

# Impact of Current Market Dynamics on Paddy and Wheat Farmers in Muzaffarpur, Bihar





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# Acknowledgement

The methodology for this study was conceptualised by CUTS under the project, 'Competition Reforms in Key Markets for Enhancing Social and Economic Welfare in Developing Countries', referred to as the CREW project. The project is funded by DFID, UK and BMZ, Germany through GIZ, Germany and is being implemented across India, Philippines, Ghana and Zambia in staple food and bus transport sectors.

The need for this study emerged from the findings of the Diagnostic Country Report of the CREW project in India – which covered two states, Bihar and Rajasthan. From the assessment undertaken in Bihar it was clear that productivity gains were not accompanied with benefits for the farming community, especially small farmers. This study specifically looks at the weaknesses in output markets in paddy and wheat sectors, in Muzaffarpur district in Bihar, to identify reasons for the above. The objective is to understand the implications of some of the recent agricultural reforms and market dynamics on the small and marginal farmers and relevant stakeholders.

The report has been co-authored by **Neha Tomar**, Senior Research Associate, CUTS International and CUTS local partner **Kunal Ranjan**. While the methodology was framed by Neha based on the CREW project findings, the same was implemented by Kunal and his team on the ground.

The study benefits from inputs and guidance from experts like **Anil Kumar Jha**, Agriculture Expert, Department of Agriculture, Government of Bihar and **Mithilesh Singh**, Deputy General Manager, National Bank for Agriculture and Rural Development (NABARD. The team also benefitted from interactions with **Chaitanya Prasad**, Principal Secretary, Department of Cooperatives, Government of Bihar and his colleagues in the Department – who have assured us that the findings of this study would be considered, going forward. We thank them for providing us timely and sharp inputs which helped us shape the study. We are also grateful to CUTS Secretary General, **Pradeep S Mehta** for motivating and guiding us over the course of this study.

Lastly, any error that may have remained in the study is solely our responsibility.

**Rijit Sengupta** Director, CUTS International

# **Executive Summary**

Around 81 percent of the workforce of Bihar is absorbed in the agriculture sector, where 97 percent of the same are small and marginal farmers. The sector accounts for about 42 percent of the State Domestic Product and the volume of production has increased from 7.9 million tonnes in 2004-05 to over 16.5 million tonnes in 2011-12.

Multiple reforms have been undertaken in this sector (over time) to augment production and smoothen the value chain. The Bihar Agriculture Roadmap (2012-17) underlines: (i) increased farmers' income; (ii) food security; and (iii) gainful employment as the prime goals. With the introduction of reforms and subsequent change in market dynamics, it is important to understand the implications of the same on the farming community (especially small farmers) and relevant stakeholders. It is vital to understand if the increased production is translating into improved livelihoods for farmers and sift the bottlenecks which impede such translation.

This report attempts to study the implications of recent agricultural reforms on small and marginal farmers and relevant stakeholders in a specific location in Bihar (Muzaffarpur district), as per the advice of local experts. The report attempts to extract certain measures that can help farmers increase their income and meet the food security needs of their families as envisaged under the Agriculture Roadmap (2012-17). The findings are expected to provide evidence-based recommendations for policymakers, not only for this district but elsewhere in the state as well.

The study was undertaken in Muzaffarpur District which houses one of the biggest 'mandis' of Eastern India. Primary information and secondary (where needed) was collected from farmers, the Primary Agriculture Credit Societies (PACS), private players, local aggregators and local agriculture officers. In terms of reforms, the following elements were studied: (i) Procurement monopolisation granted to the PACS since 2013; and (ii) Abolishment of Model Agriculture Produce Marketing (AMPC) Act in 2006.

From the analysis of the collected date, the following points have emerged:

#### 1. Selling Pattern

- Paddy farmers generally sell to the PACS or local aggregators
- Wheat farmers sell to local aggregators only (as PACS do not procure wheat)
- No private players procured from 'farm gate' (in the surveyed areas)
- In the last few years, more farmers have started selling paddy to the PACS

#### 2. Price and Price Realisation

- Minimum Support Price (MSP) is the highest price offered to paddy farmers (only offered by the PACS)
- Price offered by local aggregators is influenced by the millers (Paddy: Rs 300-600 lesser than MSP; Wheat: Rs 50-250 more/less than MSP)
- Price realisation has improved over the years but not matched up to inflation levels

#### 3. Procurement

- Due to late procurement orders from the Bihar State Food & Civil Supplies Corporation (BSFC), there is a significant delay (two-three) months between harvest and procurement by the PACS
- PACS do not have basic infrastructure for procurement (moisture meters, sewing machines, grading machines), and often lack proper storage
- Process of forwarding produce from PACS to the Block Centre is chaotic
- Private players need to furnish multiple documents in order to procure (cumbersome)

#### 4. Abolishment of APMC and Bhagwanpur Mandi

- Farmers prefer to not sell at mandis as they feel they are 'cheated'
- Private players prefer the APMC model as it ensured basic infrastructure

#### 5. Changes over the years

- Excess documentation (for farmers and private players)
- Quality of grains has deteriorated
- Banking sector has improved

Collation of the above findings lead CUTS to make the following **recommendations** for reforms in Bihar, especially targeted to benefit the small farmers:

- Measures should be put in place to ensure timely transmission of procurement orders from BSFC to the PACS. BSFC can use technology (ICT) to issue the procurement orders to PACS to avoid delays. It is great to see the e-PACS platform created by the Department of Cooperatives, which can be used for sending 'procurement orders' to the PACS as well.
- Incentives need to be devised to ensure effective procurement by the PACS. Currently, there are no incentives in place for the PACS. The PACS should act like a one-stop shop for farmers, as more and more farmers are looking up to it.
- State-level policy measures need to explore how delays in payment by the PACS
  to farmers can be minimised. There is perhaps need for NABARD to explore ways
  in which they can offer 'soft-loans' to PACS to enable them to procure and even
  store the product. Delay in payments beyond a certain number of days could be
  penalised.
- The above two elements could be included in some sort of a 'Performance Standards' for PACS, which could instil competition among PACS as well to procure grains from the farmers. Currently, it seems there is very little incentive (and therefore no compulsion) for the PACS to be efficient.
- Some assessment needs to be done of the number of PACS needed for efficient (timely) and effective (from a farmers' perspective) procurement in the State. It seems that assessment has not been done. PACS that have performed very badly (and consistently so) over the last three-five years could be closed.
- There is evidence to suggest that local aggregators are buying from farmers and selling to the PACS. The 'Land Possession Certificate (LPC) is clearly not working. Use of *Kisan* or *Aadhar* card or to be explored instead of LPC for farmers to sell to the PACS.

- A programme for technical/technological improvements in PACS (e.g., computerisation, data storage of all transactions, making moisture meters mandatory, etc.) should be brought in place. This can also provide some jobs to the rural youth.
- A schedule for PACS to sell to the block-level procurement Centre should be prepared. Currently, all PACS come to sell to the block-level centre on the same day making the process chaotic and leading to wastage of grains.
- Documentation of number of 'aggregators' in the village (done under the supervision of the *Panchayat*) and documentation of the price paid by the 'aggregator' to farmers (through use of SMS by farmers) should be introduced.
- Documentation process for private players should be smoothened.
- Government needs to invest in maintaining and repairing the infrastructure at the 'mandis'.
- The ideal situation would be for the PACS to compete with millers/traders (who seem to have a fairly strong and efficient network at the village-level) for the produce from the farmers. This can happen if the PACS can be strengthened to ensure that they attract small and medium farmers to sell their products.
- At the institutional level, there is need for greater coordination between the Department of Agriculture and the Department of Cooperatives which could be achieved by having thematic 'joint working groups' and organising joint meetings on issues of mutual interest from time to time.



Farmers FGD at Chhajan, Kurhani Block

# **Introduction & Objective**

## **Background**

Agriculture plays a significant role in Bihar's economy. The sector accounts for about 81 percent of the State's workforce (much higher than the national average) and almost 42 percent of the State Domestic Product.<sup>1</sup> The sector is overwhelmingly dominated by marginal and small farmers – where two categories account for 97 percent of landholding units covering 76 percent of the total agricultural land.<sup>2</sup> The large farmers in the State account for only 1 percent of the agricultural land.

This study attempts to analyse the implications of the current market dynamics on the farmers, in particular, the small and medium farmers. Over the last 10 years, there have been significant and multiple reforms in the Bihar's agriculture sector. For instance, in 2006, the government <u>abolished the Model APMC Act, 2003</u> and liberalised markets for private participation. Similarly, in 2013, the government reduced the procurement agencies from seven to one and granted <u>procurement monopoly rights to the PACS</u>. With such fundamental changes in markets, it is important to realise the shift that the small and medium farmers are making to enhance price realisation. Such analysis is important to not only to understand the ground realities but also evaluate the policy gaps and evolve a sustainable way forward.

The study has been demonstrated through the sectors – paddy and wheat. This is because both paddy and wheat are the principle grains of Bihar and have witnessed an upward swing in production as well as productivity.<sup>3</sup>

## **Objective of the Study**

As mentioned above, this study attempts to understand the consequences of the changing market dynamics and policy paradigm on small and medium farmers. The stakeholders identified under the study are – farmers, the PACS, local aggregators and private players and Local Agriculture Officers (LAOs). The study strives to capture ground realities in order to evaluate the gaps between policies and implementations and the subsequent challenges.

Specifically, the objectives *vis-à-vis* the stakeholders are as:

#### Farmers

- To assess price realisation (in the current market regime)
- To ascertain who they are selling their produce to and why

<sup>&</sup>lt;sup>1</sup> As per the Department of Agriculture, Bihar (http://krishi.bih.nic.in/)

http://www.cuts-ccier.org/crew/pdf/Diagnostic Country Report-India.pdf

<sup>&</sup>lt;sup>3</sup> http://finance.bih.nic.in/Documents/Reports/Economic-Survey-2015-EN.pdf

#### PACS

• To understand challenges faced by the PACS in emerging as effective, profarmers entities

#### **Private Players**

• To understand challenges and opportunities in getting involved with the procurement wheat in Bihar

#### **Local Aggregators**

• To understand their role as aggregators and challenges faced

#### **Local Government Officers**

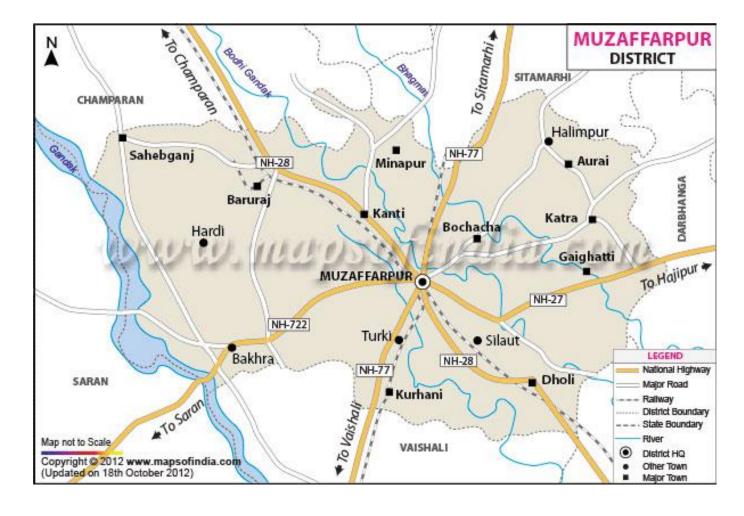
• To understand the overall bottlenecks in the procurement and market regime

Ultimately, the study aims to provide recommendations from the ground to policymakers of Bihar, in order to contribute to the development of the government's agenda of improving the plight of the farming community.

#### Methodology

The study was carried out in Muzaffarpur District. This district was selected as it houses one of the biggest *mandis* of North East India. Four blocks across the district were selected - Kurhani, Bochha, Sakra and Kanti, each situated at about 20-25 kms from the main city (Bhagwanpur).

Primary data was gathered through focussed group discussions (FGDs) where all respondents were randomly selected. A total of 137 farmers were interviewed on random basis in the select blocks. In case of PACS, a total of 12 PACS were interviewed, three PACS in each block. Further, one government officer (BAO/BCO) and one local aggregator were interviewed in each block. Apart from this, four private players were interviewed in Bhagwanpur (centre of the city) and two more farmer FGDs were conducted in *panchayats* at about 8 kms and 10 kms from Bhagwanpur *mandi*.



Geographical map of Muzaffarpur, Bihar

# **Institutions and Players in the Paddy & Wheat Markets**

As the agriculture sector of Bihar is dominated by small and marginal farmers, agricultural markets are such that they are limited to the village/panchayat level. Most of the farmers do not sell produce at 'mandis' but to the PACS or local aggregators present in their village/panchayat.

To sell produce to the PACS, farmers are required to produce their LPC and ensure the quality of produce as per the requirements of the PACS. The PACS pay farmers through an invoice which is payable at cooperative banks. Generally, such payment is received by farmers in 15-45 days. Once the produce is collected by the PACS it is forwarded to the BSFC which furthers the same to the Food Corporation of India (FCI). The FCI then brings produce to the Block-level godowns which are responsible for the distributing the same through the Public Distribution Shops (PDS).

The other popular option for selling produce is the local aggregators. When selling to the local aggregators, farmers do not have to present any documents and receive immediate cash. The local aggregators are generally agents of millers or traders. Some of the aggregators are also found to sell produce at *mandis*.

The details of the flow of grains  $vis-\dot{a}-vis$  payment has been explained in Figure 1, which also explains the time in which payments are made to stakeholders in question.

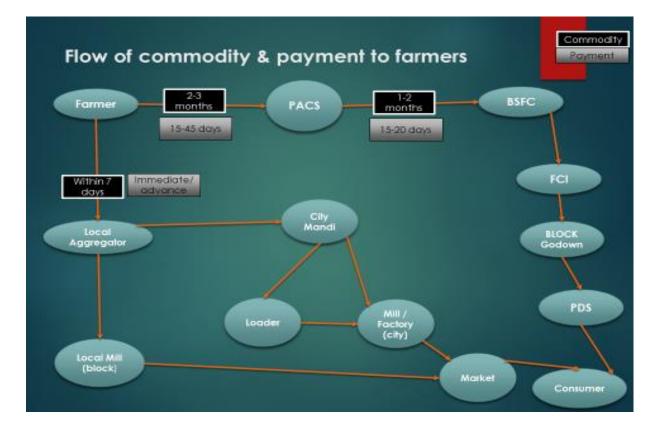


Figure 1: Flow of Commodity & Payment to Farmers

# **Key Findings of the Study**

#### **Selling Pattern**

Through FGDs of farmers, information was gathered on the selling pattern. The questions extended to include challenges faced and behavioural shift in selling. The information gathered from them was as below:

#### **Paddy Farmers**

In case of paddy, <u>some farmers sell to the PACS while some to local aggregators</u>. The difference between sale to PACS and local aggregators has been summarised in Table 1.

Table 1: Difference Between Sale to PACS and Local Aggregators		
PACS	Local Aggregators	
Purchase starts two-three months after	Purchase starts about seven days after	
harvest	harvest	
Purchase at MSP	Purchase at Rs 200-600 lesser than MSP	
Produce to be cleaned before sale	Produce need not to be cleaned	
Need to be registered with the PACS and	No documentation is required	
show LPC at the time of sale		
Produce is bought in consideration for	Immediate payment is made (sometimes	
invoice which is payable at cooperative	even advance payment is made, when	
banks. The whole process of payment	providing credit)	
takes about 15-45 days		

In terms of preference, however, majority of the paddy farmers conceded that <u>they</u> <u>would prefer to sell to the PACS</u>, <u>mainly because they offer the best price</u> that is the MSP. They cited the following **challenges**, which deter them from selling to the PACS:

- Procurement process generally starts late (two-three months from harvest)
- Produce is required to be cleaned up before sale, adding extra cost and time
- The payment is delayed by 15-45 days
- Documentation process is cumbersome (LPC renewal)

#### **Wheat Farmers**

Wheat farmers mentioned that they <u>sell produce to the local aggregators</u>. In fact, local aggregators were the only option they had. The price offered by local aggregators is almost the same as that of MSP. It is generally Rs 100–150 lesser at the time of harvest and Rs 100 –150 higher post-harvest.

The PACS have not been procuring wheat since about last five years.

#### **Analysis of Selling Pattern**

From the information gathered from farmers it is pertinent to note that the PACS and local aggregators are essentially the only market which farmers have. Unfortunately, in

case of wheat, local aggregators are the only option, which calls for the need to analyse the reason for the same, especially if it is in the interest of small farmers.

There are no private players that procure from farm gate in any of the blocks surveyed. Furthermore, while all blocks surveyed range from 8 kms-31 kms from the Bhagwanpur *mandi*, none of farmers sell produce at the *mandi*. According to them, the price offered at the *mandi* is the same as that offered by local aggregators, hence, selling at *mandi* only adds transport cost. Further, they fear getting cheated by private players at the *mandi*. Perhaps there is a need for having a mechanism for 'price surveillance and monitoring' in *mandis*.

It is, therefore, argued that as farmers prefer to sell paddy to the PACS, the institution should be strengthened. Further, it is important to understand the reason behind PACS not procuring wheat. Some have maintained that the reason for this is the fact that the market price is generally higher than the MSP. However, from the information gathered on ground, there is not much difference offered in the price offered by the PACS or the local aggregators.

#### **Price and Price Realisation**

An attempt was made to understand the price at which farmers sell produce  $vis-\dot{a}-vis$  the price realisation. Further, an assessment was made of the price which is offered to farmers. Below is the response collected from stakeholders on the issue of price and price realisation:

#### **Farmers**

Majority of farmers mentioned that for them <u>the best price is the MSP</u>, <u>which is only offered by the PACS</u>. The local aggregators offer lesser than the MSP in case of paddy and slightly lesser or above the MSP in case of wheat. The price offered at the Bhagwanpur *mandi* is also similar to the price offered by the local aggregators. However, as mentioned above, this adds travel cost which negates price realisation.

Table 2: Price Offered by Buyers (2015-16)		
Buyer	Price offered	
PACS	• At MSP: Rs 1410 + RS 300 (Bonus)	
	Total: Rs 1710 per quintal	
Aggregators	<ul> <li>Paddy: Below MSP (Rs 200-600)</li> </ul>	
	Average: Rs 1110-1210 per quintal	
	<ul> <li>Wheat: Below/Above MSP (Rs 50-250)</li> </ul>	
	Average: Rs 1200-1800 per quintal	
Mandi	Similar to local aggregator	

Farmers mentioned that over the past five years, while the price paid (by the PACS and aggregators) had increased, however, it had failed to match up with inflation.

In terms of price realisation, farmers mentioned the same had been erratic over the last five years. Farmers from some of the blocks cited price increase of Rs 300-500 in the past years, but reiterated that the same had not translated into profits due to inflation.

#### **Analysis of Price Realisation**

An important finding that emerged was that for paddy farmers, MSP is the actually the highest price for sale. If they sell produce to the local aggregators or at the *mandi*, the price offered is lesser. In case wheat, the price varies from Rs 100-150 more/lesser than the MSP.

#### **Procurement**

#### **PACS**



PACS FGD in Chajjan

The PACS initiate the procurement process once they receive a letter from the BSFC. Thereafter, a procurement alert is broadcasted in the local newspaper and in the *Aam Sabha* (village-level meeting of farmers). The complete procurement process has been encapsulated in Figure 2.

### **Figure 2: Procurement Process**



- •PACS receive letter of procurement from BSFC
- •Farmers are then informed about procurement through 'Aam Sabha' and local newspapers
- Database of farmers' profile and yield are collected by the PACS and sent to District Cooperative Officer (DCO)
- •DCO verifies the data
- •PACS decides eligible farmers for procurement (there is considerably uncertainty for farmers)
- At the time of procurement, farmers are required to bring cleaned produce and submit their LPC
- •On purchase, farmers are given an invoice payable at cooperative banks

It is important to note that all the PACS interviewed said that they procure only at MSP. In terms of challenges faced in the procurement, the PACS had some insightful remarks. The challenges underlined by them were as:

- <u>Lack of basic equipment</u> like moisture meters, grading machine and sewing machine for packing (9 out of 12 PACS interviewed said they do not have moisture meters)
- <u>Lack of storage facilities</u> (4 out of 12 PACS interviewed said they do not have go downs)
- <u>Significant delay from the BSFC in providing the letter for procurement</u> (6 out of 12 PACS interviewed said there is a delay of about three-four months. The harvest begins in November but the procurement order from the BSFC is only received around March-April)
- Having procured grains, the same are to forward to the centre of the respective block. There is a delay of about two-three months in the process, thus resulting in grain losses
- Only one procurement centre is made for over 20 PACS. <u>All the PACS come together to sell collected produce on the same day, making the process chaotic.</u> Further, no security, water, or any other basic facilities are provided.

#### **Private Players**

Two private players were interviewed. They explained that they procure grains through local brokers/agents. One of the company said it procures from farm gate as well. In case of procurement from farm gate, it does not provide commission to farmers but provides gunny bags. In case of procurement through agents, they charge a minimal fee of Rs 5 per quintal for their services.

The broker/agent is responsible for collecting produce from farmers and forwards the same to the company. The quantity and quality required is mentioned to the broker/agent. The standards prescribed by the government are followed. The broker/agent is to arrange for transportation, sort grains at primary level and follow up on payments.

"These middlemen should not be eliminated from the chain as they do the same work for very less money which, when done by government, costs far too high", said one of the private players. "The company does not know farmers and vice versa, therefore, a medium of communication, which also acts as a guarantor, is needed to carry out procurement."

In terms of price, both companies said they follow instant mode of payment. They pay brokers/agents by and large same price as the MSP (in some occasions, the price is Rs 100-200 more or less). The key factor determining the price is – quality. For example, generally the price paid for 'Mansoori' type of paddy is lesser than 'Sonam', 'Katarni', 'Basmati', 'Sambha', etc. As they do not go on the field, they are not concerned with the price that the broker/agent charges the farmers.

Some of the challenges highlighted by the two companies were as:

- There is much red-tapism involved to get into procurement. Further, every State has a different policy/licences/permits which need to be adhered to. Much time is taken in getting the right documents in place
- The quality of wheat is not satisfactory
- Transportation charges are high
- (Specific to companies involved in milling) As compared to other States, the BSFC in Bihar pays relatively less for milling. To explicate, the BSFC pays Rs 10 per quintal whereas Rs 28 is paid in Punjab

#### **Local Aggregators**

The local aggregators interviewed mentioned they procure both wheat and paddy and forward it to millers. They mostly procure from farmers' door step without any sort of formal prerequisites. The produce need not be cleaned before selling to aggregators. On an average, the local aggregators interviewed, said they have been active in procurement since last 3 to 20 years.

In case of wheat, while the aggregator in Kanti Block reported that he procures at about Rs 200-250 lesser than the MSP, the aggregators in remaining Blocks said they procure at Rs 50-100 lesser or more than the MSP. In case of paddy, all aggregators said the price ranges from Rs 300-600 lesser than the MSP. The reason cited for such disparity in price was that the same was influenced by the price offered to them by millers. This also highlights the fact that millers have considerable control over prices. What is not clear is whether there is a marked price differential among different millers, as that would create some competition for the 'local aggregators' to benefit from. Presently, the 'local aggregators' seem to be taking considerable risk but not getting the due returns.

In terms of challenges faced, majority of aggregators lamented that while selling produce to millers, they cut the weight of dirt and soil attached to grains. As the price offered to aggregators is based on the weight, they end up losing up quite a bit. The aggregator from Kanti also reported that administration issues such as: paper work, bribery prevent smooth procurement.

#### **Analysis of Procurement**

While the PACS and aggregators have direct interface with farmers, the private players rely on the brokers/agents. Subsequently, while the PACS procure at the MSP, the private players are not concerned with the price paid to the farmers. Local aggregators, on the other hand, offer price to the farmers, keeping in mind price offered to them by the millers.

Furthermore, there are some eminent bottlenecks in the procurement node of the value chain which need to be rectified. In case of the PACS, two of the most crucial challenges are – delay in procurement (as much as three-four months) and lack of basic infrastructure (moisture meters and warehouses). It is crucial for the BSFC to ensure that timely procurement orders are sent to the PACS. Further, the PACS have to be facilitated with proper infrastructure to ensure efficient procurement.

Similarly, to encourage private participation, documentation needs to be minimalised. Commodity trade should be free and national permits should be given. The government needs to invest in the infrastructure, particularly, transportation.

On the overall, the moisture content in as prescribed by the national standard acts as a deterrent as both paddy and wheat in Bihar have relatively higher moisture content. Hence, it is important for the government to revisit its parameters for quality standards and perhaps make it State-specific.

Lastly, as strengthening procurement is on the agenda of the roadmap, it is important to strategire the same keeping the selling pattern, price realisation and current bottlenecks in mind. While, as per the roadmap, it is agreed that modern warehousing facilities need to be set up along market yards, it is important to also boost and systematise the milling segment.

#### Abolishment of the APMC and the Bhagwanpur Mandi

As the APMC was abolished in Bihar in 2006, it is important to understand the impact of the same on farmers, local aggregators and private players. Below are highlights of the information collected from the stakeholders.

#### **Farmers**



(Farmers FGD in Kanti)

Most farmers interviewed were oblivious to the 'mandi'. Only a few agreed to having been to the Bhagwanpur mandi, where they mentioned they did not make any profits.

Farmers prefer to not go to the *mandis* as the price offered there is the same as that offered by the local aggregator who collects produce from their doorstep. Moreover, they fear getting cheated by the private players in the *mandi*. According to them, if the payment is made (to them) at the time of sale, <u>some amount is arbitrarily deducted by the private players</u>. Reason cited is the fact that they had not been paid by the other parties in advance. Further, to avoid tax, <u>the *arhitya*/traders would not give payment</u>

slips to the farmers. Ultimately, making it difficult for them to prove income and procure loan form banks.

In conclusion, all farmers agreed that whether or not the APMC regime is in place, they do not benefit from the 'mandis'.

#### **Government Officials**

The government officials interviewed answered equivocally to the impact of abolishment of the *mandi*. One of the District Agriculture Officer (Muzaffarpur) felt that the abolishment of APMC 'mandis' had positively impacted farmers. The farmers now experienced more freedom and enjoyed exemption from the 'mandi' fee and supplementary documentation.

The Officer at Kanti, on the other hand, expressed that the abolishment had had no impact on farmers. The 'mandi' is where aggregators and private players thrive, not farmers. In fact the farmers felt cheated at 'mandis' and did not trust the private players.

#### **Private Players**

The private players were of the opinion that the marketing regime was better under the APMC Act. The *mandis* offered an open market space where private players and farmers could interact. There were provisions of water, electricity, shed, security and cleanliness. They were of the opinion that farmers also made profits as *mandis* gave them an opportunity to circumvent the middle layer (aggregators/agents/brokers).

With the abolishment of the APMC, the quality of basic infrastructure has fallen significantly. There is no provision for electricity/ water/hygiene/etc. One even felt that the business had decreased as lesser farmers had started coming to *mandis*.

#### Analysis of the 'Mandi'

From the information gathered, it is clear that farmers are indifferent towards the existence or non-existence of APMC *mandis*. Most of them do not sell grains at the *mandi*, to avoid transportation cost and 'being cheated' by the private players. In contrast, the private players prefer the APMC *mandis* for the fact that it provided and ensured good basic infrastructure.

When the government abolished the APMC Act in 2006, one of its main goals was to enhance private participation. Unfortunately, there has been no increase in private participation since. Keeping in mind the predicaments of private players, it is important for the government to duly invest in providing the right infrastructure and finding ways to facilitate trade. Furthermore, it is important to understand why farmers feel cheated while interacting with private players. If farmers continue to feel so, increased private participation will not meet the objective of improving price realisation for farmers.

Lastly, as the government under the roadmap intends to vivaciously revive the market, it is important to do so keeping in mind the ground realities. According to the roadmap, Rs 12500 lakh is to be invested during 2012-17 in developing the market yards. To ensure that such investment meets the objective, it is important to simultaneously ensure the market is made attractive for private players and red tapism is cut down.



Current Infrastructure at the Bhagwanpur Mandi



Bhagwanpur Mandi

# **Changes over the Years**

It is important to take stock of the way the market has developed over the last few years. This is important to not only assess the impact on farmers, but also to evaluate policies that have worked or have not. Below is the opinion of the some of stakeholders  $vis-\dot{a}-vis$  changes felt in the last five years.

#### **Farmers**

Almost all farmers claimed that there had been a change in selling pattern in the last five years. According to them, the PACS were accountable for the change.

The system of LPC has become more complex. Compared to earlier, it takes more days for farmers to renew the same. Importantly, they mentioned the price of grains had improved but so had inflation (negating inflation).

A positive change was witnessed in the Banking sector. The process of accounts and money transfer has become easier and more efficient.

#### **PACS**

Majority of the PACS (10 out of 12 interviewed) mentioned that not only had PACS as an institution become more efficient, the strength of the same had significantly increased. In some of the PACS, the strength had almost doubled (Kurhani and Sakra).

Furthermore, the quantum of procurement (in paddy) had increased, while sale of fertilisers and seeds had reduced. Although, the quality if seeds and fertilisers had upgraded.

The remaining 2 PACS (Sarfuddinpur, Bochaha Block, and Garha, Bochaha Block) maintained that there had been no change whatsoever and complexities in documentation process still pertain.

#### **Local Aggregators**

The local aggregators were of the opinion that quality of grains (both wheat and paddy) had deteriorated in the past few years. Further, the awareness level amongst farmers had increased. They bargain with the aggregators more than they did earlier.

One of the aggregators (Kurhani) mentioned that there has been a slight shift in the selling pattern of farmers. Compared to earlier, more farmers have started selling produce to the PACS compared to local aggregators.

#### **Government Officials**

Some of the government officials reported that the payment process had become more transparent and more farmers have started selling to the government. Further, the effective appointment of the Block Cooperative Officers (BCO) has eased the process of managing procurement.

One of the Officers (Labour Enforcement Officer, Kanti) was of the opinion that nothing had changed in the last few years and the same problems continue to scar the agriculture sector.

#### **Analysis (Changes over the years)**

Complex LPC, rising prices and quality of grains are some of the key issues that are still being grappled by the stakeholders. Excess documentation daunts the procurement process. In case of the positives, there has been an upward swing in the Banking sector and the payment process.

It is important to note, that more farmers have begun to sell produce to the PACS. The strength of the PACS has also increased. In response to such a shift in selling pattern, it is important to build the capacity of the PACS. Such policies and practices should be put in place which ensures efficient procurement by the PACS and simpler documentation for farmers selling to the PACS.

#### **Conclusion and Recommendations**

As majority of farmers (about 97 percent) in Bihar are small and marginal, it is important for the government to bear in mind their economic, social and cultural limitations while bringing in new agricultural reforms. Moreover, reforms should also align with the interest of the government and encourage private participation.

Keeping in mind the information gathered from stakeholders under this study and the need to balance the interest of farmers, private players and the government, some of the recommendations put forth are as:

#### *Need to Strengthen the PACS*

As mentioned earlier in the report, the number of farmers joining the PACS and the selling paddy is increasing. In wake of such augmented participation of farmers, it is crucial for the PACS to build their capacity and cater to farmers. Some of the recommendations hereunder are as:

- BSFC should promptly send procurement orders to the PACS. The BSFC can use technology (ICT) to issue 'procurement orders' to PACS to avoid the delay
- PACS should be provided with basic procurement tools like the moisture meter, sewing machines, grading scales
- PACS should have well maintained storage facilities
- Capacity building exercise should be done for the PACS to not only make their functioning effective but to also find ways of revenue generation. Moreover, a programme for technical/technological improvements in PACS (e.g., computerisation, data storage of all transactions, making moisture meters mandatory, etc.) should be brought in place
- E-governance should be introduced. This would enable the PACS to store all information regarding procurement and farmers online and instil accountability
- Delivery of produce from the PACS to block centres needs to be done more frequently and in an organised manner. A schedule should be made for the transfer of produce
- Incentives need to be devised to ensure effective procurement by the PACS. Currently, there are no incentives in place for the PACS. The PACS should act like a one-stop shop for farmers, as more and more farmers are looking up to it
- State-level policy measures need to explore how delays in payment by PACS to farmers can be minimised. Delay in payments beyond a certain number of days would be penalised
- The above two elements could be included in some sort of a 'Performance Standards' for PACS, which could instil competition among PACS as well to procure grains from the farmers. Currently, it seems there is very little incentive (and therefore compulsion) for the PACS to be efficient in procurement
- Some assessment needs to be done of the number of PACS needed for efficient (timely) and effective (from a farmers' perspective) procurement in the State. PACS that have performed very badly (and consistently so) over the last 3-5 years should be closed.

- There is evidence to suggest that local aggregators are buying from farmers and selling to the PACS. The 'LPC' is clearly not working
- Use of *Kisan* or *Aadhar* card to be explored instead of LPC, for farmers to sell to the PACS

Furthermore, some of the recommendations provided by the PACS interviewed are as:

- In case of delay in procurement, crops should be insured
- Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) labourers should be linked to the PACS
- Monthly remuneration should be provided to the committee members

#### Bhagwanpur Mandi

The farmers surveyed mentioned that they fear getting cheated by the private players, if they sell produce at the *mandi*. One of the main objectives of establishing the *mandi* was to enable direct interaction of farmers with private players at the *mandi*. It is important to understand why farmers feel cheated and work towards enhancing the interaction between private players and farmers. Some of the recommendations specific to the Bhagwanpur *mandi* are:

- It is crucial for the government to ensure basic infrastructure (water, electricity, shed, security, etc.) at *mandis*. From the visit made under the study, it is evident that the *mandi* does not provide an enabling space for trade
- Documentation for private players needs to be smoothened. Commodity trade should be free and national permits should be given

#### **Overall**

On the overall, following are some important recommendations:

- The BSFC should regularly revise the rates for milling
- The quality parameters should be made State-specific and not set at the National level
- Documentation of number of 'aggregators' in the village (done under the supervision of the *Panchayat*) and documentation of the price paid by the 'aggregator' to farmers (through use of SMS by farmers) should be introduced in order to maintain data