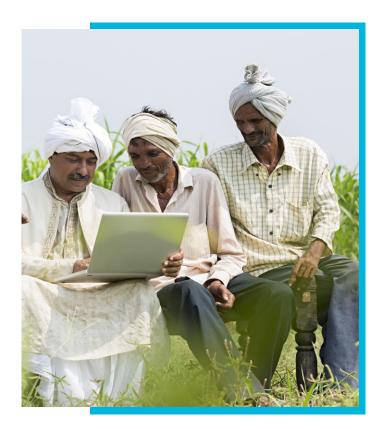




# **Market Linkages**





### ABOUT US -

NCDEX e Markets Limited (NeML), is India's leading fully integrated digital marketplace for all commodities and intangibles with a nation-wide network.

### VISION -

Relentless pursuit of excellence to strengthen our position as the premier e Market place in the country with a best-in-class integrated solution for commodities and intangibles whilst maintaining the highest standards of governance and environmental sustainability.



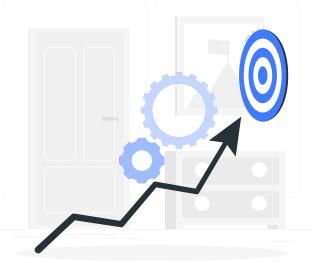


### **MISSION** -

- Create an integrated e-market platform solution using cutting-edge technology innovatively to offer robust & transparent price discovery & liquidity mechanisms for all commodities & intangibles
- Build and enable an end-to-end e-market ecosystem for all commodities and intangibles leveraging NeML's extended business relationships starting from KYC compliance, on-boarding, right up to the clearing & settlement
- Deliver superior returns for our shareholders maintaining highest levels of governance whilst ensuring that we fulfil the aspirations of all our other stakeholders including farmers, FPOs, Government & its various agencies, business partners and corporates to achieve long term sustainability
- Become the great place to work & be the preferred employer of choice

### **VALUES** -

- We will continue to strengthen trust amongst all our stakeholders
- We will further establish all our transactions & relationships on integrity & honesty
- All our actions & solutions will be built on high levels of transparency & fairness
- We are obsessed to do everything to ensure client delight & success



## NeML OWNERSHIP



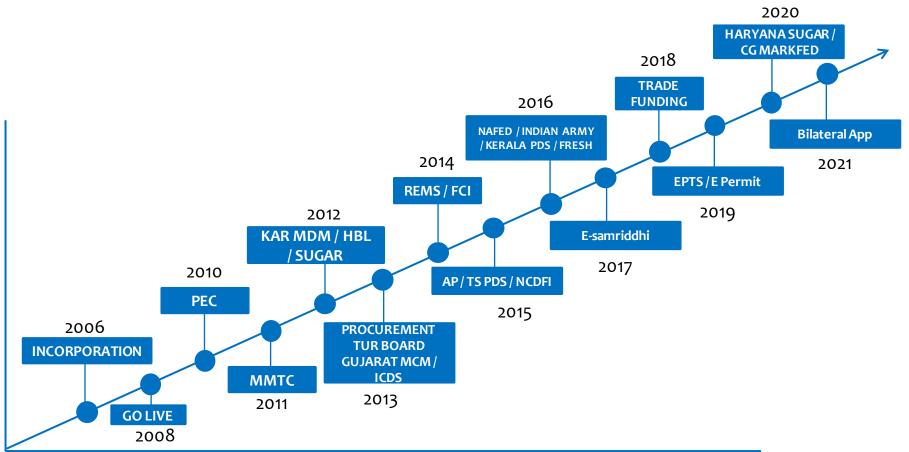
### NCDEX SHAREHOLDING PATTERN

Sr.No.	Name of the shareholder	% of total capital
1	National Stock Exchange of India Limited (NSE)	15.00%
2	Life Insurance Corporation of India (LIC)	11.10%
3	National Bank for Agriculture and Rural Development (NABARD)	11.10%
4	Indian Farmers Fertilizer Cooperative Limited (IFFCO)	10.00%
5	Oman India Joint Investment Fund	10.00%

NCDEX owns 100% of NeML

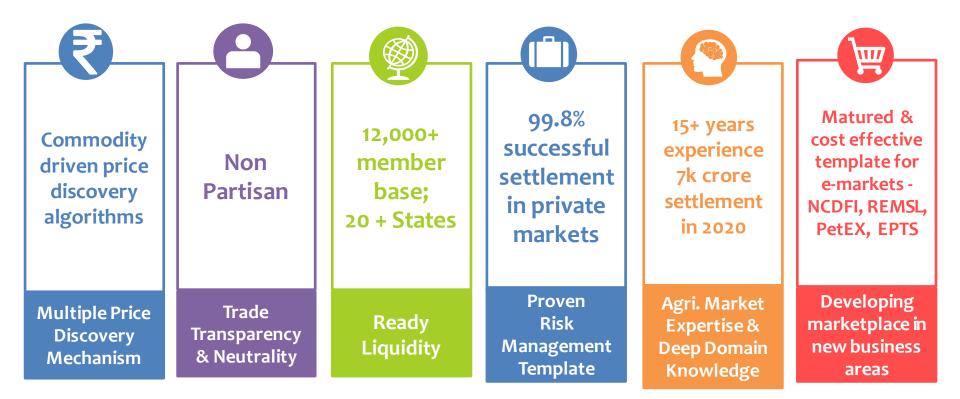
## NeML BUSINESS JOURNEY





## DIFFERENTIATOR





### OUR REACH : COMMODITY AND REGION MAP



				Land			nanoronning mari	
North	Agency	New Members	Commodities		Agency	New Members	Commodities	East
8 N	NAFED	1144	Mustard, Wheat ,		NAFED	207		Ш
	СР	349	Paddy, Sugar,	PUNJAB	СР	307	-	
	NCDFI	615	Kabuli Chana, Bajra	for the I	NCDFI	230	Wheat , Maize	
				HARVANA	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	>		
	Agency	New Members	Commodities	RAJASTHAN UTTAR PRADESH BIHAR	3 Ag			
	NAFED	2906	Groundnut , Tur ,	GUJARAT MADHYA PRADESH	(A)			
West	CP	924	Chana , Maize ,	PRADESH ST PENGAL	1			
8			Moong , Mustard , Sugar , Coriander ,	MAHARASHTRA	Agency	New Members	Commodities	
			Jeera . Turmeric .			Members		m l
	NCDFI	718	Jeera , Turmeric , Jowar	TELANGANAT TELANGANAT	NAFED	709	Wheat , Urad,	ntral
		·	Jowar	The second second	NAFED CP		Wheat , Urad, Maize,	Central
	NCDFI Agency	718 New Members		ANDHRA PRADESH		709		Central
Ith		New	Jowar	ANDHRA PRADESH	СР	709 276	Maize, Soyabean,	Central
South	Agency	New Members	Jowar	The second second	СР	709 276	Maize, Soyabean,	Central
South	Agency NAFED	New Members 1405	Jowar Commodities Tur, Urad, Chana, Sunflower Seeds, Groundnut , Moong,	ANDHRA PRADESH	СР	709 276	Maize, Soyabean,	Central
South	Agency NAFED	New Members 1405 1518	Jowar Commodities Tur, Urad, Chana, Sunflower Seeds,	ANDHRA PRADESH	СР	709 276	Maize, Soyabean,	Central

## Animal Feed Industry – Current Challenges



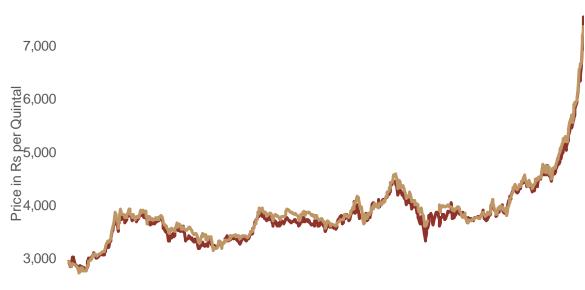
- Diversion of raw materials : Sorghum and Maize, a major commodity for human consumption and ethanol production leading to shortage for feed Industry. CAGR of feed Industry however is at 12.5% (2021-2026)
- Extreme volatility and Rising costs of Feed: Raw materials constitutes 70% of production costs. Pressure to minimize the costs or keep it under control to maintain margins. (ex: Maize: +/- 16 % in FY2021)
- Non Acceptance of Imported Genetically Modified Organisms (GMO) cereals and brans: Leading to higher input costs domestically and also imposition of high trade barriers (Ex Soya meal recent increase in import duty for limited time frame)
- Exchange rate Instability : Feed commodities are all globally traded and are dependent on variety of sources of imports of sensitive materials resulting in escalation of costs
- **Frequent outbreaks of diseases :** Food and Mouth Diseases, Black Quarter infection, Influenza etc. continue to affect Livestock health and lowers the productivity.

Core concern : Managing Price Volatility and Ensuring timely availability of Material

### Soybean Spot and Future Correlation

8,000





## 2,000 $O^{2^{-1}}$ $S^{2^{-1}}$ $S^{2^{-1}$

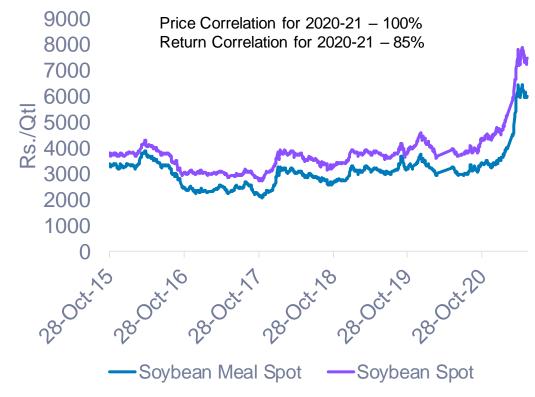
## Anchoring of Spot prices to Future prices

- Settlement of the contract on the spot price on the day of the expiry
- Compulsory delivery contract
- Imposition of Margins
- Position Limits

### Soybean and Soymeal Correlation



### Soybean and Soybean Meal Spot Price



Year	Correlation
2017-18	80%
2018-19	77%
2019-20	75%
2020-21	85%

### Hedging through Soybean and Soy Oil Futures



#### Soybean Meal Hedging through Soybean and Soy Oil Futures

- Soybean and Soybean Meal prices are highly correlated
- A Soybean Meal end user can take position in Soybean future at a ratio of 100:120
- For hedging 1000 MT of Soybean meal one can take 1220 MT position in Soybean futures and 215 MT position in Soy oil futures contract

Sr. No.	Particular	
1	Processing Cost Per MT	1500
2	Refining Cost per 10 KG	30
2		00
3	Desired Hedged Quantity Soybean Meal MT	1000
4	Soybean to be purchased MT	1220
5	Soybean Oil to be purchased MT	215

#### Hedging Soymeal with Long Soybeans + Short Soy oil

- □ Analysis performed on last two years data of actual traded price of soybeans and soy oil and spot Indore soymeal price.
- □ This analysis is done for hedging 1000 MT(each month) of soymeal using soybean (1220 MT) and soy oil (215 MT) futures by taking positions 2 months prior to the expiry month (M-2) and squaring off the positions in the first 5 days of expiry month (M).

Purchase Month	Contract Expiry Month	Exit Month
November	January	1 <sup>st</sup> Five Days of January
December	February	1 <sup>st</sup> Five Days of February
January	March	1 <sup>st</sup> Five Days of March
February	April	1 <sup>st</sup> Five Days of April
March	May	1 <sup>st</sup> Five Days of May
April	June	1 <sup>st</sup> Five Days of June
May	July	1 <sup>st</sup> Five Days of July
June	August	1 <sup>st</sup> Five Days of August
July	September	1 <sup>st</sup> Five Days of September
August	October	1 <sup>st</sup> Five Days of October
September	November	1 <sup>st</sup> Five Days of November
October	December	1 <sup>st</sup> Five Days of December

### Soymeal Hedging using Soybean and RSO futures



futures expiry	Buy SB SFP (M-2)	Sell RSO SFP (M-2)	Sell SB SFE (M)	Buy RSO SFE (M)	Indicative SM	Adjusted for futures
month	(per 100 Kg)	(per 10 Kg)	(per 100 Kg)	(per 10 Kg)	SFP (Per MT)	SM SFE (per MT)
Oct-19	3,515	750	3,808	760	29,318	31,670
Nov-19	3,659	760	3,982	784	30,872	29,838
Dec-19	3,752	763	4,106	833	31,951	30,711
Jan-20	4,028	804	4,317	931	34,438	35,133
Feb-20	4,299	879	4,098	846	36,134	35,268
Mar-20	4,228	892	3,741	785	34,992	35,111
Apr-20	3,913	807	3,777	807	32,956	NA
May-20	3,602	757	3,830	772	30,238	NA
Jun-20	3,745	765	3,921	808	31,816	31,307
Jul-20	3,746	757	3,748	811	32,003	30,953
Aug-20	3,777	808	3,850	876	31,290	30,613
Sep-20	3,746	835	3,931	884	30,322	31,417
Oct-20	3,762	877	3,901	906	29,644	30,184
Nov-20	3,899	907	4,280	986	30,655	30,811
Dec-20	4,191	942	4,376	1,061	33,489	33,950
Jan-21	4,400	1,029	4,655	1,200	34,154	35,209
Feb-21	4,401	1,088	4,625	1,106	32,918	34,160
Mar-21	4,619	1,114	5,122	1,180	35,032	35,036
Apr-21	4,805	1,129	6,360	1,309	36,973	37,190
May-21	5,367	1,234	7,404	1,427	41,597	41,159
Jun-21	6,747	1,327	7,053	1,409	56,432	58,133
Jul-21	6,921	1,385	7,501	1,283	57,322	54,426

### Soymeal Hedging using Soybean and RSO futures



futures	A) SB Buy	B) RSO Sell	C) SB Sell	D) RSO Buy	E) Indicative SM Price (per MT)	F) Futures P/L		H) Adjusted for futures	I) SM Spot	J) SM Spot	MTM gain/Loss on	Incremental cost on
expiry	value (M-2)	Value (M-2)	value (M)	Value (M-2)	[(A/1250+1500(P.C))-((B/215-	(per MT of SM)	first 5 days	SM spot price (Per MT)	variance with	variance without	Futures positions	unhedged soymeal
month	1220MT	215 MT	1220 MT	215 MT		[(B+C-A-D)/1000]	average (M)	[G-F]	Hedge [(H-E)/E]	Hedge [(G-E)/E]	[F*1000]	purchage [(G-E)*1000]
Oct-19		1,61,33,400	4,64,62,050	1,63,29,700	29,318	3,386	35,056	31,670	8%	20%		57,37,469
Nov-19		1,63,38,550	4,85,74,400	1,68,54,450	30,872	3,420	33,258	29,838	-3%	8%	34,20,050	23,85,759
Dec-19		1,63,95,075	5,00,87,900	1,79,06,600	31,951	2,803	33,513	30,711	-4%	5%		15,62,771
Jan-20		1,72,75,750	5,26,66,100	2,00,25,000	34,438	781	35,913	35,133	2%	4%		14,75,697
Feb-20	5,24,47,200	1,89,01,600	4,99,89,600	1,81,96,500	36,134	-1,753	33,515	35,268	-2%	-7%	-17,52,500	-26,18,518
Mar-20		1,91,74,100	4,56,35,100	1,68,77,600	34,992	-3,644	31,467	35,111	0%	-10%	-36,44,300	-35,25,476
Apr-20	4,77,38,000	1,73,60,300	4,60,84,500	1,73,59,600	32,956	-1,653	NA	NA	NA	NA	NA	NA
May-20	4,39,47,600	1,62,81,600	4,67,28,400	1,66,05,300	30,238	2,457	NA	NA	NA	NA	NA	NA
Jun-20	4,56,85,200	1,64,42,100	4,78,36,600	1,73,67,400	31,816	1,226	32,533	31,307	-2%	2%	12,26,100	7,17,214
Jul-20	4,56,99,500	1,62,67,700	4,57,31,400	1,74,38,100	32,003	-1,139	29,815	30,953	-3%	-7%	-11,38,500	-21,88,194
Aug-20	4,60,78,200	1,73,67,550	4,69,74,600	1,88,23,450	31,290	-560	30,053	30,613	-2%	-4%	-5,59,500	-12,36,403
Sep-20	4,57,00,000	1,79,62,100	4,79,59,100	1,90,09,850	30,322	1,211	32,629	31,417	4%	8%	12,11,350	23,07,012
Oct-20	4,59,02,000	1,88,48,150	4,75,89,400	1,94,80,150	29,644	1,055	31,240	30,184	2%	5%	10,55,400	15,95,609
Nov-20	4,75,68,250	1,95,07,350	5,22,14,250	2,12,04,800	30,655	2,949	33,760	30,811	1%	10%	29,48,550	31,04,564
Dec-20	5,11,33,400	2,02,42,500	5,33,91,850	2,28,20,600	33,489	-320	33,630	33,950	1%	0%	-3,19,650	1,40,769
Jan-21	5,36,76,200	2,21,33,200	5,67,90,400	2,57,99,250	34,154	-552	34,658	35,209	3%	1%	-5,51,850	5,03,344
Feb-21	5,36,93,700	2,33,96,000	5,64,29,350	2,37,87,050	32,918	2,345	36,505	34,160	4%	11%	23,44,600	35,86,739
Mar-21	5,63,56,400	2,39,47,850	6,24,89,650	2,53,76,200	35,032	4,705	39,741	35,036	0%	13%	47,04,900	47,08,885
Apr-21	5,86,22,000	2,42,74,050	7,75,91,850	2,81,51,150	36,973	15,093	52,283	37,190	1%	41%	1,50,92,750	1,53,09,585
May-21		2,65,21,600	9,03,27,250	3,06,78,000	41,597	20,691	61,850	41,159	-1%	49%	2,06,90,950	2,02,52,804
Jun-21		2,85,27,350	8,60,41,950	3,02,89,850	56,432	1,967	60,100	58,133	3%	6%	19,66,650	36,67,595
Jul-21		2,97,69,750	9,15,10,400	2,75,88,900	57,322	9,254	63,680	54,426	-5%	11%	92,54,450	63,57,883
Total											6,29,18,425	6,38,45,107

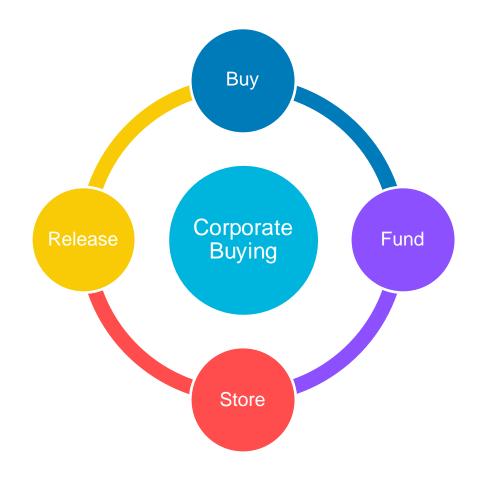
## **BUYING ON NEML**



- Customise your buying contracts as per your requirements
- NeML ensures appropriate risk management measures like EMD and SD
- Assaying can be arranged by 3<sup>rd</sup> party agencies
- Large KYC verified Seller base on NeML along with dedicated relationship managers
- Various price discovery methodologies
- Trade fulfilment and Settlement is of Gold standards
- Over 14 Private and PSU banks enabled for settlements
- Option to trade on web mode and app
- Funding linkages with empanelled NBFC's

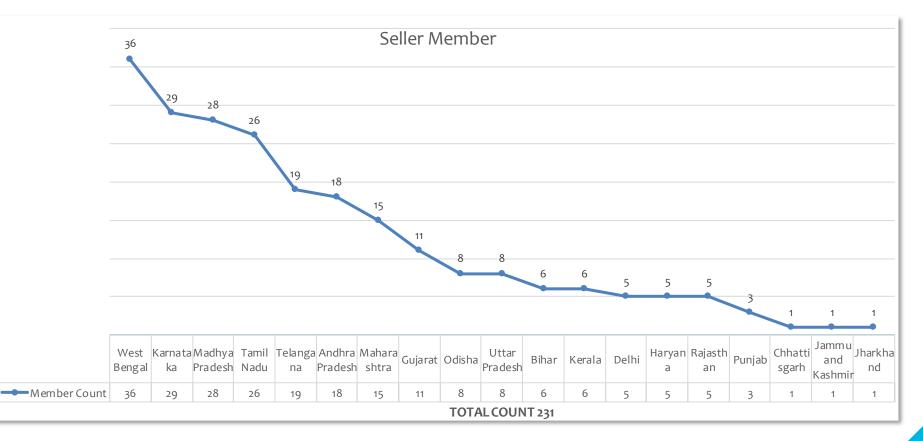
## **CORPORATE BUYING - NEML**





- Mandate to do physical purchase on your behalf with your Quality & Quantity specifications
- Purchase from Farmers / FPO's / Traders @
  Designated locations (eg.Gulbagh / Maize)
- 100% transparency of operations
- Extensive use of mobile enabled technology for procurement / storage and payments
- NeML offers price risk management
- NeML will also arrange for funding at competitive rates / linkages with empanelled NBFC's

## ANIMAL FEED : SELLER MEMBERS ON NEML SING MARKETS



### NCDFI



#### About

- NeML was tasked by the National Cooperative Dairy Federation of India (NCDFI) in November 2014 to setup an electronic market place for the efficient buying and selling of dairy products across India.
- NeML was instrumental in conceptualizing and developing NCDFI e-Market (ncdfiemarket.com) and gradually increasing its scope from Dairy product platform to both Dairy and Agri commodity platform. Thus, resulting in better returns to dairy cooperatives and in turn to milk producers

#### Achievement

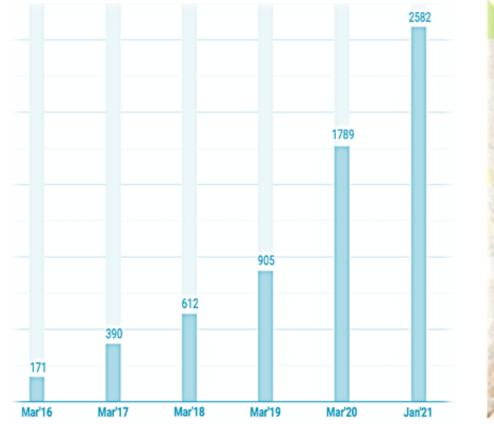
- The commodities being traded on the NCDFI e-market platform are dairy products, cattle feed ingredients, edible oils, fodder seeds, packaging materials, sugar, chemicals, scrap, etc., apart from various service contracts.
- The platform in the year 2020-21 recorded a turnover of over Rs.3,000 Cr. In a span of 6 years.
- All the leading brands of dairy cooperative sector have adopted this platform.



### NCDFI – MEMBERSHIP & INGREDIANTS







### **Cattle Feed Ingredients**

Bajra Barley Bentonite Power Calcite Powder Calcium Carbonate Calcium Powder Chromium **Cobalt Sulphate** Coconut Meal Coffee Husk Powder **Copper Sulphate** Cotton Seed Meal **Dicalcium Phosphate** Gram Groundnut Meal Guar Korma Meal Ground Nut Shell Powder

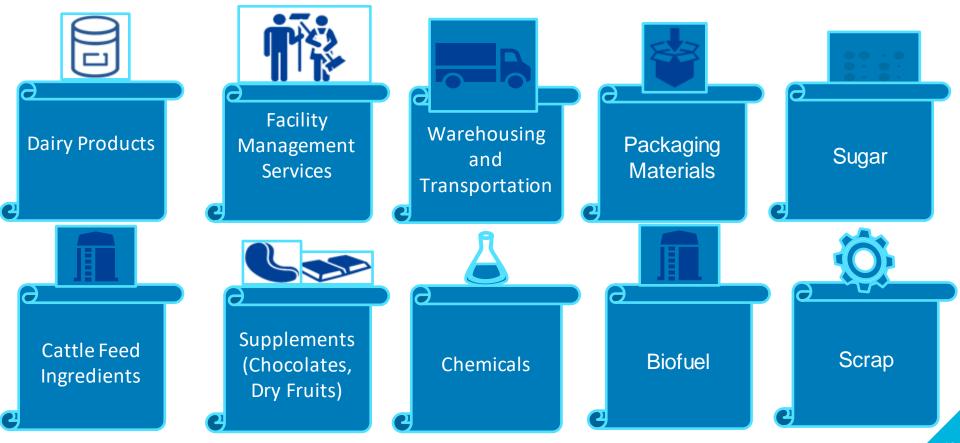
Gur Gypsum Horse Gram Inorganic Minerals Jowar Kemin Maxim Dry Koran Bran Lacto Vanilla Magnesium Oxide Maize Manganese Sulphate Mineral Mixtures Molasses Mustard Meal Palm Kernel Cake Pottasium lodide Ragi Sodium Thio Sulphate Dried / Monodhydrates

Rice Rice Bran/Polish Sal Seed Salt Sesame Meal Shea Soya Bean Meal Sun Flower Meal Sweetener Tapioca Trace Minerals Tur Urea Wheat Yeast Zinc Sulphate Jaggery N

### **NCDFI – Auctions Coverage**







### **ASSOCIATED BRANDS**

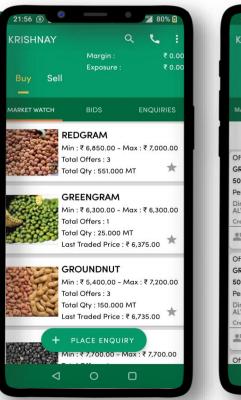


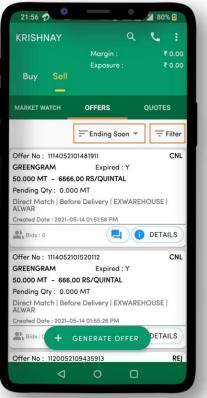


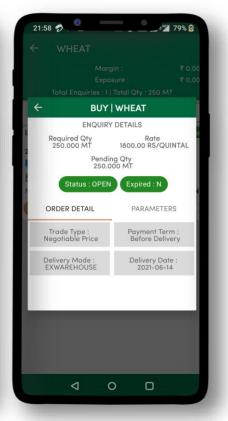
## NeML DIRECT – PRIVATE Market App















# **#Thank You**

It was nice meeting you!!