplicate number since it is linked to their individual biometrics. Using Aadhaar to identify beneficiaries in PDS databases will eliminate duplicate and fake beneficiaries from the rolls, and make identification for entitlements far more effective.
- ii) **Portability in identification:** Aadhaar is a universal number, and agencies and services can contact the central Unique Identification database from anywhere in the country to confirm a beneficiary's identity. The number thus gives individuals a universal, portable form of identification.
- iii) **Aadhaar-based authentication to confirm entitlement delivered to the beneficiary:** Aadhaar enables remote, online biometric and demographic authentication of identity. Such Aadhaar-based authentication can take place in real-time, and can even be performed through a mobile phone. Using Aadhaar for real-time identity verification at the FPS, when beneficiaries collect their entitlements, will help governments verify that the benefits reached the person they were meant for².

One challenge here is ensuring that such authentication is carried out at the FPS. Governments can ensure that Aadhaar-based authentication is implemented by the FPS owner by **linking future FPS allocations to authenticated offtake by beneficiaries**. The fewer Aadhaar-based authentications happen at the outlet, the less grain the FPS receives from the government. This will give the FPS owner a strong incentive to ensure

² This meets the recommendations of the Planning Commission and Wadhwa Committee, which have suggested biometric authentication of beneficiaries while delivering food entitlements.

that Aadhaar-based authentication is carried out, and that authentication devices are working.

Implementing such authentication while leveraging the **portability of Aadhaar** can bring significant benefits. Today, beneficiaries in a particular block or district can collect their rations only from their allotted ration shop. However, since the Aadhaar would be recognized across ration outlets, the number would help residents **collect entitlements from any FPS within the state**. Governments would then replenish FPS stocks based on authentication-linked offtake, which would give them real-time information on how many beneficiaries collected their entitlements from which outlet.

These two aspects of the Aadhaar-enabled system – linking grain allocation to authenticated offtake, and choice of FPS for the beneficiary – would enable a significant shift from the present approach, where foodgrain allocations within the PDS are static, supply-led and divorced from beneficiary demand and choice. The Aadhaar-enabled approach would instead help create a demand-led, dynamic system, one which gives power and choice to the beneficiary.

- iv) **Aadhaar-based authentication to track foodgrain movement:** Aadhaar-based authentication can be implemented across the supply chain, which will enable governments to track foodgrain as it is exchanged between PDS intermediaries. This would curb diversions, and help identify bottlenecks in delivery.
- v) **Aadhaar-enabled cloud-computing infrastructure:** The use of Aadhaar-based authentication across the supply chain gives governments the opportunity to link such authentication to a cloud-based management information system (MIS) within the PDS.

An Aadhaar-linked MIS would enable the PDS to address broader procurement, storage and monitoring challenges. Registration and procurement orders could be managed online, enabling decentralized, and more local procurement. Inventory management could be streamlined and handled online in real-time. This would also enable the PDS to implement state wide information systems that link all ration shops in a state, and give beneficiaries more flexibility in how they collect their entitlements, and from which ration shop.

- vi) **Electronic benefit transfers:** Aadhaar authentication at the delivery point – the FPS – would enable governments to transfer entitlements to residents through an electronic system. Beneficiaries could have an online food account on the PDS system, which would enable governments to directly communicate details of food entitlements to residents.

These Aadhaar features give governments the opportunity to substantially empower PDS beneficiaries. The use of the portable Aadhaar number, and Aadhaar-based authentication give beneficiaries choice in collecting their rations from any FPS in the state. Tracking the offtake of

entitlements through authentication and an Aadhaar-linked MIS would enable governments to make entitlement collection flexible – beneficiaries would be able to collect their entitlements on a weekly and monthly basis, and also claim entitlements left over from previous months. And finally, electronic benefit transfers linked to Aadhaar would give beneficiaries flexibility in the kind of foodgrains they have access to, particularly in times of shortage; it would also enable governments to tailor food entitlements to pregnant women, infants and young children.

2.2 Choices in Aadhaar implementation

The government can determine which Aadhaar-linked features to implement within the PDS, depending on priorities, cost, and feasibility of the intervention. Governments may choose to rapidly implement Aadhaar authentication across the system, and establish an MIS across the PDS infrastructure; other states may prefer to first implement identification-related features and roll out the others over a period of time.

3 Aadhaar-enabled reforms in the Public Distribution System

Aadhaar can play an important role in the core areas outlined for reform within the Public Distribution System:

3.1 Aadhaar for beneficiary identification, and addressing inclusion/exclusion errors

The PDS has long faced challenges in effectively identifying beneficiaries for food entitlements, and limiting exclusion of the poor. The issues the PDS has identified here include:

- **Omission of poor families:** A problem in reaching benefits to BPL families is that the poorest families often lack the identification documents they need to receive ration cards. They are as a result, excluded from the PDS.
- **Fake and duplicate ration cards which do not correspond to real families:** The PDS has pointed out the problem of large numbers of duplicate and fake cards in both the BPL & AAY categories, which result in significant leakage of food subsidies from the PDS system. The Wadhwa Committee recently corroborated the problem of duplicate cards, noting that the practice of “multiple ration cards issued under a single name” is widespread nationally. In Delhi alone, RTI petitions uncovered 901 ration cards issued in the name of one woman, ‘Manju’ in Badarpur.
- **Individual versus household benefits:** A key step the government has considered for ensuring right to food for every citizen in India is guaranteeing an individual-based entitlement, rather than the PDS approach of a household based entitlement. The household-based entitlement reduce food availability in large families, particularly for women and children; the ‘household’ defined benefit also limits access to PDS for certain groups, such as single women.

A vicious cycle for the poor: bogus cards and identity verification

The large numbers of fake and duplicate ration cards increase difficulties for the poor in getting a ration card. Large quantities of fake cards compel governments to make verification norms for issuing ration cards more stringent. This tends to penalize poor families, and cuts off large numbers of BPL families who lack necessary documents from accessing rations.



For instance, one state government unearthed 29 lakh bogus ration cards in 2009. The government as a result, launched an identity verification drive, and has made it compulsory for residents to provide the electoral roll number, a copy of the electricity bill, and house rent bill to receive a ration card. In addition, migrants have to present an official document confirming their change in residence. This has cut off many of the poor from accessing rations, including the homeless, migrants and people living in informal housing.

Aadhaar-based identification would help the government address these challenges:

- i) **Clear identification of beneficiaries:** Since Aadhaar guarantees uniqueness, linking each beneficiary listed in the ration card to their Aadhaar would ensure that only unique individuals are present in the PDS database. This would eliminate duplicates, ghosts and fake identities.
- ii) **Ensuring inclusion of the poor:** Savings from eliminating duplicates and fakes through Aadhaar-based identification will enable governments to expand benefits to more poor residents.

In addition, the UIDAI will issue Aadhaar numbers to residents through multiple registrar agencies as well as through focused outreach efforts. This means that marginal groups that have lacked a proof of identity will receive their first identification through the UID initiative. Once the PDS accepts Aadhaar as sufficient proof of identity (PoI) and proof of address (PoA), these individuals can be provided with ration cards.

Aadhaar can help address another significant source of exclusion of the poor – the denial of applications for a ration card as well as prolonged delays in processing the application, once the individual has applied for a card. To address this, governments can implement a **centralized, Aadhaar-enabled registration system** for the whole state, where a poor person can log a request for a ration card through SMS. The request would be published on the system once the Aadhaar is verified.

Governments could subsequently process the logged request, verify eligibility of the individual, etc. Governments would also be able to track delays in processing applications and identify bottlenecks in issuing ration cards. In addition, civil society

groups could track the progress in processing the applications, and take up these applications on behalf of the individuals.

- iii) **Enabling individual entitlements:** Linking Aadhaar to ration card holders enables the government to provide individual, rather than household entitlements. This would make allocations more transparent, and also addresses the challenge of larger households receiving insufficient foodgrain.

3.2 Addressing diversions and leakages

The PDS has identified high rates of leakages while delivering food subsidies to beneficiaries. Diversions take place both at the FPS point as well as en-route, before subsidies reach the FPS.

Aadhaar-based authentication can help curb both kinds of diversion. There are two options in Aadhaar authentication:

i) Aadhaar-based authentication at FPS

Aadhaar-based authentication at the FPS comes with distinct advantages:

Ensuring zero proxy withdrawals: A key source of leakage identified in the PDS, is subsidized food drawn from the ration shop in the names of eligible families by someone else. In such cases, the ration card has usually been issued and distributed without the knowledge of the eligible beneficiary. When the beneficiary does have the ration card, FPS owners often do not open the ration shop, or open it without warning, so that beneficiaries are unable to claim their rations. Rations are then diverted through proxy withdrawals through duplicate cards.

Through Aadhaar-based authentication at the FPS, the government can ensure that rations are not collected without the beneficiaries' knowledge, and that only entitled beneficiaries collect rations³.

Providing beneficiaries with portable entitlements: As discussed in 2.1(iii), since Aadhaar is a universal, mobile number that can be verified across ration outlets, beneficiaries would be able to withdraw their entitlements from any ration shop in the state, using Aadhaar authentication.

Such choice will give beneficiaries more negotiating power with FPS owners. If one FPS owner for instance, refuses to honor the beneficiary's entitlement or does not provide them with the authenticating device to withdraw rations, the beneficiary can go to another FPS to collect their benefits. Aadhaar-based authentication would also enable the government to allocate foodgrain to ration shops based on the amount of authentication-linked offtake. This approach of portable entitlements can be first implemented in parts of the country – such as urban centers – where PDS supply can be managed more dynamically.

³ An exception here would be in the case of the elderly and the physically challenged. A specific provision could be made to allow such beneficiaries to nominate a person to collect entitlements on their behalf.

'We return empty-handed'

Vim Mahji is a resident of Rattu Bigha, Dhuriari village, and works as an agricultural labourer. He has an Antyodaya card that makes him eligible to buy 25 kg of ration per month.

Vim has not been able to collect his rations for the past several months. Supply to the local ration shop is erratic; the shopkeeper keeps his shop closed for months at a time. The state government has little means of tracking what has happened to the foodgrain stock, and of confirming whether it has actually reached the shops in the villages.

When rations do arrive at the shop, they arrive in small amounts, and without advance notice. Vim has little opportunity to save the amount he needs to buy rice and wheat for his family. They end up making most of their purchases in the market, which they cannot afford.



ii) Aadhaar-based authentication across the supply chain

Implementing Aadhaar authentication at every exchange point would enable governments to track the movement of food entitlements across the PDS chain, and identify bottlenecks and diversions in real-time. In the case of centralized procurement, such authentication would begin at the FCI point.



3.3 Managing food grain storage and ensuring timely distribution

The expense of grain storage has become a significant aspect of PDS costs, and storage availability limits the amount of grain that the PDS can procure and distribute. Storage limitations also increase grain spoilage, resulting in losses and additional cost.

Once Aadhaar authentication is in place across the PDS infrastructure, it can be linked to an MIS to ensure efficient grain management and storage. Governments would then be able to track and manage Aadhaar-linked procurement, storage and movement of foodgrain in real-time. Such an Aadhaar-enabled system would have the following features:

- i) **Online registration of farmers through Aadhaar:** Farmers anywhere in the country supplying grain to the PDS could first register online through their Aadhaar number. They would be officially registered once their details are verified by PDS officials.
- ii) **Electronic order management:** The Aadhaar-based system would enable the government to issue procurement orders online, which would mean immediate

visibility for farmers on requirements, and reduction of delays. Authentication through Aadhaar at every exchange point would also enable inventory management to be reconciled online, and payments could be seamlessly processed into suppliers' Aadhaar-linked bank accounts.

This system would also enable the government to predict and manage local storage requirements. Electronic registration and order management would encourage local, decentralized procurement, as close to storage facilities and demand points as possible.

- iii) **Portability:** The use of an MIS linked to a universal identifier such as Aadhaar, would enable governments to match supply and demand across districts as well as in the longer term, across states.
- iv) **Focus on efficiency:** Online registration and management would improve the efficiency of the system, and enable the timely distribution of foodgrain to the beneficiary. Delays in movement and offtake of grain could be identified by delays in Aadhaar authentication and immediately flagged on the system.
- v) **Tracking of grain offtake:** Tracking of individual offtake through Aadhaar authentication would enable beneficiaries to collect their entitlements in instalments, and also collect leftover quota from previous months.

Building an Aadhaar-enabled MIS within PDS would require process changes across various organizations – including the FCI, SFC, and PDS departments. These changes would have to accompany MIS implementation, to ensure that the system works effectively across PDS procurement, storage, movement and distribution.

The Chhattisgarh implementation: bringing technology into PDS

Creating an Aadhaar-linked management information system across the PDS is not an unrealistic goal – different aspects of such reform have been tried across states with some success, most notably in Chhattisgarh.

The state has implemented end-to-end computerization of the PDS procurement chain. This involved an online registration system for millers of PDS rice, as well as procurement and movement orders that are issued electronically.

The government carries out allocations to FPS shops using the ration cards database, and the transmission time for allocations has been cut from three weeks to two hours. Continuous monitoring of sales and stock levels at FPS outlets also ensured in-time stocking of the shops, so that outlets could meet the demand from beneficiaries at all times. In a recent 2009 survey, 92% of respondents in Chhattisgarh reported receiving their full rations without problems.



3.4 Enabling effective accountability and monitoring

The PDS today has put in place vigilance groups and monitoring systems to ensure that food subsidies reach the poor. A limitation the program faces however, is a lack of transparency and

clear accountability – the government and the public have no means of verifying whether vigilance checks and inspections were carried out, and who is accountable for delays and leakages.

Aadhaar authentication would be a tool for the government to implement high levels of accountability across the system:

- i) **Accountability in foodgrain movement:** The use of Aadhaar authentication at subsidy exchange points would ensure that the responsibility of each individual – supplier, transporter, FPS owner, inspector – is traceable, and clearly visible across the PDS infrastructure.
- ii) **FPS accountability:** Requiring Aadhaar authentication every time the beneficiary collects the entitlement from the FPS would ensure that the FPS owner must clearly account for the offtake claimed by his store.
- iii) **Beneficiary accountability:** Aadhaar authentication by the beneficiary would ensure that proxy withdrawals of entitlements are no longer possible. Beneficiaries would also not be able to withdraw more subsidies than they are entitled to through duplicate ration cards.
- iv) **Community participation in monitoring:** Communities in both rural and urban India have turned to Right to Information, as well as public activism, in order to access FPS records and monitor the functioning of ration shops. However these community monitoring efforts by individuals and civil society organizations have been constrained by the limited access they have to records across the PDS supply chain, before the foodgrain arrives at the FPS.

Aadhaar-based authentication and MIS would bring transparency to a currently opaque system. Clear accountability through Aadhaar authentication, as well as the use of electronic records, would make data more available for community monitoring, and would strengthen the use of RTI in PDS.

In addition, the Aadhaar-enabled infrastructure would enable governments to take additional steps for effective public monitoring.

SMS alerts: An SMS-alert can be sent to the resident's Aadhaar-linked mobile number, when the truck leaves from the warehouse for the FPS depot. The SMS can contain information such as time the truck left, quantity of grain it is carrying, and grain prices.

Making information public: An MIS system across the PDS infrastructure means that data would be easily accessible across the supply chain. This information can be shared by the government with beneficiaries. This would also create new spaces for civil society to engage and monitor delivery of entitlements to the poor.

Providing information through SMS in Tamil Nadu

The government in Tamil Nadu has implemented an SMS-based approach to get information on PDS stock.

In 2009, the Tamil Nadu government began using SMS to receive inputs on stock availability from each ration shop across the state. The data thus received was stored in the central server. Once this system was tested, the government decided to share this information with ration beneficiaries.



Ration card holders could now contact the server to receive information on the stock availability of the ration shop closest to them. Once they sent an SMS to a specified number with the district code and shop code of the outlet, they would receive a message with the details of the stock position of the ration shop.

3.5 Mechanisms for grievance redressal

A particularly powerful use of Aadhaar would be in tracking grievances and complaints from PDS beneficiaries. The number would enable:

- i) **Individual recognition:** Aadhaar ensures that PDS beneficiaries are individually recognized and easily verified as beneficiaries, without fear of duplicates. Aadhaar can enable the government to implement a central system which automatically publishes grievances submitted by beneficiaries online or through a toll-free number. The complaint would be published once the system verifies the beneficiary's Aadhaar.
- ii) **High visibility:** An Aadhaar-enabled IT grievance system would ensure that complaints are visible publicly and across different levels of government. As a result, there would be a strong incentive to address complaints quickly.
- iii) **Ensuring 'nish-pakshita' or impartiality in addressing grievances:** The advantage of an IT-enabled grievance system is that the complaints of all beneficiaries are treated the same. This is often not the case today, when grievances are channeled through village or local administration.
- iv) **Pre-empting grievances in food delivery:** The PDS has typically been highly reactive in responding to challenges in delivering food, and weaknesses are addressed once complaints and problems reach a threshold. An Aadhaar-enabled MIS however, creates new opportunities for governments to identify and address problems in real-time.

The MIS would make vast amounts of data and information within the PDS available to the government. The government would be able to build multiple applications to analyze the data, and identify problems as well as opportunities. Such applications could include tools that analyze storage and procurement data for bottlenecks, identify weak-performers among FPS outlets, and pinpoint areas where entitlement claims are low. This in turn, would enable states to make pre-emptive information-led changes and updates to their PDS programs.

3.6 Fulfilling food security goals

Aadhaar can help the PDS ensure food delivery to beneficiaries without losses and leakage. The number offers benefits in identification of beneficiaries, confirmation in delivering entitlements, and accountability across the delivery infrastructure.

Aadhaar would also make it possible to implement an **online food account** through which entitlements could be delivered to the poor:

- The Aadhaar-enabled MIS system can host online food accounts on the cloud, which are linked to Aadhaar numbers of FPS owners as well as each individual beneficiary.
- The online account of the beneficiary would be updated monthly with the details of their entitlements – which foodgrains, how much, and at what price.
- When the beneficiary authenticates themselves with their Aadhaar at the FPS to collect the benefit, the authentication confirmation appears against the FPS owner's food account. The government can thus track offtakes of foodgrain in real-time.
- If the subsidized good was provided to the FPS at market price, the FPS owner can then claim their reimbursement from the government. The system, on receiving the Aadhaar-linked confirmation that the entitlement was delivered, would electronically issue a cheque to the FPS owner, or transfer money to the FPS owner's bank account.

The online food account would have none of the disadvantages of offline food coupons/vouchers. FPS owners would not be able to collude with officials to accept photocopies of food coupons or fake coupons, since reimbursements would be carried out electronically.

This approach could streamline benefit transfers and give both governments and residents flexibility in food delivery and access. The government could for instance, immediately tailor entitlements in response to local shortages, such as temporarily providing higher allocations of rice when wheat is unavailable. It would also help improve state responses to crises and disasters, as governments can provide higher allocations, as well as temporarily increase the number of outlets within a particular area from where subsidized grain can be claimed.

4 Incentives for implementing Aadhaar across the PDS infrastructure

4.1 Incentives for residents

- i) Ease in identity verification:** With Aadhaar, residents can easily establish their identity, wherever they are in the country. Identity verification will be simpler while obtaining a ration card.
- ii) Expanded coverage:** Ease in identity verification will allow poor residents who have so far been shut out of food subsidies, to access food entitlements.

- iii) **Address exclusion of eligible poor:** A centralized, Aadhaar-enabled registration system for PDS applicants would encourage governments to respond more quickly to applications, and limit the exclusion of eligible individuals.
- iv) **Portability and choice in accessing benefits:** A universal identification number gives governments the chance to offer portable food entitlements, which beneficiaries can claim wherever they are in the state.
- v) **Improved services through increased transparency:** Clear accountability and transparent monitoring would significantly improve access and quality of entitlements to beneficiaries.
- vi) **Better grievance redressal:** Transparent, centralized system of grievances would encourage rapid responses from governments on complaints.

4.2 Incentives for distributors and FPS owners

- i) **Focus in food entitlements shifts to commercial viability:** As leakages decrease, the focus will shift to making FPS outlets more viable. This would follow the current trend in reformist states – states that implemented reforms to curb PDS leakages also increased commissions to FPS outlets, to ensure that these shops weren't forced to close.
- ii) **Growth based on monthly offtake:** The portability enabled by Aadhaar, and choice for beneficiaries will give FPS outlets opportunities to expand the number of beneficiaries they cover, and the amount of foodgrain they sell.
- iii) **Fewer delays and efficient allocations:** The implementation of Aadhaar-based authentication and an Aadhaar-enabled MIS will create more efficiencies within the system, and lower delays for FPS owners in receiving supplies.

4.3 Incentives for governments

- i) **Elimination of ghosts/duplicates/fakes:** Aadhaar-linked identification would help address long-standing problems of duplicates, ghosts and fakes in the PDS system.
- ii) **Effective targeting:** Aadhaar can enable individual entitlement, and tailoring of benefits to beneficiaries.
- iii) **Lower costs in procurement and storage:** Use of an Aadhaar-enabled MIS in farmer registration, foodgrain movement, delivery and payment can ease costs and complexity within the PDS infrastructure.
- iv) **Ease in capacity additions:** By easing registration of suppliers as well as distributors, an Aadhaar-enabled MIS can make capacity additions and changes more convenient for the government to implement.
- v) **Effective monitoring:** Aadhaar would greatly improve the power of vigilance committees and overall monitoring, as it would enable the government and public to track delays and diversions.
- vi) **Expansion to other schemes:** In India, a variety of programs, including the ICDS and the MDMS, offer food entitlements to the poor. These multiple benefits can eventually

be delivered to beneficiaries through online food accounts. Aadhaar's role in these programs can be discussed at a later date.

5 Next steps

Aadhaar offers a highly flexible solution, which governments can implement depending on their priorities surrounding PDS and the Right to Food. The following steps could be considered, to make an Aadhaar-enabled solution a reality:

Use of Aadhaar for identification

- “ Require every ration card to contain Aadhaar numbers of every household member, including children
- “ Recommend Aadhaar as sufficient Proof of Identity and Proof of Address in PDS

Use of Aadhaar for authentication and tracking

- “ Require authentication at FPS each time beneficiary withdraws their entitlement
- “ Require Aadhaar for every stakeholder in the system – every wholesaler, FPS owner, inspection officials, etc
- “ Recommend authentication infrastructure across the PDS supply chain. The Aadhaar authentication system could be as simple as demographic authentication through a mobile phone
- “ Recommend a cloud-based, Aadhaar-linked IT infrastructure for PDS in each state, to enable online procurement and inventory management
- “ Recommend linking Aadhaar authentication to online tracking of food across supply chain

Use of Aadhaar for monitoring and grievance systems

- “ Link Aadhaar authentication to vigilance and inspection processes
- “ Recommend a central, Aadhaar-enabled grievance system, where complaints are publicly available and accessible across government levels

The Aadhaar-based solution will be strengthened by the expanding mobile and internet connectivity across India – mobile connectivity is now available in over 3 lakh villages, and remaining shortages will be resolved over the next few years.

Aadhaar's success across states will depend on specific PDS reforms adopted by different state governments, and how they link these reforms to Aadhaar-enabled solutions. At the state level for example, the Aadhaar-based approach would be more effective when augmented by an online food account system, rather than an offline food coupon/voucher approach. Similarly, state decisions on

incentives for FPS owners, the use of electronic procurement and movement orders within the MIS, etc. will determine how Aadhaar functions within the PDS infrastructure.

Aadhaar can be a powerful tool for governments intent on making the Public Distribution System more effective. It could help transform India's oldest, most well-established welfare program into an initiative that is potent, effective and that empowers India's poor – and one that the poor can trust will deliver their entitlements to them.