

The background of the top half of the page is a photograph of a lush green paddy field in the foreground, with a range of blue mountains in the distance under a clear sky. A large, semi-transparent orange rectangle is overlaid on the left side of the image, containing the title text.

# PADDY PROCUREMENT AUTOMATION SYSTEM (P-PAS)

**The Food Supplies and Consumer Welfare Department of the Government of Odisha is mandated under the National Food Security Act 2013 and its own State Food Security Act 2018 to deliver subsidized food grains to approximately 3.5 Cr people, thus feeding 3/4th of the State's population.**

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Around 50 lakh MT of paddy is procured by the State every year from 7 lakh farmers living in 50,000+ villages of the State. Stakeholders in a massive network of 3000 PPCs, 1500 millers, 200 godowns, 200 transport contractors and 15000 Fair Price Shops collaborate in this journey of paddy from farmers to the PDS beneficiaries.

## **Pre Scenario**

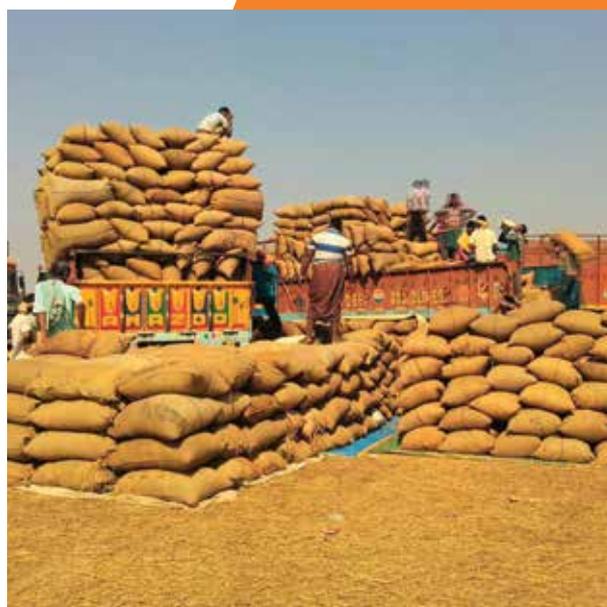
Under the Decentralization Procurement Scheme, the State Government had been carrying out procurement of paddy on behalf of Government of India since 2003-04. However, the coming into force of the National Food Security Act 2013 demanded, in turn, an efficient public procurement system. At that time, public procurement in Odisha was plagued with challenges such as no database or method of identification

of farmers, a nexus of middlemen forcing farmers to sell their crops at lower prices, vast documentation, payment delays, and huge information gaps leading to poor forecasting. This overall lack of transparency affected the faith of the farmers in procurement operations run by the State and led to distress sale on a significant scale.

### Challenges:

Even though decentralized procurement of paddy should benefit the farmers, but there were a lot of bottlenecks in implementing a fair and transparent system at the ground level. Initially till KMS 2012-13, there was no uniform system to identify farmers across the State, there were no farmer's database, and there was involvement of middlemen, no proper decision support system at procurement centers, vast manual documentation at each step and most importantly there was no transparency in the entire system for monitoring the process. On the other hand, as there was no option to calculate the surplus available with farmers hence farmers were always apprehensive about the sale of their paddy, which resulted in distress sale of paddy at a much lower price to the traders.

- > Duplication of data entry can be an issue, as is the lack of consistency checks e.g. same DC certificate can be entered multiple times.
- > The P-PAS systems to be fully integrated with the SCM system and other components of the PDS 31 computerised system (RCMS, FPS Automation and the transparency portal). Does not provide mechanism for planning and forecasting. The state level end to end view of the planning and subsequently execution is missing.
- > Some of the entries can be automated e.g. date, grain accepted or not (based on the quality values) etc.
- > Lack of IT hardware support and maintenance. At some locations low powered PCs were being used which often hang. Data entry if lost in between had to be redone all over again.



- > Manual registers for all activities are maintained alongside the system, leading to duplication of efforts and provides room for manipulation.
- > The role of an independent verifier in the system has not been defined.
- > Advance token number generated is a serial number which cannot be linked to the farmer. Farmer code from the farmer registration module may be used.
- > The farmer data which is required for documentation and to eliminate fake purchases takes months to compile even after close of a marketing season.
- > Farmers are never sure as to when they can sell their paddy to their society.
- > Inadequate capacity of the PACS/GPs/PPCs to handle paddy procurement operations causes problems for farmers.
- > The implemented system does not seem to support any decision making based on the existing reports generated by the system.
- > Farmer identification by way of assigning each of them to a plot of land is an issue as several persons can be attributed to the plot of land when crop-sharing, especially if the agreement between the land owner and a tenant is verbal.

It was in this context that the department conceptualized P-PAS and sought to automate the whole process at the society/ Market Yard level, including delivery of paddy to millers and payment of paddy cost to farmers. Such a system has brought in complete transparency in procurement operations and reaffirmed people's belief in Odisha's political and administrative capabilities to undertake sustainable pro-farmer and pro-poor policies.

## Solution

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Paddy Procurement Automation System (P-PAS) which has been in operation since 2014 is a web-based application where all transactions at a PACS are executed through computer both online and offline mode. It uses the verified and updated database of Farmer Registration module as its input. Multiple documents such as Advance Token (given to farmers specifying the date and time on which they can sell their paddy to the PACS), Vendor Receipt (given to farmers as a proof of receipt of paddy), Transit Pass (given to millers capturing the details of the vehicle of the miller picking up the paddy from the PACS) and Paddy Acceptance Note (given to millers as a proof of quantity of paddy picked up from PACS) are generated from this system.

## Post Scenario

Initially in the KMS 2014 the P-PAS was implemented in 60 blocks of 24 Districts. 54% of total procurement was done in the system where 28.26 lakh MT of Paddy was procured from 3.24 lakh farmers. The state wide roll out was done in the year KMS 2016-17 where

more than 2500 PACs in 308 blocks of 30 districts were covered.

During KMS 2018-19, 14.76 lakhs farmers sold around 65.49 lakhs MT paddy to 1307 millers amounting to Rs. 11461 Crores. And they get the money directly transferred to their bank account within 72 hours which was previously more than 15 days.

Through this system, Odisha became the first state in India to link its farmer database to the land records (Bhulekh). This linkage has been instrumental in ensuring that the right owner (farmer not the middleman) sells his produce to the Primary Agriculture Co-operative Societies. Also, forecasting and advance calculation of surplus have become transparent, thus providing a macro view of the procurement situation in the state at any point of time. The system also ensures that not just farmers but small, marginal and share croppers are also a part of farmer registration and the procurement system which is first of its kind in the entire country.

Catchment areas for millers, who are responsible for picking up the paddy and converting it into Custom Milled Rice, is defined through mapping of PACs with millers in the system. This accountability ensures timely pick up of produce and minimum wastage. Since the transit operations of the miller - from PACs to mill and mill to depot - are also automated, leakage and diversions are effectively checked.

## The data that corroborates our effort

- > **Total Farmer Participated - 1011521**
- > **Total Paddy Procured - 65.49 LMT**
- > **Total Miller Participated - 1315**
- > **Total Payment Credited - 11463.12 Cr.**