

# **Title: Linking Farmers with University Hostels**

## **Mess- Agriculture Marketing Perspective**

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Direct market linkage between farmer and perspective hostels has to be done in the vision that they have potential to strengthen, to achieve profitability to farmers. This direct linkage will not only be inclusive for the purpose to have profit but also to have local and safe food consumption by the students. This linkage should have the potential to lead to a win – win situation for both the buyer and supplier. Outside India, some of the institutions are already direct linking the farm to their local market for strengthening the local family farms and to cultivate vibrant communities, such as:

- **Farm-to-college** programs connect colleges and universities with producers in their area to provide local farm products for meals and special events on campus.
- **National farm to school network** envisions a nation in which farm to school program an essential component of strong and just local and regional food system ensuring the health of all school children, farms, environment, economy and communities.

In April 2017, the Union Ministry of Agriculture and Farmers Welfare, India drafted the Model **Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017**. The draft law seeks to overhaul the existing legal framework related to the marketing of agriculture produce and will replace the Agricultural Produce Market Committee (APMC) Act<sup>1</sup>.

The policy of model APLM Act, 2017 is a major agri-reform as it provides wider options for farmers to sell produce and get better prices. It has reduced price spread by enabling direct contact between farmers and consumers or other end-user categories.

### **The salient features of Model APLM Act, 2017<sup>2</sup>**

- Disintermediation of food supply chain by integration of farmers, processors, exporters, bulk retailers and consumers.
- Promotion of direct interface between farmers and processors/exporters/bulk-buyers/end users so as to reduce the price spread bringing advantage to both the producers and the consumers.
- Enabling declaration of warehouses/silos/cold storages and other structures/space as market sub-yard to provide better market access/ linkages to the farmers.
- Giving freedom to the agriculturalists to sell their produce to the buyers and at the place and time of their choice, to whomsoever and wherever they get better prices.

Almost every university in the country have their hostels for students. In which 2, 94, 27,000 students reside in 903 universities in India<sup>3</sup>. Abundant of food is cooked for them in those hostels mess. These universities hostel mess procure the food from the various channels either from the government suppliers or from the private markets. In these universities either the tenders are released for running

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<sup>1</sup> Ministry of Agriculture & Farmers welfare,  
[http://agricoop.gov.in/sites/default/files/APLM\\_ACT\\_2017\\_0.pdf](http://agricoop.gov.in/sites/default/files/APLM_ACT_2017_0.pdf)

<sup>2</sup> Jagran josh, <https://www.jagranjosh.com/articles/ias-exam-features-of-aplm-act-2017-1519827004-1>

<sup>3</sup> UGC 2016-17 annual report, <https://www.ugc.ac.in/stats.aspx>

the mess or co-operative mess are run by the students themselves. They procure the food from the various channels readily available to them, such as.

**Procurement Channels university hostel mess opt for:**

- ✓ Hostel → Caterers → Purchasing Department → Wholesale/ Retail Shops/Govt. shops
- ✓ Hostel → Mess manager → Wholesale/ Retail Shops

These hostels arrange food for students under their management by appointing cook or by giving tender to private caterer. These hostels procure their raw food materials from wholesale/ retail shopkeeper/ Mandi or Govt. shops. On the other hand the farmers in the vicinity of these hostels sell his produce to either these local shopkeepers or Mandi.

The hostels have demand and there is a plenty of supply from farmers side of same food items required by the hostel. In marketing of these food items/ agricultural produce transportation cost, inadequate market infrastructure, lack of market information, lack of processing units, storage facility, price fluctuation come out as a major problems that leads to decrease in the revenue/ income fetched by farmers.

So, the question is whether these problems can be solved by direct linking farmers to local buyers such as hostel mess or not? Or there is a requirement of a facilitator who can facilitate the both ends. What quantity of each item will be needed to seek this linkage program? Which parameters are required for such linkage?

Case study attempt to explore the potential to strengthen the direct marketing linkage between farmer and hostel. The main motive of this case study is to facilitate the farmers by providing alternate channel for selling their produce in the market at a profitable price which is beneficial for farmers.

**1. Punjab Agriculture University (PAU), Ludhiana**

PAU is a state agriculture university. It is the 3<sup>rd</sup> oldest agriculture university in India. It has 5 departments, which offers 91 courses in which 3654 students are enrolled<sup>4</sup>. University has residential facility also available for all the students, faculties, researcher, and administrations. PAU has 7 boy's hostels and 11 girl's hostels and 1 kisan ghar.

Each hostel has their own running mess where in each hostel around 250 students reside in them. The co-operative mess is run by the students themselves. Food material is purchased by the supervisor of the mess in agreement to the mess manager. The grocery is purchased from the retail shop in Ludhiana on every monthly basis, vegetable are purchased from mandi on daily basis, supervisor is asked to go to mandi daily at 6am in the morning for purchasing the vegetable, and milk products are purchased from the verka dairy booth only, on daily basis. Verka dairy themselves deliver the products as per their requirements to the mess.

Yearly these seven items given below are procured at a cost of 24, 37,800/- for the 250 number of students in one hostel only. The potential market of PAU is **4, 38, 80,400** /- yearly for these seven items only.

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<sup>4</sup> About PAU, [https://en.wikipedia.org/wiki/Punjab\\_Agricultural\\_University](https://en.wikipedia.org/wiki/Punjab_Agricultural_University)

## EXHIBIT 1: REQUIREMENT OF FOOD ITEMS BY EACH HOSTEL ARE AS:

INGREDIENT	QUANTITY (Monthly)	Market price purchase (Rs./kg/ltr)	Yearly Demand (Rs.)
RICE	2-3 quintal	60/kg	1,80,000/-
WHEAT	15 quintal	25/kg	4,50,000/-
POTATO	10 quintal	15/kg	1,80,000/-
TOMATO	7-8 quintal	40/kg	2,88,000/-
MILK	2400 liter	44/ltr	12, 67,200/-
PULSES (Moong dal)	25-30 kg	90/kg	27,000/-
MUSTARD OIL	40 liter	95/ltr	45,600/-
<b>Total</b>			<b>24, 37,800/-</b>

The mess supervisors are also procuring some food material from the farmers/ FPO's also such as Pulses, Potato, turmeric, and rice. Global FPO is providing turmeric, spinach to the mess on the basis of as per their requirement. This purchase from the farmer or FPO is beneficial to both the producer and consumer. For ex. Moong pulse is sold by the farmer in the wholesale market at 45/kg, whereas in retail market the price is 90/kg. But to the hostel, the farmer is directly selling it at the price of 67/kg (45+22(50% of difference)). Similar process is done to the other items also.

Procuring the food materials directly from the farmers or FPO's was done with two motives:

- 1) To get the fresh and nutritional food directly from the farms
- 2) And to get the food at a cheaper price than available in the market

## 2. Direct linkages can be established by following value chain partners

### 2.1.Global SHG / FPO's

It is an SHG/FPO in Ludhiana run by Gurdev Kaur Deol from Lyali Khurd Village in Ludhiana, Punjab in the 6 km vicinity of PAU. In March 2015, the group was registered under the name, Global Self Help Group Farmer Producer Organization. SHG has 15 small farmers as members of this and above 300 progressive farmers as members or producers of FPO.<sup>5</sup>

They make pickle, murabba, sauces and squash juices. They do bee-keeping and have 450 boxes for the bee-keeping. They also purchase organic pulses from other farmers and pack and sell them. They also do fanning of turmeric, chilly and other spices. After packaging, they sell them to the market. They have specialized products also available in the market such as Honey, Lassi masala, Tea masala, Jamun achaar, Alsi, Jaggery etc. to which they process, pack, price them, and sell them in the "Global" brand name in the market.

Global SHG/FPO is linked with the kisan club of PAU since from the starting all of its members are the active participants of PAU kisan club. PAU kisan club has provided assistance to them for starting the FPO.

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<sup>5</sup> Global SHG/FPO, about us, <http://www.globalselfhelpgroup.apnikheti.co.in/>

### **PAU kisan club**

PAU kisan club is an extension department of PAU started with the inception of extension department of PAU, where new technologies are as early as disseminated to its members. PAU kisan club has its roots in all small villages throughout Punjab. At present about 3900 farmers and 400 farm women are club members. Monthly meetings are organized at PAU campus or at farmer's field for providing the assistance to the farmers. Club members also participate in kisan melas, field days and publication of articles. They get seed, plant material and technological knowledge from the experts in the fields. Members also get professional exposure through farmer exchange program. Enlargement of their friendship circle, improved social status, contacts with PAU experts, contacts with progressive farmers, farm input derived are some benefits of joining the kisan club

The food material is purchased from the members of the FPO, it is processed, packed, priced and then marketing team sell their product to the market. PAU hostels have enough demand found to potentially supply by the FPO. Global SHG/ FPO provide raw material to the mess on the requirement basis. Hostel mess only purchase the food when there is a price feasibility to purchase that product from them, than it is in the market. There is no such existing streamline process or mechanism available to purchase the material by the hostels form them. The products are purchased only on the basis of price feasibility, quality, and ease of availability.

#### **EXHIBIT 2: RATE LIST OF THE COMMODITIES**

<b>COMMODITY</b>	<b>PRICE RATE (Rs./kg/ltr)</b>
RICE	45/kg
WHEAT	22.5/kg
POTATO	12/kg
TOMATO	30/kg
MILK	45/ltr
PULSES (MOONG)	80/kg
MUSTARD OIL	140/ltr

#### **2.2.B. K. Agro Foods (PAU Agripreneur)**

Bachittar Singh Garcha of Deh Kalan village has set an example for others by commercially developing various soybean products and encouraged a number of farmers in the state to follow him. Bachittar Singh was allotted a shop at Punjab Agricultural University (PAU) for marketing his products. Today, he is directly selling his products at his own outlets in Polo Ground in Patiala, PAU, Sant Longowal Institute of Engineering and Technology (SLIET) in and around Sangrur, besides supplying his products to retail outlets in various parts of the state<sup>6</sup>. At least, 10 persons are getting direct employment through his soya venture.

Garcha's soybean milk products under the name of Shaktiman and eatables under the brand of BK Agro Foods have become a household name. It is a venture which is supported by PAU. They are also

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<sup>6</sup> B.K. Agro food article in The Tribune, <https://www.tribuneindia.com/2009/20091006/ldh1.htm>

providing soya items to the PAU hostel mess as well as at the time of university sports tournament the soya milk which is very good source of protein and energy is provided by them.

### 2.3.UPJ Farms

UPJ farms is located at Kohara village of Ludhiana started by Agripreneur Mr. Amrinder singh who is also the general secretary of PAU kisan club. UPJ Farms is an agro processing industry started in 2017 with the motive of giving value addition to the farm produced by himself or local farmers and marketing the products at various channels. Currently they are processing wheat, turmeric, rice, mustard oil etc. There premium products are multigrain wheat, gluten free wheat, and mustard oil.

UPJ farms is also supported by the PAU kisan club for education learning, processing of product, packaging, branding, and how to market their product. UPJ also tried to sell their processed product to the PAU hostel but due to local competitors, price variability, distance they could not manage it to market their product to the PAU hostels.

## 3. Some examples of linking farmers

### 3.1.(FARM TO COLLEGE)

Farm-to-college programs in the U.S. and Canada collected by the Community Food Security Coalition. Farm-to-college programs connect colleges and universities with producers in their area to provide local farm products for meals and special events on campus. The Community Food Security Coalition (CFSC) has a National Farm to College Program, which works to help farmers, food service personnel, students, faculty and others to establish and maintain farm-to-college programs<sup>7</sup>.

### 3.2.(NATIONAL FARM TO SCHOOL NETWORK)

The National Farm to School Network (NFSN), established in 2007, began as a collaborative of the Urban & Environmental Policy Institute, Occidental College and the Community Food Security Coalition (CFSC). The National Farm to School Network is an information, advocacy and networking hub for communities working to bring local food sourcing, school gardens and food and agriculture education into schools and early care and education settings<sup>8</sup>. Farm to school enriches the connection communities have with fresh, healthy food and local food producers by changing food purchasing and education practices at schools and early care and education sites.

Students gain access to healthy, local foods as well as education opportunities such as school gardens, cooking lessons and farm field trips. Farm to school empowers children and their families to make informed food choices while strengthening the local economy and contributing to vibrant communities.

Farm to school implementation differs by location but always includes one or more of the following<sup>9</sup>:

**Procurement:** Local foods are purchased, promoted and served in the cafeteria or as a snack or taste-test;

**School gardens:** Students engage in hands-on learning through gardening; and

**Education:** Students participate in education activities related to agriculture, food, health or nutrition.

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<sup>7</sup> Farm to college, <http://www.farmtocollege.org/about-farm-to-college/>

<sup>8</sup> NFSM, <http://www.farmtoschool.org/about>

<sup>9</sup> NFSM, <http://www.farmtoschool.org/about/what-is-farm-to-school>

### EXHIBIT 3: CORE ELEMENTS OF FARM TO SCHOOL



Source: NFSM, <http://www.farmentoschool.org/about>

#### 4. Marketing Mix required for linking process

Hostel mess require a large variety of food material to be serve for the students in their 3 time meals. A wide product range included milk, bread, cheese, cereal, pulses, breakfast food, fruits, spices, processed, unprocessed various kind of material is required by the hostel mess to serve. Compromising on the quality is a one statement to every Indian hostel mess. After battling with mess food, people not only start appreciating “ghar ka khana”, but they can also give Sherlock tough competition in knowing all the cheap eateries around, become expert at budget management and often emerge as fledgling cooks themselves!

To provide the quality and variety of food in the hostel mess, caterers or mess managers have started procuring the quality food material from various institutions on the regular basis. FPO’s have also started processing, promoting, branding, pricing and marketing their products at different levels of channels to reach the various audience and to fulfil the needs. The demand always attract the supply but in Indian industry it is completely opposite where supply caters the demand. There is a demand from the hostel side and supply from the farmers but marketing of the product has to reach many levels. To cater the demand marketing mix from farmer/FPO side is important.

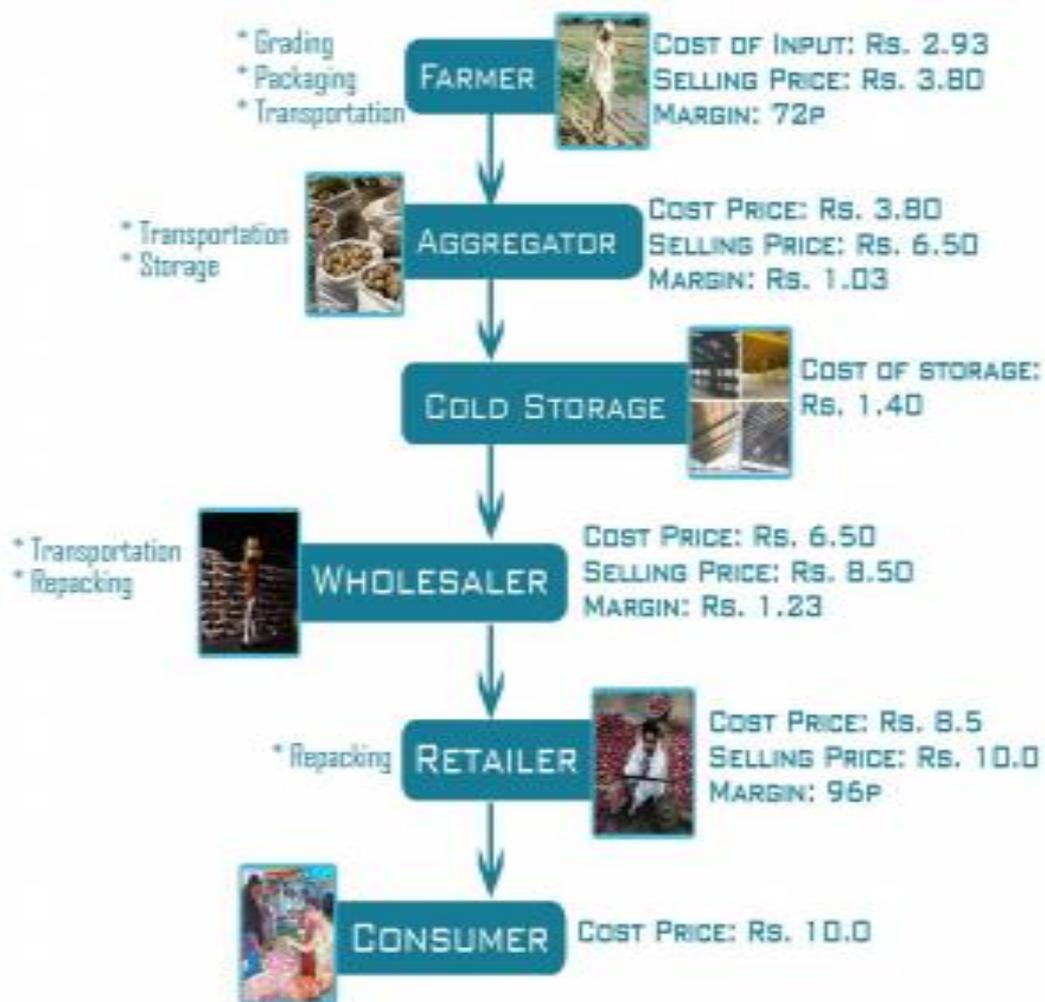
##### 4.1.Price

Hostels are demanding the products at the affordable price with good quality. Whereas farmers are ready to sell their produce at profitable price to any alternate channel. The fluctuation in vegetable prices has become a perennial problem and is usually associated with the economics of demand and supply. Farmers, mainly marginal and small landholders, depend on intermediaries to sell their produce. Being perishable, vegetables are more prone to price fluctuation, hence they require better infrastructure for storage and marketing.

In Haryana and Punjab, Tomato production during 2017-18, according to the first advance estimate, is likely to be 7.8% higher than that of the previous year. However, it is 20% higher than the average production of the past five years. Similarly, potato production is estimated to be 1.5% higher than that

of the previous year. However, compared with the average production of the past five years, it is 8.7% higher. These figures indicate that farmers are producing more without good returns. Season after season, farmers face price uncertainties mainly owing to fluctuations in demand and supply caused by bumper or poor production, speculation and hoarding by traders<sup>10</sup>. Vegetables are purchased for Re 1 from farmer but retailer sell it for Re 20 to consumer<sup>11</sup>

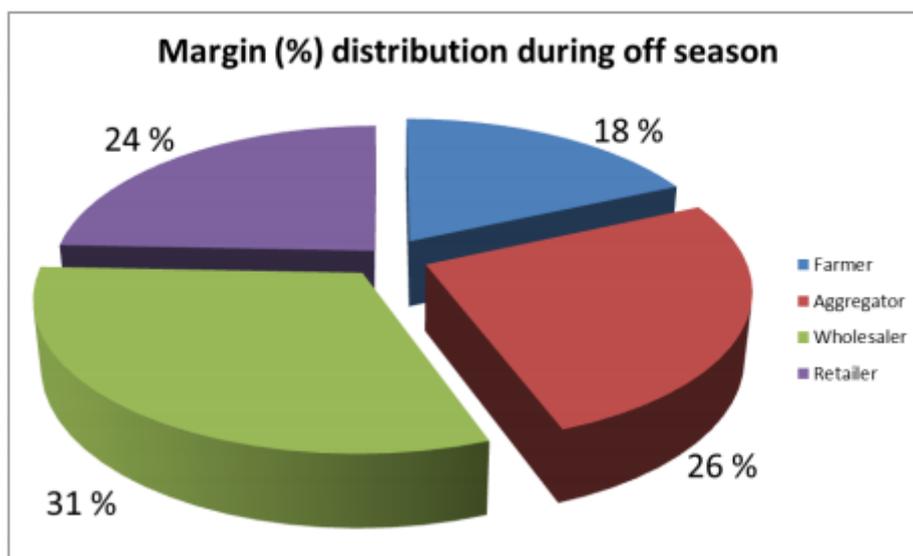
**EXHIBIT 4: COMMON POTATO SUPPLY CHAIN IN PUNJAB DURING OFF SEASON**



**EXHIBIT 5: DISTRIBUTION OF MARGIN BETWEEN VARIOUS INTERMEDIARIES**

<sup>10</sup> The Hindu, <https://www.thehindu.com/news/national/why-are-farmers-not-getting-a-fair-price/article24068937.ece>

<sup>11</sup> Times of India, <https://timesofindia.indiatimes.com/business/india-business/why-vegetables-sell-for-re-1-but-you-buy-for-rs-20/articleshow/66933311.cms>



Source: [https://ccs.in/internship\\_papers/2011/252\\_farm-to-fork-supply-chain-of-potato-in-the-state-of-punjab-shashank-singh.pdf](https://ccs.in/internship_papers/2011/252_farm-to-fork-supply-chain-of-potato-in-the-state-of-punjab-shashank-singh.pdf)

#### EXHIBIT 6: STATUS OF POTATO IN PUNJAB

<i>YEAR</i>	<i>PRODUCTION (in '000 Tones)</i>	<i>PRICE (per quintal)</i>	<i>% CHANGE In PRICE</i>
<i>2016-17</i>	2423	397.21	<b>-24.92%</b>
<i>2017-18</i>	2570.67	298.23	

Source- <http://agmarknet.gov.in/OtherPages/CommodityList.aspx>

#### EXHIBIT 7: STATUS OF TOMATO IN PUNJAB

<i>YEAR</i>	<i>PRODUCTION (in '000 Tones)</i>	<i>PRICE (per quintal)</i>	<i>% CHANGE In PRICE</i>
<i>2016-17</i>	200.38	1627.5	<b>-42.07%</b>
<i>2017-18</i>	224.18	942.87	

Source- <http://agmarknet.gov.in/OtherPages/CommodityList.aspx>

### 4.2.Place

Local food is available to institutions throughout the country and most likely there are several outlets close to hostels. Supporting local food system and expanding the availability and quality of locally grown and produced foods is the motive of direct linking the farmers with local markets. Exploring the local market to sell the produce and targeting the nearby market such as hostels where potentiality of 4 crore market for seven item yearly to one university is available as an alternate for the farmers to sell their produce when the farmer are not getting the fair prices for the produce. Place not only provide ease of selling the produce but also reduces the transportation costs. Selling the produce at far places is a big challenge some time it not only incur the extra cost but also there is a loss to the produce while handling and transporting the produce.

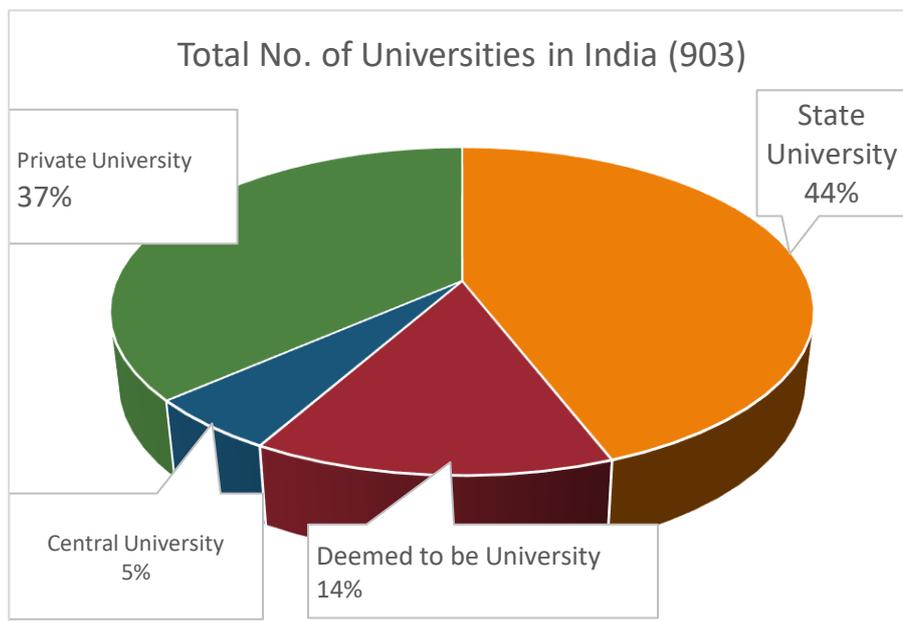
### 4.3.Promotion



**EXHIBIT 9: TOTAL NO. OF UNIVERSITIES IN THE COUNTRY AS ON 18.02.2019**

<b>University</b>	<b>Total No.</b>
State University	399
Deemed to be University	126
Central University	48
Private University	330
<b>Total</b>	<b>903</b>

Source: UGC 2016-17 annual report, <https://www.ugc.ac.in/stats.aspx>



## EXHIBIT 10: DIFFERENT TYPES OF MARKET CHANNEL

### I. Types of Market Channels:

Some of the typical marketing channels for different product groups are given below:

#### A. Channels of rice:

1. Producer–miller->consumer (village sale)
2. Producer–miller->retailer–consumer (local sale)
3. Producer–wholesaler->miller–retailer–consumer
4. Producer–miller–cum–wholesaler–retailer–consumer
5. Producer–village merchant–miller–retailer–consumer
6. Producer–govt. procurement–miller–retailer–consumer

#### B. Channel of other foodgrains:

1. Producer – consumer (village sale)
2. Producer–village merchant–consumer (local sale)
3. Producer–wholesaler–cum–commission agent retailer–consumer
4. Producer–primary wholesaler–secondary wholesaler– retailer– Consumer
5. Producer–Primary wholesaler–miller–consumer (Bakers).
6. Producer->govt.procurement–retailer–consumer.
7. Producer–government–miller–retailer–consumer.

#### C. Channels of cotton:

1. Producer–village merchant–wholesaler or ginning factory– wholesaler in lint–textile mill (consumer)
2. Producer–Primary wholesaler–ginning factory–secondary wholesaler–consumer (Textile mill)
3. Producer– Trader– ginning factory– wholesaler in lint– consumer (Textile mill)
4. Producer–govt. agency–ginning factory–consumer (Textile mill).
5. Producer–Trader–ginning factory–wholesaler–retailer– consumer (non-textile use).

#### D. Channels of Vegetables:

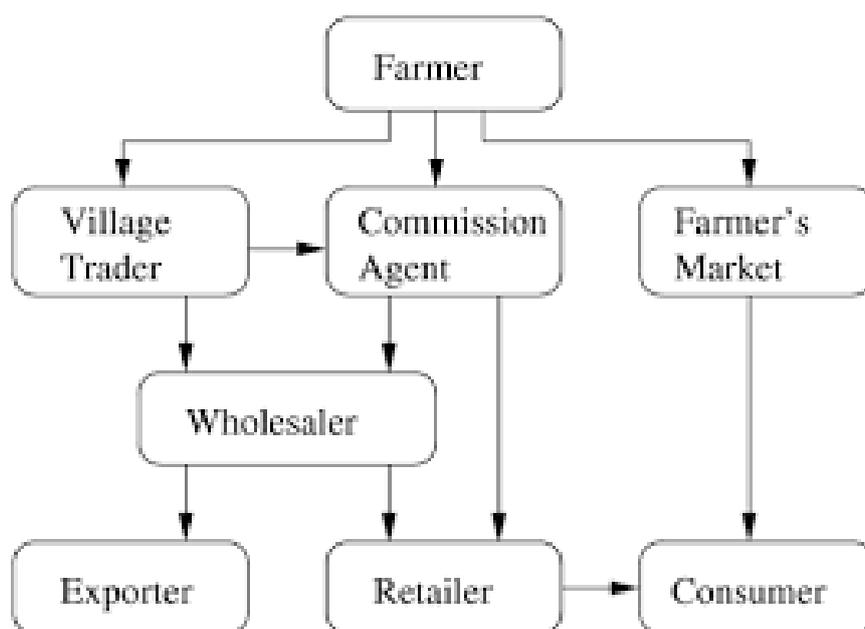
1. Producers–consumer (village sale)
2. Producer–retailer–consumer (local sale)
3. Producer–Trader–commission agent–retailer–consumer.
4. Producer–commission agent–retailer–consumer
5. Producer–primary wholesaler–secondary wholesaler– retailer– consumer (distant market).

#### E. Channels of Fruits:

1. Producer–consumer (village sale)
2. Producer–Trader–consumer (local sale)
3. Producer–pre-harvest contractor–retailer–consumer
4. Producer–commission agent–retailer–consumer.
5. Producer–pre-harvest contractor–commission agent– retailer–consumer
6. Producer–commission agent–secondary wholesaler– retailer–consumer (distant market).

Source: TNAU Agritech portal, Agricultural marketing & Agribusiness  
[http://agritech.tnau.ac.in/agricultural\\_marketing/agrimark\\_Marketing%20channels.html](http://agritech.tnau.ac.in/agricultural_marketing/agrimark_Marketing%20channels.html)

**EXHIBIT 11: MARKETING CHANNEL FOR FOODGRAINS (FARM TO MARKET)**



Source: <https://www.google.com/search?q=agriculture+marketing+channel+for+food+grain&tbm=isch&source=univ&sa=X&ved=2ahUKEwipj5TLkLPhAhUJ448KHfjsAj0QsAR6BAgJEAE&biw=1366&bih=625#imgrc=88akjNJGRd7B0M>:

**EXHIBIT 12: COMPARISON BETWEEN COST OF PROVIDING FOOD IN THE CURRENT SYSTEM AND PROPOSED DIRECT LINKAGE SYSTEM**

Commodity	FPO/Farmer	Particular	Existing system (Rs./Kg)	Direct procurement from FPO/ Farmer (Rs./Kg)	Decreased Cost (Rs./Kg)	Decreased Cost/ Day (Rs.)	Decreased Cost/ Yearly(300 DAYS) (Rs.)	Profitable linkage observed
Wheat	FPO	Cost	25	22.5	2.5	125	37500	6.38% profitable to link with FPO
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>25.5</b>	<b>23</b>	<b>2.5</b>			
	Farmer	Cost	25	20	5	117.5	35250	
		Processing	0	2.15	-2.15			
		Transport	0.5	1	-0.5			
<b>TOTAL</b>	<b>25.5</b>	<b>23.15</b>	<b>2.35</b>					
Rice	FPO	Cost	60	45	15	150	45000/-	57.89% profitable to link with FPO
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>60.5</b>	<b>45.5</b>	<b>15</b>			
	Farmer	Cost	60	40	20	95	28500	
		Processing	0	10	-10			
		Transport	0.5	1	-0.5			
<b>TOTAL</b>	<b>60.5</b>	<b>51</b>	<b>9.5</b>					
Potato	FPO	Cost	15	12	3	75	22500	40% profitable
		Transport	0.5	0.5	0			

		<b>TOTAL</b>	<b>15.5</b>	<b>12.5</b>	<b>3</b>			to link with Farmer
	Farmer	Cost	15	10	5	125	<b>37500</b>	
		Processing	0	0	0			
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>15.5</b>	<b>10.5</b>	<b>5</b>			
<b>Tomato</b>	FPO	Cost	40	30	10	100	<b>30000</b>	Any linkage channel is possible
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>40.5</b>	<b>30.5</b>	<b>10</b>			
	Farmer	Cost	40	30	10	100	<b>30000</b>	
		Processing	0	0	0			
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>40.5</b>	<b>30.5</b>	<b>10</b>			
<b>Pulses (Moong dal)</b>	FPO	Cost	90	80	10	10	<b>3000</b>	56.52% profitable to link with farmer
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>90.5</b>	<b>80.5</b>	<b>10</b>			
	Farmer	Cost	90	67	23	23	<b>6900</b>	
		Processing	0	0	0			
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>90.5</b>	<b>67.5</b>	<b>23</b>			
<b>Mustard Oil</b>	FPO	Cost	95	140	-45	-45	<b>-13500</b>	Retail linkage profitable
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>95.5</b>	<b>140.5</b>	<b>-45</b>			
<b>Turmeric</b>	FPO	Cost	180	170	10	3	<b>300</b>	88.89% profitable to link with farmer
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>180.5</b>	<b>170.5</b>	<b>10</b>			
	Farmer	Cost	180	150	30	9	<b>2700</b>	
		Processing	0	0	0			
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>180.5</b>	<b>150.5</b>	<b>30</b>			

**Analysis:** In comparison to the cost of providing food material in the current system (Retail) and proposed direct linkage system, it is observed that in some items it is profitable to link them directly with FPO, some to farmers and some with existing channel because of the variation in price and capacity. For ex. In above table wheat, rice and tomato have profit of 6.38%, 57.89% and no risk profit respectively to procure from FPO whereas potato, pulses and turmeric have profit of 40%, 56.52% and 88.89% respectively to procure from farmer. But in case of processed mustard oil it is profitable to procure directly from retail shop because of its large production capacity bring economies of scale to the big companies.

But FPO's can act as a facilitator between the linkage systems because they also have risk bearing capacity as it is seen in the case of tomato.

Some companies have also seen the potential market to sell their product directly to the institutions, Dawat has introduced one Tota chawal variety especially for the institutions at the price of 45/-kg only. Which is a good quality rice as per the feedback from the mess managers.

## EXHIBIT 13: NATIONAL FARM TO SCHOOL NETWORK

### Our Mission

National Farm to School Network increases access to local food and nutrition education to improve children's health, strengthen family farms, and cultivate vibrant communities.

### Our Vision

National Farm to School Network envisions a nation in which farm to school programs are an essential component of strong and just local and regional food systems, ensuring the health of all school children, farms, environment, economy and communities.

### Our Theory of Change

The National Farm to School Network's Theory of Change is grounded in our organizational **Core Values**, which reflect the spirit of inclusivity and collaboration with which NFSN was established, and embody the integration of equity, justice, mutual trust and respect in all elements of our work.

[Explore our Theory of Change visual map and narrative here.](#)

### 2017-2019 Strategic Plan

The National Farm to School Network's strategic plan for 2017-2019 accounts for the learning from the last decade of unprecedented growth and maturity of the farm to school movement, and recognizes the need for a more focused and targeted approach to programming and operations.

[Read a summary of our 2017-2019 strategic plan here.](#)

Source: <http://www.farmtoschool.org/about>

## EXHIBIT 14: UPJ FARMS SKU DISPLAY SITE



**EXHIBIT 15: UPJ FARM PRODUCT PACKAGING (SPECIAL CHAKKI ATTA )**



Source: On field / Industry visit

**EXHIBIT 16: STORAGE FACILITY AVAILABLE IN PAU HOSTEL MESS**



**EXHIBIT 17: WEEKLY FOOD MENU OF PAU HOSTEL**

	Hostel. No. 4		MESS.	मिन्
	बरेकफास्ट	लैन्च	डिनर	
सोमवार	खैरफरीठा कालेदोले दही बटर दुध भा दुधपत्ती पुदिनाचटनी	करी दाल-पावल रोटी खैर सलाद दही तरका-पावल (2.5)	पनीटकराही पंजाबीचिकन रोटी सलाद -पावल डिसगुलावजापुन दही (4)	
मंगलवार	पनीटफरीठा दही बटर दलिआ दुध भा दुधपत्ती पुदिनाचटनी (2)	राजमा-पावल रोटी दही सलाद तरका-पावल अंगूर (2.5)	-पानामखाला दाल रोटी सलाद खैर दही (3)	
बुधवार	आलुफरीठा दही बटर पुदिनाचटनी दुध भा दुधपत्ती दलिआ (2)	भलाईकोप्ता-चीकन दही सलाद रोटी तरका-पावल (3)	बटर चिकन खादिपनीट -पावल रोटी सलाद डिसजिलेपी तरका-पावल (4)	
गुरुवार	जीवीफरीठा दही बटर दुध भा दुधपत्ती पुदिनाचटनी दलिआ (2)	आलु भटर दही -पावल रोटी सलाद डिससंभय तरका-पावल (2.5)	दालभजनी मिकसबजरी रोटी -पावल सलाद डिस खिमीया पुदिनाचटनी (3)	
शुक्रवार	बेरानभाज फरीठा बटर दही दुध भा दुधपत्ती पुदिनाचटनी (2)	चिलीचिकन दाल -पावल दही रोटी सलाद डिसफुरट (3)	चिलीचिकन पनीट मुरजी रोटी डिसगुलावजापुन सलाद (4)	
शनिवार	बरेडपकोरा भा बरेडभाभलेट दुध भा दुधपत्ती दलिआ (2)	नान दोले बटर दही (3)	मिकसबजरी दाल रोटी -पावल सलाद डिस रसगुला (2.5)	
रविवार	पालकमैथीफरीठा बटर दही दुध भा दुधपत्ती दलिआ पुदिनाचटनी (2)	पुरी दोले दही (3)	भटर पनीट-पावल भटरभलाईमैथी रोटी सलाद डिसकासट (3)	

**EXHIBIT 18: FARMER AND UNIVERSITY VISIT IN THE PUNJAB FIELD**



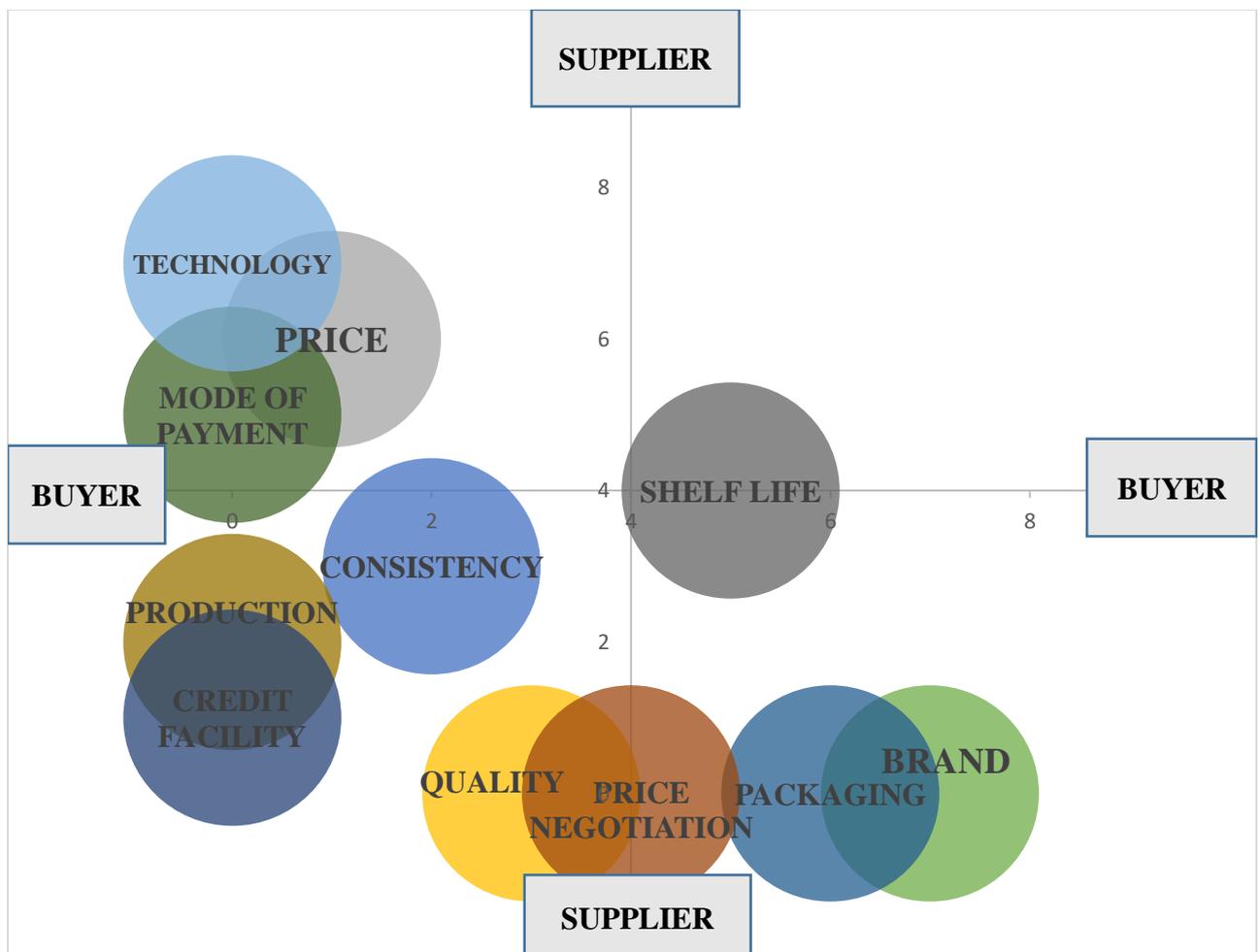
**EXHIBIT 19: IMPORTANT FACTORS AFFECTING TO BUYER FOR DIRECT LINKING WITH FARMERS**

<b>Buyer Constraints in direct linking the farmer with University hostel mess</b>										
<b>Constraints</b>	<b>No. of Buyer</b>	<b>Rankings</b>							<b>RBQ</b>	<b>RANK</b>
		<b>1st</b>	<b>2nd</b>	<b>3rd</b>	<b>4th</b>	<b>5th</b>	<b>6th</b>	<b>7th</b>		
<b>QUALITY</b>	5	0	1	1	2	1	0	0	62.85	<b>III</b>
<b>PRICE</b>	5	4	1	0	0	0	0	0	97.14	<b>I</b>
<b>CONSISTENCY</b>	5	1	2	1	0	1	0	0	77.14	<b>II</b>
<b>BRAND</b>	5	0	0	0	1	0	1	3	25.71	<b>VII</b>
<b>PACKAGING</b>	5	0	0	0	0	2	2	1	31.42	<b>VI</b>
<b>PRICE NEGOTIATION</b>	5	0	0	3	1	0	1	0	60	<b>IV</b>
<b>SHELF LIFE</b>	5	0	1	0	1	1	1	1	45.71	<b>V</b>

**EXHIBIT 20: IMPORTANT FACTORS AFFECTING TO SUPPLIER FOR DIRECT LINKING WITH HOSTELS**

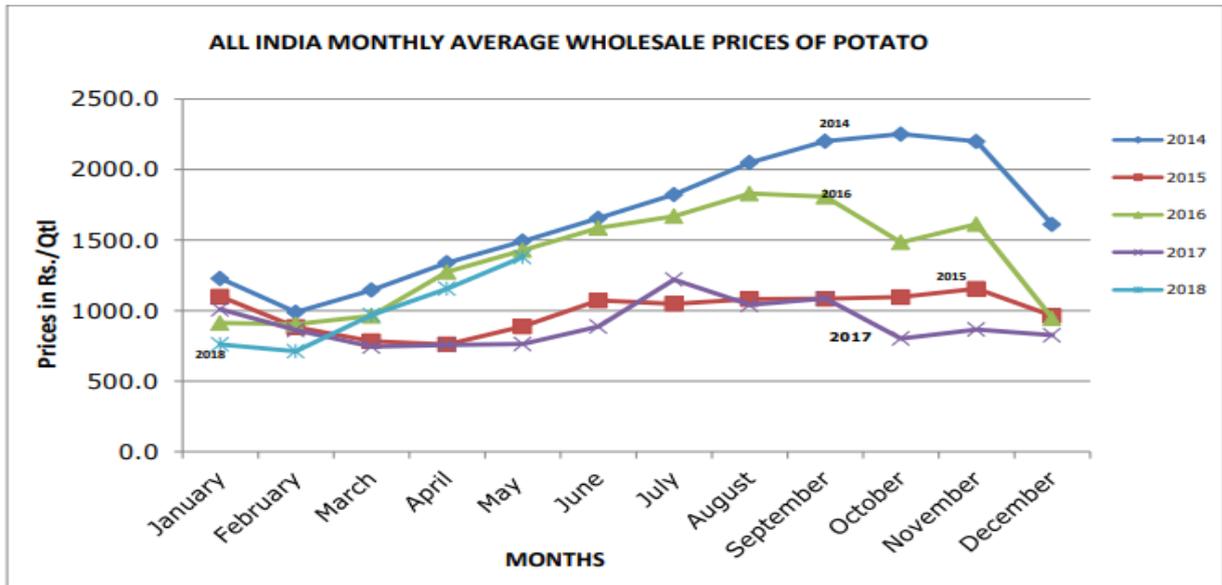
Supplier Constraints in direct linking the farmer with University hostel mess										
Constraints	No. of Supplier	Rankings								RANK
		1st	2nd	3rd	4th	5th	6th	7th	RBQ	
PRICE	5	0	0	2	2	1	0	0	40	VI
CONSISTENCY	5	0	0	3	1	1	0	0	62.85	III
PRODUCTION	5	2	2	0	0	1	0	0	82.85	II
CREDIT FACILITY	5	3	2	0	0	0	0	0	94.28	I
MODE OF PAYMENT	5	0	1	0	0	1	3	0	42.85	IV/V
SHELF LIFE	5	0	0	0	2	1	2	0	42.85	IV/V
TECHNOLOGY	5	0	0	0	0	0	0	5	14.28	VII

**EXHIBIT 21: USING PERCEPTUAL MAPPING SHOWING THE NEGOTIABLE CONSTRAINTS FOR BOTH BUYER AND SUPPLIER**



Source: Primary Data

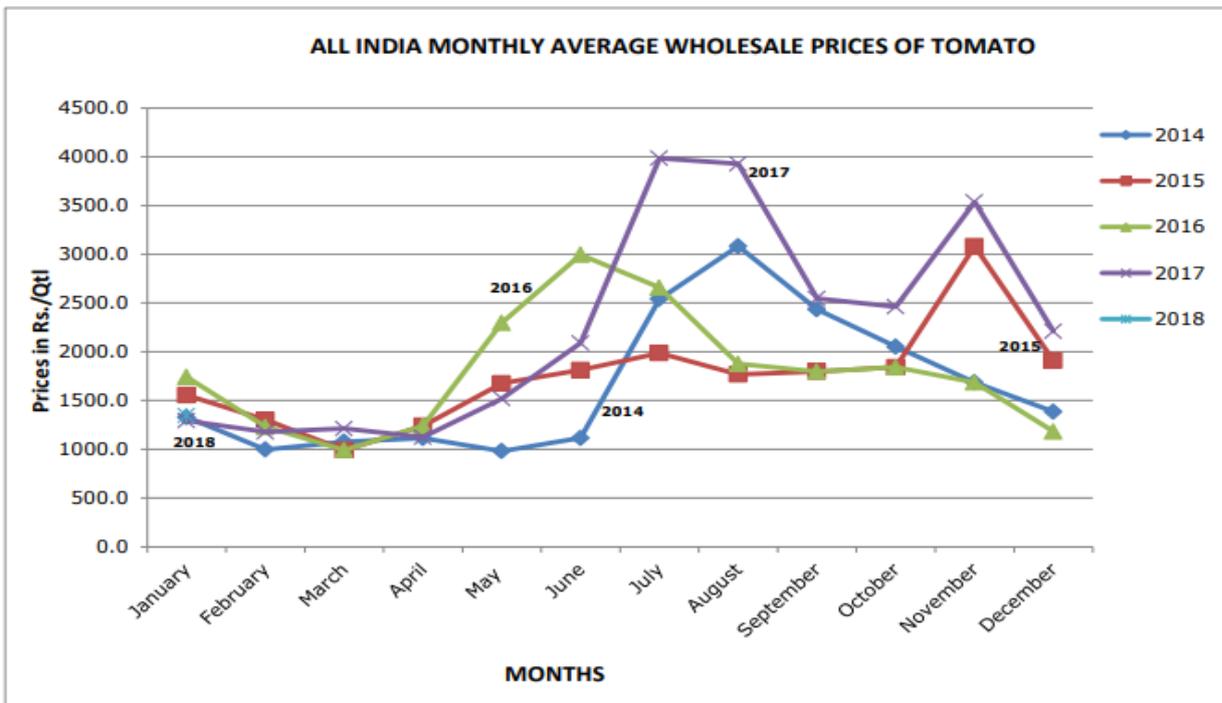
**EXHIBIT 22: ALL INDIA MONTHLY AVERAGE WHOLESALE PRICES OF POTATO**



Source:

<http://agricoop.gov.in/sites/default/files/Monthly%20Report%20on%20Potato%20for%20May%2C%202018>

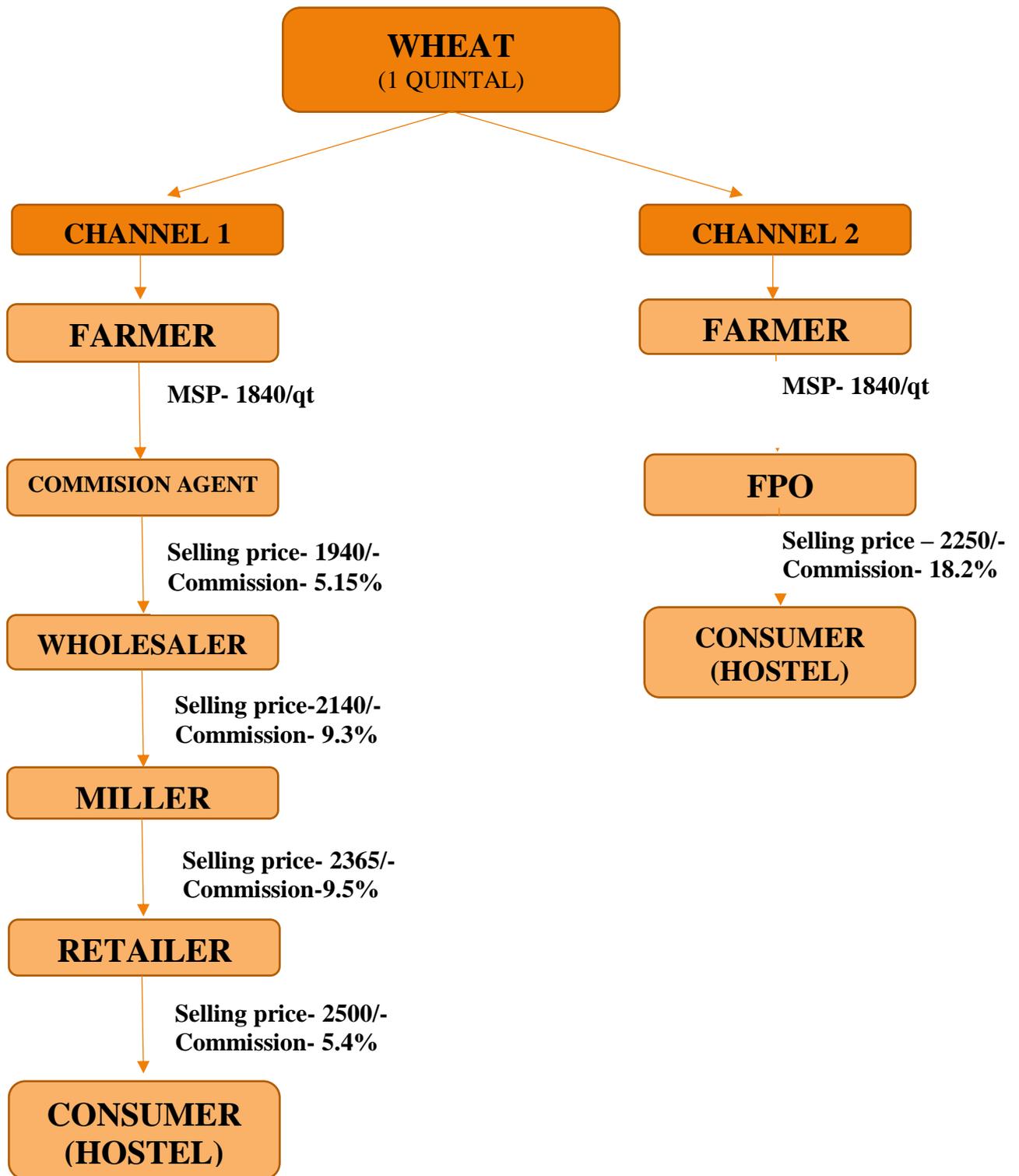
**EXHIBIT 23: ALL INDIA MONTHLY AVERAGE WHOLESALE PRICES OF TOMATO**



Source:

<http://agricoop.gov.in/sites/default/files/Monthly%20Report%20on%20Tomato%20for%20January%202018>

**EXHIBIT 24: COMPARISON OF VALUE ADDITION CHANNELS**



## (SOLUTION)

### Linking Farmers with University Hostels Mess- Agriculture Marketing Perspective

#### 1. Situation Analysis

##### a. Introduction to the case

The case is about to explore the potential to strengthen the direct marketing linkage between farmer and hostel. The main motive of this case study is to facilitate the farmers by providing alternate channel for selling their produce in the market at a profitable price which is beneficial for farmers. In the case study discussion point is whether problems of the farmers can be solved by direct linking farmers to local buyers such as hostel mess or not or there is a requirement of a facilitator who can facilitate the both ends. The quantity required of each item will be needed to seek this linkage program. The parameters required for such linkage.

##### b. Statement of objective

- To overview the existing food procurement mechanism in the university hostel mess from the FPO/ Farmers.
- To study the benefits of the farmer university linkage program.
- To assess the effectiveness gap in the existing mechanism for both farmers as well for the university hostel.
- To study the possibility of the linkage of local farmers at a larger scale of operation and suggest reformative policy measures.

##### c. Decision statement

- If this linkage will be profitable for the farmer
- If all the items can be linked directly
- If any facilitator is required for the direct linkage

##### d. Criteria to be applied

The criteria has to be based upon the collection of more objective data from the primary sources and secondary sources for the references and accordingly the decision has to be based which is acceptable to both parties and intermediary involved.

#### 2. The decision process

##### **COMPARISON BETWEEN COST OF PROVIDING FOOD IN THE CURRENT SYSTEM AND PROPOSED DIRECT LINKAGE SYSTEM**

Commodity	FPO/Farmer	Particular	Existing system (Rs./Kg)	Direct procurement from FPO/ Farmer (Rs./Kg)	Decreased Cost (Rs./Kg)	Decreased Cost/ Day (Rs.)	Decreased Cost/ Yearly(300 DAYS) (Rs.)	Profitable linkage observed
Wheat	FPO	Cost	25	22.5	2.5	125	37500	

		Transport	0.5	0.5	0	117.5	<b>35250</b>	6.38% profitable to link with FPO
		<b>TOTAL</b>	<b>25.5</b>	<b>23</b>	<b>2.5</b>			
		Cost	25	20	5			
		Processing	0	2.15	-2.15			
		Transport	0.5	1	-0.5			
	Farmer	<b>TOTAL</b>	<b>25.5</b>	<b>23.15</b>	<b>2.35</b>			
<b>Rice</b>	FPO	Cost	60	45	15	150	<b>45000/-</b>	57.89% profitable to link with FPO
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>60.5</b>	<b>45.5</b>	<b>15</b>			
	Farmer	Cost	60	40	20	95	<b>28500</b>	
		Processing	0	10	-10			
		Transport	0.5	1	-0.5			
		<b>TOTAL</b>	<b>60.5</b>	<b>51</b>	<b>9.5</b>			
<b>Potato</b>	FPO	Cost	15	12	3	75	<b>22500</b>	40% profitable to link with Farmer
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>15.5</b>	<b>12.5</b>	<b>3</b>			
	Farmer	Cost	15	10	5	125	<b>37500</b>	
		Processing	0	0	0			
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>15.5</b>	<b>10.5</b>	<b>5</b>			
<b>Tomato</b>	FPO	Cost	40	30	10	100	<b>30000</b>	Any linkage channel is possible
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>40.5</b>	<b>30.5</b>	<b>10</b>			
	Farmer	Cost	40	30	10	100	<b>30000</b>	
		Processing	0	0	0			
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>40.5</b>	<b>30.5</b>	<b>10</b>			
<b>Pulses (Moong dal)</b>	FPO	Cost	90	80	10	10	<b>3000</b>	56.52% profitable to link with farmer
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>90.5</b>	<b>80.5</b>	<b>10</b>			
	Farmer	Cost	90	67	23	23	<b>6900</b>	
		Processing	0	0	0			
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>90.5</b>	<b>67.5</b>	<b>23</b>			
<b>Mustard Oil</b>	FPO	Cost	95	140	-45	-45	<b>-13500</b>	Retail linkage profitable
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>95.5</b>	<b>140.5</b>	<b>-45</b>			
<b>Turmeric</b>	FPO	Cost	180	170	10	3	<b>300</b>	88.89% profitable to link with farmer
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>180.5</b>	<b>170.5</b>	<b>10</b>			
	Farmer	Cost	180	150	30	9	<b>2700</b>	
		Processing	0	0	0			
		Transport	0.5	0.5	0			
		<b>TOTAL</b>	<b>180.5</b>	<b>150.5</b>	<b>30</b>			

**Analysis:** In comparison to the cost of providing food material in the current system (Retail) and proposed direct linkage system, it is observed that in some items it is profitable to link them directly with FPO, some to farmers and some with existing channel because of the variation in price and capacity. For ex. In above table wheat, rice and tomato have profit of 6.38%, 57.89% and no risk profit respectively to procure from FPO whereas potato, pulses and turmeric have profit of 40%, 56.52% and 88.89% respectively to procure from farmer. But in case of processed mustard oil it is profitable to procure directly from retail shop because of its large production capacity bring economies of scale to the big companies.

But FPO's can act as a facilitator between the linkage systems because they also have risk bearing capacity as it is seen in the case of tomato.

**a. Generating alternatives:** Various alternatives present in front of the policy maker are as under:

**Alternative 1:** A mandate can be formed to purchase the all material from the local FPO/ Farmer

**Alternative 2:** Instead of linking all the items directly there can be the provision of 60:40 ratio that university hostel mess contractor has to purchase 60% of material from the local farmer or FPO and 40% of material can be purchased from any source.

**Alternate 3:** FPO can act as a facilitator for providing multi commodity material but FPO should be assisted by the university

**Alternate 4:** University centralized stores can be open which will act as an alternate market for the farmer/FPO to sell their products and mandate for the university hostels to purchase the material only from these university centralized stores

**b. Evaluation of alternatives**

**Alternative 1:** If such mandate is formed then university hostels will have to totally dependent upon the farmers for their material, consistency in the products will be the problem, storage facility will be required by the hostels. Breakfast material cannot be provided by the farmers.

**Alternative2:** This 60:40 provision can be done on the basis of keep checking and under the guidance of experts for maintaining the continuity and providing the list of farmers/FPO from which that 60% material has to be procured. In this case also storage facility will be required by the hostels for keeping the both perishable and non-perishable commodities.

**Alternative3:** FPO's can act as a facilitator for providing food material to the hostels. They also can provide the processed products such as ketchups, oils etc. marketing of the materials will also be easy with this linkage. FPO's also have the risk bearing capacity. FPO are also formed for the benefits of farmers. Run by farmers for the farmers and to the farmers by. But FPO should be assisted and funded by the universities or govt. because without external support FPO's might not be able to fulfill this much of demand.

**Alternative 4:** Opening a centralized store within the premises of university is a good idea to gather all the multiple commodity at one store from various farmers and FPO's here the risk bearing capacity will be higher by the centralized stores because of the intervention of the university or govt. It can also provide the alternate market to the farmer where they can sell their products directly. But opening a centralized store will require a lot of funding and it is only possible through government support.

**c. Choice of an alternate**

If we analyze the outcomes of all the four alternatives the choice of the best alternative depends upon the further objectives information being collected to support the alternative 2 or 3 as the best one if it seems to accept the facts analyzed.

3. **The implementation plan:** The government support is necessary to implement either the alternative 2 or 3. Or both alternative can be merged to make the policy or provision for the benefits of the farmers. The process can take place by making the provisions and strengthening the FPO's by providing the necessary assistance.