# Groundnut Value Chain

## Jhansi & Mahoba, Uttar Pradesh

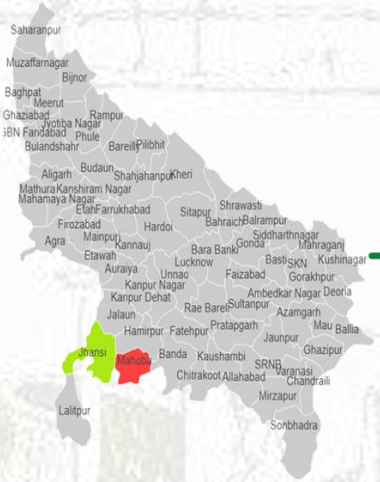
**July 2021**

FDRVC
VALUE FOR INDIA

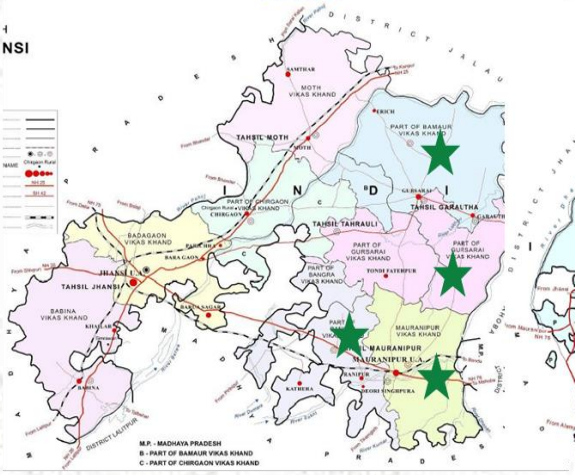
A joint initiative of
Ministry of Rural
Development
& Tata Trusts

# Project Area : Jhansi & Mahoba

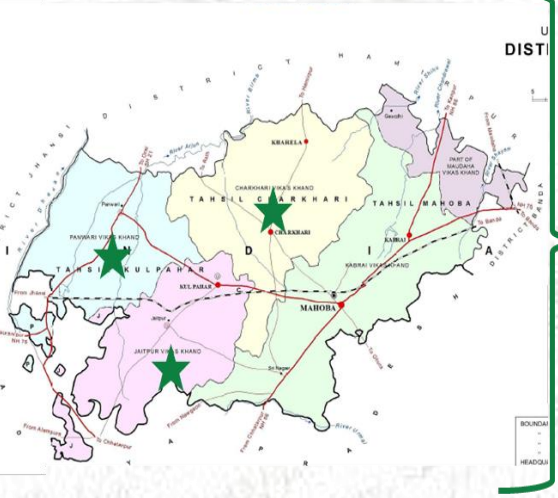
## Geographic & Agriculture Profile




Jhansi




Mahoba




### Agriculture Profile

- Bundelkhand farmers usually grow sesame, urad, groundnut in Kharif season (many farmers leave land fallow due to Anna Pratha). In Rabi, farmers grow wheat, chana, masoor and matar (dry peas). Some farmers in areas with availability of water grow paddy.
- Farmer Centrality : **Around 50% land area in Jhansi and Mahoba is under pulses cultivation. Similarly 20% area is under oilseeds cultivation**, indicationg farmers in the region are predominantly inclined towards growing pulses and oil seed (specially groundnut)
- **Abundant Marketable Surplus:** Farmers sell almost 75%-85% of their produce as against any other crops like wheat which has almost 50%-60% of market surplus
- **Cropping Pattern :** While **Groundnut and Urad are Kharif crops and Chana, Matar are Rabi crops**

| Indicators | Jhansi | Mahoba |
|---|---|---|
| **Total Blocks** | 8 | 4 |
| **Blocks Selected** | **Bamaur, Gursarai, Mauranipur, Bangara** | **Panwari, Charkhari, Jaitpur** |
| **Total Rural Cultivators – Census 2011 (in Selected Blocks)** | 1,12,569 | 78,259 |
| **No of SHGs (in Selected Blocks)** | 3,244 | 2,058 |
| **No of Village Organizations (in Selected Blocks)** | 209 | 109 |
| **No of SHG members(in Selected Blocks)** | 31,745 | 21,900 |

| | Season | Jhansi | | | Mahoba | | | Marketable Surplus* |
|---|---|---|---|---|---|---|---|---|
| | | Area (Ha) | Prod (MT) | Yield (MT/Ha) | Area (Ha) | Prod (MT) | Yield (MT/Ha) | |
| **Urad** | Kharif | 69,875 | 21,834 | 0.31 | 46,061 | 17,507 | 0.38 | 80-90% |
| **Groundnut** | Kharif | 25,005 | 22,164 | 0.89 | 7,940 | 8,004 | 1.01 | 90-95% |
| **Matar** | Rabi | 49,507 | 73,468 | 1.48 | 30,271 | 25,662 | 0.85 | 80-90% |
| **Desi Chana** | Rabi | 48,274 | 60,499 | 1.25 | 46,578 | 46,520 | 1.00 | 75-85% |
| **Sesame** | Kharif | 76,946 | 13,489 | 0.18 | 26,821 | 8,830 | 0.33 | 90-95% |

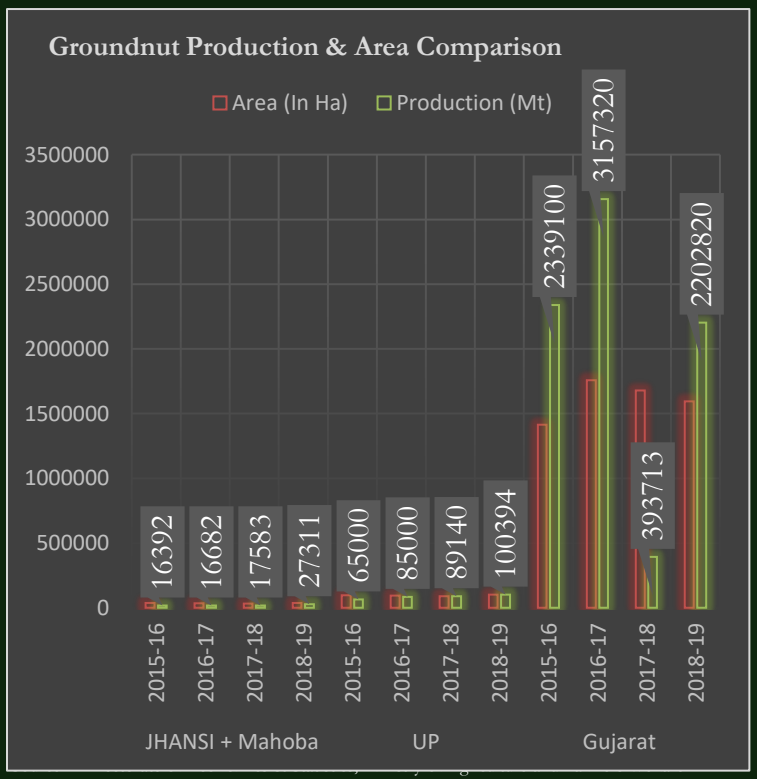
***Estimates from Interaction with Farmers)**

# Groundnut Sector @ Glance

## PRODUCTION STATISTICS

Production Status of Uttar Pradesh and districts (Jhansi & Mahoba)

Gujarat is the single largest as well as the best quality groundnut producer accounting for over 40% of total groundnut produced in he country. Uttar Pradesh is among the top ten groundnut producer in the country and contributes around 1% to the total groundnut production of India. The districts of Jhansi & Mahoba contributes around 31% to the total production of Uttar Pradesh.




## Seasonality

| Crop | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Groundnut | | | | | | S | S | | H | H | H | |

## POPULAR VARIETIES

The main Groundnut varieties produced in India are Kadiri-2, Kadiri-3, BG-1, BG-2, Kuber , GAUG-1, GAUG-10, PG-1 , T-28, T-64, Chandra, Chitra, Kaushal, Parkash, Amber etc.
At Local level two varieties of groundnut are very prominent
BATALI – Used for Oil Extraction
DESI – Used for consumption purpose and sold as nuts in retail.

## LANDHOLDING PATTERN

| | Jhansi | | Mahoba | |
|---|---|---|---|---|
| **Rural Population** | 58.30 % | | 78.84% | |
| **Net Sown Area in the district** | 3,12,005 Ha | | 1,84,921 Ha | |
| **Cropping Intensity** | 149% | | 113% | |
| | *% of Operational Land Holdings* | *% Land Area* | *% of Operational Land Holdings* | *% Land Area* |
| **Marginal (<1 Ha)** | 61.6% | 23.2% | 51.6% | 15.3% |
| **Small (1-2 Ha)** | 19.5% | 21.2% | 23.7% | 21.5% |
| **Medium (2-4 Ha)** | 12.6% | 26.1% | 15.6% | 27.2% |
| **Large (>4 Ha)** | 6.4% | 29.5% | 9.0% | 36.0% |

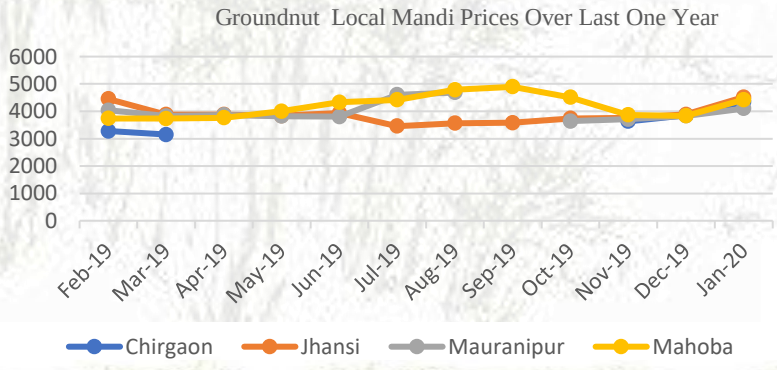
Source – http://agcensus.dacnet.nic.in/ (2015 – 16)

## Economic Importance

### •Market Scenario

Groundnut is largely marketed by farmers through APMC channel. Major physical markets or trading centre for Groundnut in India are Rajkot, Ahmedabad, Mumbai & Delhi. Locally APMC regulated markets like Mauranipur, Jhansi & Mahoba are major center of Groundnut trade and have commission agent-based bidding system. Most of the Groundnut processors are concentrated in Gujarat, Maharashtra & Rajasthan while some are present in areas of Kanpur due to groundnut production in Bundelkhand region of UP.

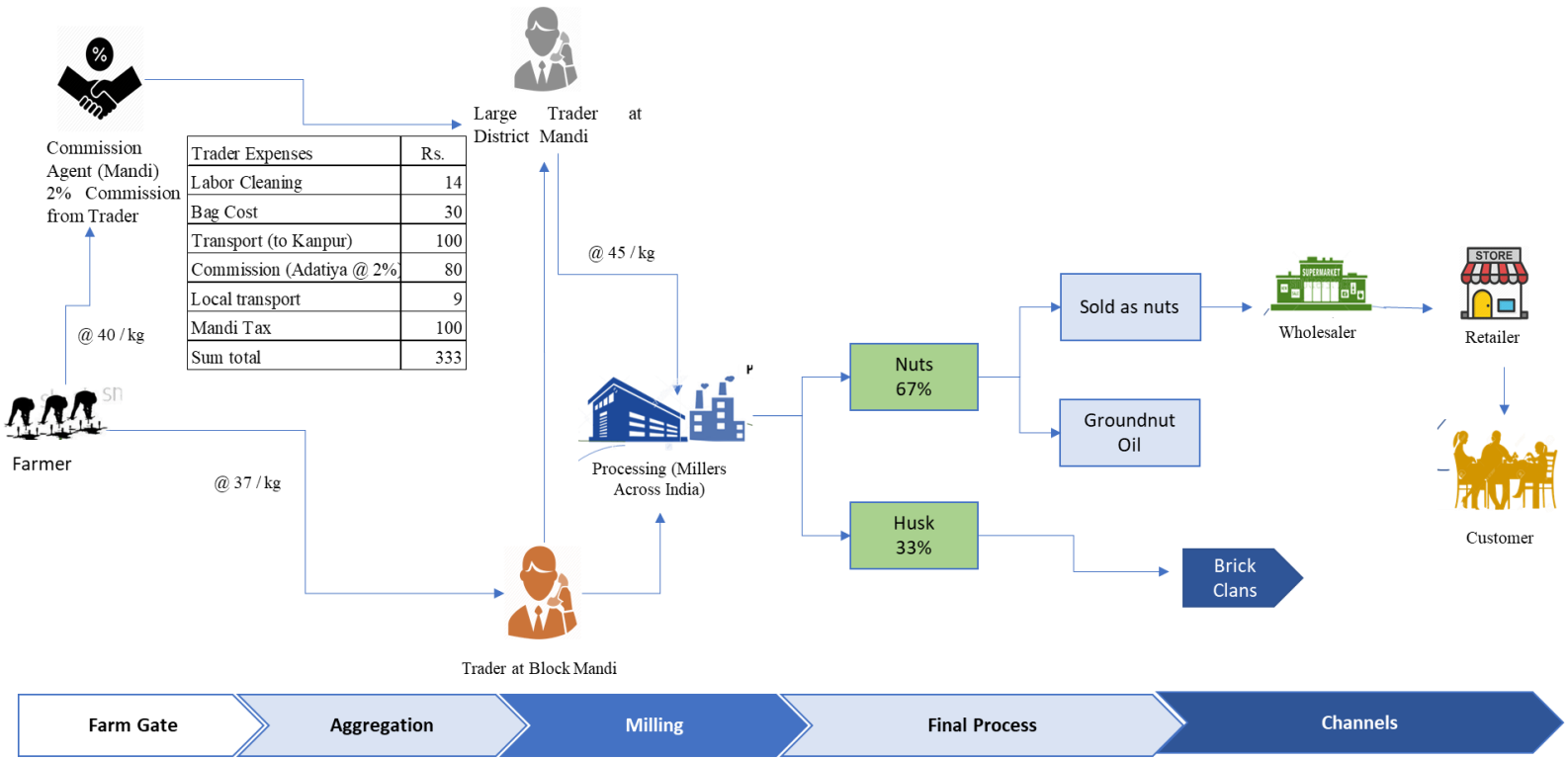
### •Price Trends of Local Market



# Groundnut Value Chain

## Activities and Stakeholders

Existing Process in Groundnut Value Chain




| Trader Expenses | Rs. |
|---|---|
| Labor Cleaning | 14 |
| Bag Cost | 30 |
| Transport (to Kanpur) | 100 |
| Commission (Adatiya @ 2%) | 80 |
| Local transport | 9 |
| Mandi Tax | 100 |
| Sum total | 333 |

## Groundnut Value Chain

The Groundnut Value chain in the region involves multiple stakeholder starting from Village Level Aggregator (VLAs), Commission Agent, traders and millers / Processors. Most of the farmers prefer to sell their produce at village level to the VLAs who predominantly belong from same village or nearby villages. VLAs transport the produce to traders/ millers / Processor, usually within 20 – 50 km radius of the village.

Commission Agents are responsible for connecting farmers to the traders. They work on fixed commission basis & help in collectivizing the produce at the mandi, and organize an open bid cry where the traders bid competitively for the produce.

Traders operate from Mandi / open market and procures commodity either from Mandi or from VLAs. They stock their commodity at their warehouse which is later sold to millers/processor. They play important role as intermediary finance of the stocks and make margin for this role.

The next important stakeholder in the supply chain are processors / Millers, where value addition in primary products occurs. They procure groundnut from traders/ mandi / VLAs. At miller / processor level the raw groundnut pod is processed into nuts (~67%) and husk (~33%). The nuts obtained are further processed into Groundnut oil or are sold as nuts to consumer through wholesale and retail channel.

## Value Chain Gaps

In the existing value chain, it has been observed that farmers are at the bottom of value chain and have very low share in consumer rupee in value added products. Some of the weakness / gaps in the Value Chain are:

- **Arbitrary price Discovery :** The buyer has access to various markets and price points compared to the farmer, hence has an information advantage over the farmer. NCDEX and APMC mandi play major role in price discovery of commodity. Farmer doesn't have access to platform like these. Also, lack of information regarding prevailing prices , arrivals etc. force farmers to sell in the village itself.
- **Payment terms:** Different channel pays them differently but none of them pays them promptly and without reminders. In order to realize payment at point of sale, farmers have to take cut of 1% of price of commodity.
- **Other transaction costs incurred in selling her produce:** To make her produce sales worthy, the farmer is expected to pack them in PP or gunny bags, transport them to the nearest market or mandi and take arbitrary cuts on account of foreign material, moisture and any other arbitrary cut that the buyer is able to enforce. The high transaction cost often forces farmers to liquidate their produce to VLAs at whatever price being offered by them.
- **Crop vulnerability to lots of soil borne diseases –** Due to lack of good agriculture practices like crop rotation and soil management in the region the crop is vulnerable to a lots of insect pest and diseases specially the soil borne disease
- **Anna Practise (Anna Pratha) –** The practice of leaving cattle in the open (Anna Pratha) where they loiter like stray animals in search of fodder even after 1 month of sowing of crops in the region cause lot of damages to the standing crops.
- **Irrigation facility –** The agriculture in the region is predominantly rainfed & the region often faces drought like situation. Due to untimely rain farmers often miss the timely sowing. Also, production is preferably done only on those part of landholdings which are connected to any source of irrigation leading to low overall acreage production.
- **Underdeveloped Extension Services –** Farmers in the region lack different types of extension services like on field demonstration, training on good packages & Practices, transfer of technology, nutrient and insect pest management etc.

| | Crop | Groundnut | |
|---|---|---|---|
| # | Description | Nearest block Mandi | District Mandi |
| A | Distance from Village (in kms) | 20km | 50 km |
| B | Price Offered to Farmer | 3900 | 4000 |
| C | Transaction Cost | | |
| 1 | Transportation Cost/Qtl | 30 | 60 |
| 2 | Malpractices in weighment @ 1% | 37 | 40 |
| 3 | Hamali | 15 | 15 |
| 4 | Farmers own expenses on food, tea etc | 25 | 25 |
| 5 | Travelling Cost of farmer(returning | 15 | 25 |
| 6 | Discount for cash payment @ 1% | 37 | 40 |
| 7 | Opportunity cost/wage loss for a day | 150 | 150 |
| | TOTAL Transaction Cost (Rs/Qtl) | 309 | 355 |
| | Net Realization (Rs/Qtl) | 3591 | 3645 |

Source : Field Data

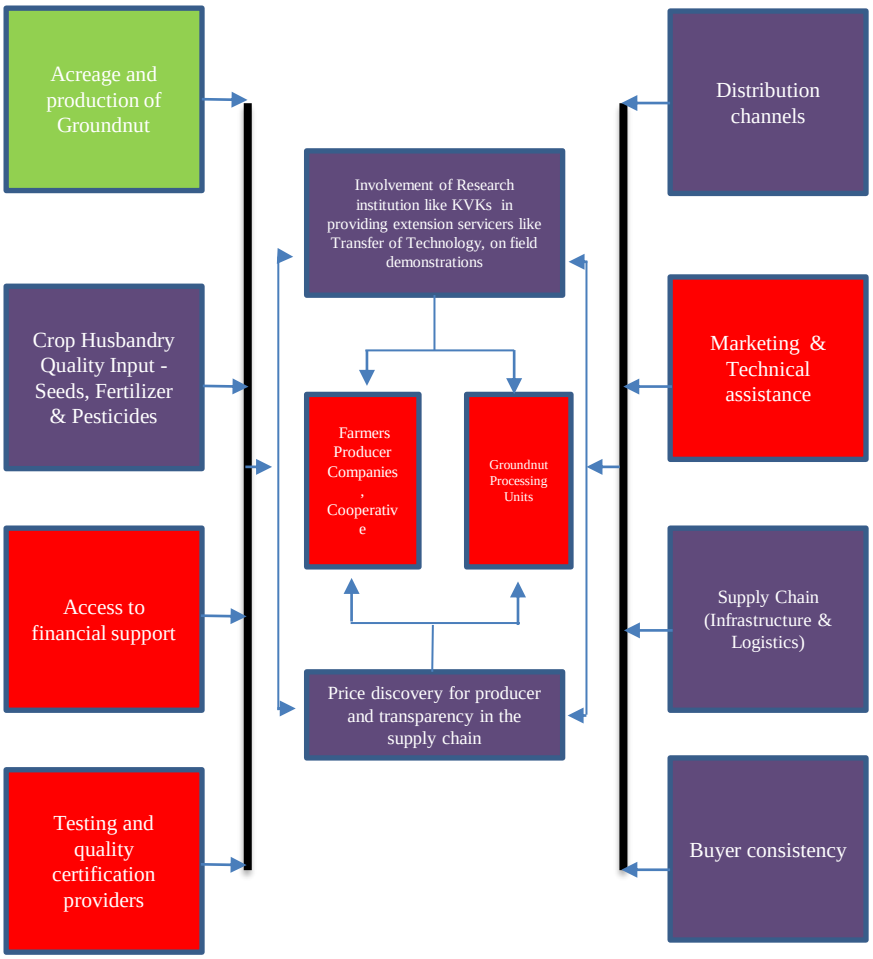
**Transaction Cost Analysis**

The farmers incur transaction cost of around Rs. 300 – 350 per quintal while selling through the existing channel. The transaction cost consists of all the direct and indirect expenses which the farmer bears when he / she uses a channel to sell their produce. The major components in transaction cost in case of Groundnut in the region are mainly the transportation, different malpractices at Mandi and Discount for cash payment.

A detailed transaction cost analysis reveals that farmer incurs maximum cost through direct sales channel while selling into the major markets in the region. Although the returns are higher in this case but risk and associated transaction cost are also high leading to low net realization. The least transaction cost is when the farmers sell to village level aggregators, but the associated returns are also less in this case. Hence a model of low transaction cost and appreciable returns can be of benefit for the farmers.

# Constraints and Opportunities in the value chain

## Opportunities & Potential Intervention



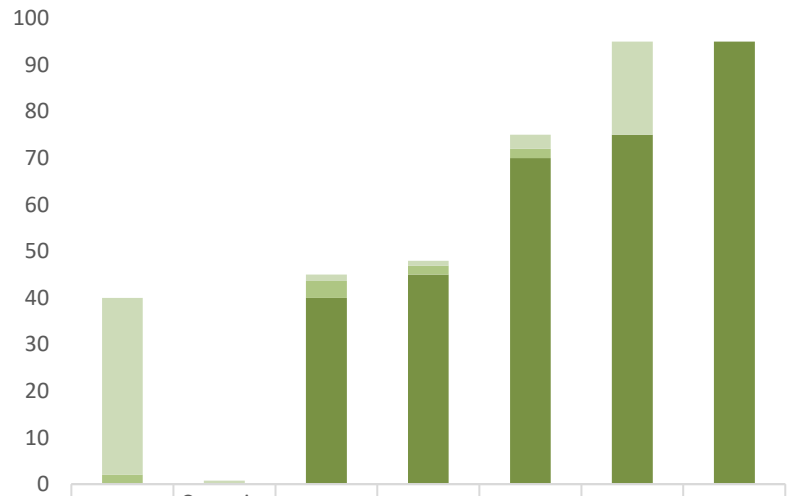

"I do cultivation of Groundnut, Gram, Pea, wheat etc. Agriculture in our region suffers from untimely rain coupled with lack of irrigation sources because of that we often miss our sowing time. Further, only around 20 - 30% of farmers in the region have the access to quality input like pesticides & often suffer crop losses in case of pest attack. The other major problem in our region is of Anna pratha (system) where cattles are left open in the field even after sowing which leads to huge crop losses. Most of the small & marginal farmers in the region lack bargaining power and resort to selling their produce to village level aggregators in search of immediate cash as well as higher transaction cost involved in going to Mandi."

Voice of representative farmer

Potential point of Intervention in the existing value chain of Groundnut is at the Aggregation and Processing level. Identified value chain gaps and transaction cost analysis suggests that there is enough opportunity to be capture at Village Level Aggregators, trader and miller level in order to reduce the transaction cost of farmers and in turn increase the net realization.

There is a scope for establishment of setting up of FPC that procures from its member shareholders at the village level through transparent system in place, processes and market the produce under the brand of PC thus increasing farmers share in consumer rupee in value added products.

Further there is scope of reducing cost of cultivation through FPCs by undertaking joint input sourcing activities for seeds, fertilizers, pesticides etc. under the umbrella of Producer Company.




| | Farmer | Commission Agent | Trader | Miller* | Wholesaler | Retailer | Consumer |
|---|---|---|---|---|---|---|---|
| Margin/Kilo | 37.9 | 0.8 | 1.4 | 1.05 | 3 | 20 | |
| Expenses | 2.1 | 0 | 3.6 | 1.9 | 2 | | |
| Buying Price | | | 40 | 45 | 70 | 75 | 95 |

# *Food for thought.....*


Transparent procurement system

Good package & practises

Bulk Production


Branding & Marketing, Market Linkage

## Farmer Producer Organizations

***Five-point agenda:***

1. ***Capacity Building***: Strengthening farmer capability through agricultural best practices for enhanced productivity. Farmer sensitization on recommended Good Agriculture Practices of Groundnut on critical activities like Land preparation, insect – pest management, Harvestable maturity , Post Harvest management etc. could be done on order to reduce losses of farmers.

2. **Transparent procurement & Reduced Transaction costs :** Procurement of farmer's produce at the village level by ensuring complete transparency through usage of Electronic weighing scale, Vibro separator, moisture meter and other equipment

3. ***Quality Inputs***: Ensuring access to and usage of quality inputs, credit and other services at affordable prices for enhanced production. FPC can also help in reducing cost of cultivation by undertaking bulk purchase of agri input at wholesale price and selling farmers at a price equal to or lower than the retail price.

4. **Value Addition –** Facilitate tie up with processors for value addition of the produce or setting up of own decorticator for nut extraction.

5. **Market Linkage –** Enabling the farmers to have access of diverse range of markets including the traders, mill owners, private label manufacturers, ecommerce giants etc.

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A joint initiative of Ministry of Rural Development & Tata Trusts

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