

## Rising commodity prices to maintain demand momentum for Agri inputs

We hosted Mr. Sameer Goel – Managing Director, Coromandel International & Mr. Balram Singh Yadav – Managing Director, Godrej Agrovet, to get their individual perspectives on the inflation in agricultural commodities (as per the World Bank, prices in Apr'21 increased 83% YoY for Maize, 64% YoY for Soybean, 76% YoY for Palm Oil, 58% YoY for Sugar, and 43% YoY for Cotton). Furthermore, we wanted to understand the implication of this inflation – driven by supply-side disruptions, stockpiling, and speculation – on various stakeholders (farmers, corporates, and the economy) as well as the current situation on the ground. Here are the key takeaways:

### CMr Sameer Goel – MD, Coromandel International

During his career, spanning more than 28 years, he has held various roles in India, the UK, the UAE, and West and South Africa; he was Vice President for Africa when he moved from GSK. He has extensive experience in managing businesses, driving sales across multiple geographies, and building B2C businesses.

### Key takeaways from our meeting with Mr Sameer Goel – Managing Director, Coromandel International Agricultural industry

- **Increase in Food Price Index:** As of Apr'21, the Food Price Index posted a rise for the 11<sup>th</sup> consecutive month and was at the highest levels since May'14. Growth was largely driven by vegetable oils and cereals, lower output and decline in inventory levels, and stockpiling in China.
- The monsoon forecast for CY21 remains normal, and reservoirs in South and West India are at good levels; these factors bode well for acreages.
- **RM prices:** Since Nov'20, prices have surged across DAP, phos acid, ammonia, and sulfur. This is largely attributable to a sharp increase in commodity prices, leading to a rise in RM prices. Moreover, increased demand, coupled with lower availability from Brazil, China, the US, and India, contributed to the price rise.
- **NBS rates:** The government has increased the subsidy on phosphorous by 204% to INR45.3/kg, keeping the subsidy rate constant for NKS. This led to a fall in DAP prices (for farmer) to INR1,200/bag (from INR1,900/bag).

### Specific to Coromandel International (CRIN)

- **Backward integration:** CRIN has increased focus on backward integration and fully integrated its Vizag and Ennore plants. The company is increasing capacity in Vizag and also installing an evaporator at the plant, which would help transport concentrated acid to the Ennore plant.
- **Capital allocation:** Going forward, the major focus and investment would be toward crop protection chemical plants (new MPP installations). It would also focus on backward integration to reduce the number of imports.
- The company is also looking at inorganic expansion opportunities – as CRIN has fully repaid its long-term and short-term debts.

### Mr Balram Singh Yadav, MD, Godrej Agrovet

He is also MD of Godrej Tyson Foods and Former Chairman of the Compound Livestock Feed Manufacturers Association of India. Additionally, he serves as Director on the boards of ACI Godrej (Bangladesh), Creamline Dairy Products, and Polychem Hygiene Laboratories. In the last 19 years, he has handled positions of increasing responsibility, including Deputy Sales Manager (Khanna), Factory Manager, and Operations Manager.

## Key takeaways from our meeting with Mr Balram Singh Yadav – Managing Director, Godrej Agrovet

### Industry concerns

- **Rural consumption:** Rural consumption slowed in FY21, largely due to a rise in the number of COVID cases in rural areas and consequent lockdowns. GoI has introduced various initiatives to revive rural demand, such as subsidizing all the fertilizers (namely urea, DAP, and P&K). Another INR190b has been allocated to 95m farmers under the PM Kisan Samman Nidhi (of which 45m farmers have received the funds). The drop in consumption is expected to be temporary, and demand is expected to bounce back faster than expected.
- **Commodity prices:** The surge in agri-commodity prices is expected to be corrected shortly – as prices are not sustainable at this level (15–20% decline may be expected) and reflect the change in global prices. Cereal prices are expected to remain elevated on increased demand from the Bio-Diesel segment.
- **Agri sector:** India's domestic sector saw a bumper rabi season, thereby paving the way for robust growth in FY22. Food grain production for the year is expected to be north of 307mmt.

### Specific to Godrej Agrovet (GOAGRO)

- **Animal Protein:** Post the lifting of the lockdown, a surge in demand is anticipated for chicken, eggs, and fish, potentially leading to a shortage in the market. 2Q/3Q/4QFY22 performance is expected to be considerably good v/s 1QFY22 and would thereby support annual growth for FY22.
- **Palm Oil:** At the current price level, farmers make ~INR200k/ha, the highest for any crop in the country. Palm oil prices are expected to remain high and are linked to bio-diesel demand, which also remains high. However, prices may correct by 10–15%, but would not return to previous levels (would be 25–30% higher than 2Q/3QFY21 levels).
- **Aqua Feed:** The Fish Feed business faced major headwinds as labor availability was an issue due to the lockdown. Shrimp feed demand continues to be robust, driven by global demand, leading to an increase in shrimp prices. With the impact of COVID gradually subsiding, the Shrimp business is expected to perform well in the current financial year.

## Detailed notes – Mr Sameer Goel – Managing Director, Coromandel International

### Agricultural sector

- **Increased global demand:** Globally, a steady increase in population is observed, along with a rise in wealth. This is in turn expected to lead to an increase in the calorie intake per capita, supported by hunger/poverty eradication. Australia, Africa, Southeast Asia, India, etc. are expected emerge as the world's largest food suppliers. India has higher irrigated land than China and could emerge as the largest agri supplier in the world.
- **GVA:** Gross value added (GVA) by the Agri sector in India increased to INR171t over CY2008–18. The value add is expected to increase 2x to INR230t over CY19–29.
- **Challenges in India Agri sector:** (i) **Decline in per capita land holdings:** The average land holding size fell from 2–2.5ha to ~1ha over 1970–71 to FY16. Recent government initiatives, such as contract farming, have led to the consolidation of land by large farmers to maintain supply. (ii) **Imbalanced nutritional usage:** The ideal ratio of NPK is 4:2:1, which increased sharply to 6.1:2.5:1 in FY18 (v/s 4.7:2.3:1 in FY11). (iii) **Lower mechanization:** According to the World Bank, the level of mechanization in India stands at 40% (v/s the US / Brazil / China at 95%/75%/48%). (iv) **Low crop protection consumption:** India's crop protection consumption stands at 0.6kg/ha (v/s the US/China 7kg/ha / 13kg/ha).
- **Eight global agri trends and impact on India:** (i) **Rising pressure on natural resources:** Pressure on natural resources is driving the need for micro-irrigation in India. (ii) **Changing dietary preferences:** Dietary patterns are evolving as demand for fruits, vegetables, and pulses continues to post a 6–8% CAGR v/s cereals (1%). (iii) **Evolution of farm holdings:** Declining avg. farm holdings. (iv) **Farm labor shortage:** Issues with labor availability are driving a 10% p.a. rise in the cost of cultivating major crops. (v) **Continued importance to political economy:** Additional government interventions in the form of higher MSP and Direct Benefit Transfers would support farmers. (vi) **Rise of digital farmers:** Increasing mobile penetration would provide a unique opportunity to use personalization to build a deeper farmer connect. (vii) **Farm tech advancements:** Data-driven agricultural and precision farming are changing the landscape of Agri and would continue to do so in the future. (viii) **Evolution of logistics:** The Logistics sector is evolving in India, with 42 mega food parks planned across the country.
- **Opportunity for agri companies:** Balanced nutrition, specialized nutrition, precision farming/ag-tech farming, and micro-irrigation are some of the major opportunities for agri companies going forward.
- **Impact of COVID on agriculture:** Agriculture was the only sector to report 3.4% GVA growth in FY21. Government spend – through MGNREGA, Social Assistance Program, etc. – increased to INR7,900b in FY21 (from INR4,400b in FY20). Also, the government procurement of paddy/wheat under MSP saw volume growth of 14%.
- Farm mechanization has also improved during the COVID period – tractor sales increased 28% YoY in FY21.

- The monsoon forecast for CY21 remains normal, and reservoirs in South and West India are at good levels; this bodes well for acreages.
- **Increase in Food Price Index:** As of Apr'21, the Food Price Index posted a rise for the 11<sup>th</sup> consecutive month and was at the highest levels since May'14. Growth was largely driven by vegetable oils and cereals, lower output and decline in inventory levels, and stockpiling in China.

### Indian Fertilizer industry

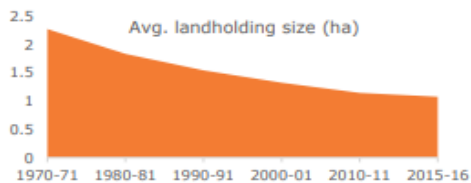
- **RM prices:** Since Nov'20, prices have surged across DAP, phos acid, ammonia, and sulfur. This is largely attributable to a sharp increase in commodity prices, leading to a rise in RM prices. Moreover, increased demand, coupled with lower availability from Brazil, China, the US, and India, contributed to the price rise.
- **NBS rates:** The government has increased the subsidy on phosphorous by 204% to INR45.3/kg, keeping the subsidy rate constant for NKS. This led to a fall in DAP prices (for farmer) to INR1,200/bag (from INR1,900/bag). The government disbursed an additional INR650b in 4QFY21.
- **Phos acid:** India's phos acid demand is pegged at 4.2–4.5mmt. Of the tradable ~4.5mmt phos acid available globally, India consumes more than 50%.
- **Prices:** DAP prices are currently lower. NPK sales are expected to increase; a shift can be seen to NPK from DAP. NPK is better for the soil and has other minerals and added benefits.

### Company-specific

- **Backward integration:** CRIN has increased focus on backward integration and fully integrated its Vizag and Ennore plants. The company is increasing capacity in Vizag and also installing an evaporator at the plant, which would help transport concentrated acid to the Ennore plant.
- **New products:** CRIN is gearing up on the Nutritional and Crop Protection fronts. Currently, ~25% of sales come from new products introduced last year. Going forward, CRIN plans to continue to invest in R&D. A similar approach would be adopted in the Nutritional biz as well.
- **Capital allocation:** Going forward, the major focus and investment would be toward crop protection chemical plants (new MPP installations). It would also focus on backward integration to reduce the number of imports. By Jun'21, capacity would increase to 1.5x that of current levels.
- The company is also looking at inorganic expansion opportunities – as CRIN has fully repaid its long-term and short-term debts.
- **Subsidy:** As of Apr'21, an INR650b government subsidy is pending across the industry, largely due to the surge in COVID-19 cases, coupled with budgetary cuts from the finance department.
- **Organic farming:** CRIN is the largest player in the Organic Farming segment in both the Nutritional and Bio-Pesticide sub-segments.

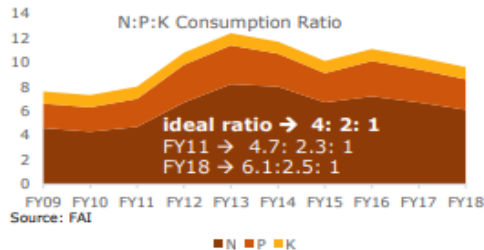
**Exhibit 1: Challenges in Indian Agricultural sector**

**Falling per capita land holding**



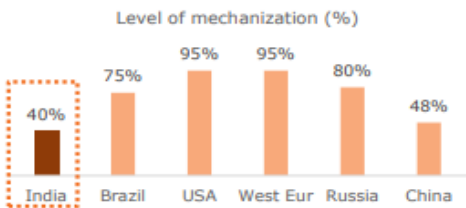
Source: Ministry of Agri

**Imbalanced Nutrient Usage**



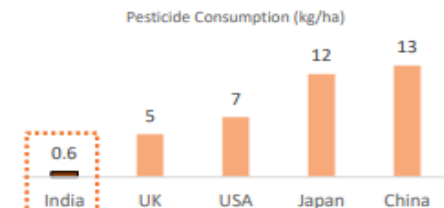
Source: FAI

**Low Mechanization**



Source: World Bank, FAO

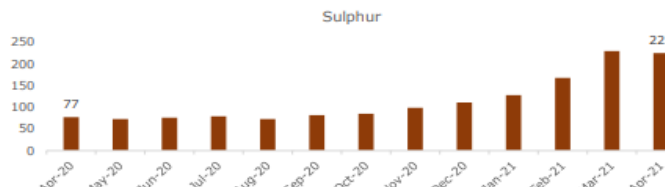
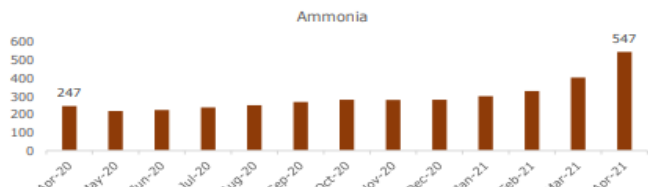
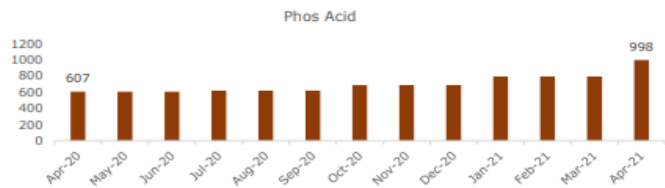
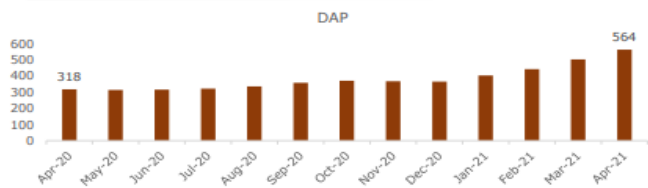
**Low Crop Protection consumption**



Source: FICCI

Source: Company, MOFSL

**Exhibit 2: Firming up raw material prices – Nov'20 onwards**



Source: Company, MOFSL

**Exhibit 3: Revised subsidy under NBS**

Nutrient	NBS (INR per Kg of Nutrient)		% ch.
	FY21	FY22	
N	18.789	18.789	0%
P	14.888	45.323	204%
K	10.116	10.116	0%
S	2.374	2.374	0%

Source: Ministry of Fertilizer, MOFSL

**Exhibit 4: Fertilizer-wise revised subsidy**

Name of Fertilizers	NBS Rates (in INR/MT)		% ch.
	FY21	FY22	
DAP 18-46-0-0	10,231	24,231	137%
MOP 0-0-60-0	6,070	6,070	0%
SSP 0-16-0-11	2,643	7,513	184%
NPS 20-20-0-13	7,044	13,131	86%
NPK 10-26-26-0	8,380	16,293	94%
NP 20-20-0-0	6,735	12,822	90%
NPK 15-15-15	6,569	11,134	69%
NP 24-24-0-0	8,082	15,387	90%
AS 20.5-0-0-23	4,398	4,398	0%
NP 28-28-0-0	9,430	17,951	90%
NPK 17-17-17	7,445	12,619	69%
NPK 19-19-19	8,321	14,103	69%
NPK 16-16-16-0	7,007	11,876	69%
NPS 16-20-0-13	6,292	12,379	97%
NPK 14-35-14	9,258	19,910	115%
NPS 24:24-0-8	8,082	15,387	90%
MAP 11-52-0-0	9,809	25,635	161%
TSP 0-46-0-0	6,848	20,849	204%
NPK 12-32-16	8,637	18,377	113%
NPK 14-28-14	8,215	16,737	104%
NPKS 15-15-15-09	6,783	11,348	67%
NP 14-28-0-0	6,799	15,321	125%
NPK 8-21-21	NA	13,145	NA
NPK 9-24-24	NA	14,996	NA

Source: Ministry of Fertilizer, MOFSL

### Detailed notes – Mr Balram Singh Yadav – Managing Director, Godrej Agrovet (GOAGRO)

#### Animal Feed

- Animal Protein:** Chicken and egg prices have been extremely low in May'21. Chicken prices have plunged from INR110/kg to INR45-50/kg in May'21, post the announcement of recent lockdowns across the country (whereas the cost of production stands at INR80/kg). Egg prices have also followed suit and dropped 30-40% during the month. Milk prices have also corrected by 15-20% in certain parts of the country. The decline in milk prices was slow as the lack of demand was accompanied by lower production across the country.
- According to the management, Post the lifting of the lockdown, a surge in demand is anticipated for chicken, eggs, and fish, potentially leading to a shortage in the market. 2Q/3Q/4QFY22 performance is expected to be considerably good v/s 1QFY22 and would thereby support annual growth for FY22.
- Aqua Feed:** The Fish Feed business has faced major headwinds due to lockdown. However, the Shrimp Feed business has seen good demand (driven by global demand), with domestic production lower than previous levels. Also, shrimp prices are rising owing to increased demand from foreign countries. The Shrimp business is expected to perform well in the current financial year.
- Poultry:** Poultry production is low across India. Compared with Jan'20, production levels of egg/chicken/milk/fish/shrimp have reached 80%/80%/90%/80%/85-90% levels. Post the lifting of the lockdown, demand across segments is expected to surge rapidly. Food inflation is likely to be driven by animal inflation.

- **Animal Feed:** Animal Feed business margin growth was muted (for GOAGRO) due to the pandemic. However, on a sequential basis, margins are improving, as R&D benefits have started to flow in. Margins are expected to surge in FY22.

### Palm Oil

- Area under cultivation for palm oil in India is ~2m-ha and the area covered is ~350k-ha. Farmers enjoy subsidies of INR50–60k/ha from the government and also gain 78–80% of the oil price. With this, and at current prices, domestic farmers make ~INR200k/ha, the highest among the crops in the country.
- Palm oil prices are expected to remain high as long as bio-diesel demand remains high. However, prices may correct by 10–15%, but would not return to previous levels (would be 25–30% higher v/s 2Q/3QFY21).
- Oil prices have remained high for the past six months. Palm oil prices were up 62% YoY, and sunflower / soya / groundnut / mustard oil prices were up 59%/55%/35%/48% YoY, respectively, at the retail level.
- GOAGRO has 35,000–40,000ha of oil palm plantations in AP (under contract farming); every hectare is geo-tagged and the company is able to access harvesting info, plant growth, fertilizer deficit, etc. and all the other necessary information. Furthermore, an infrared photographic system has enabled the company to analyze the oil content from fresh fruit bunches, which would aid the better and timely harvesting of fruits.

### Others

- **Agri sector:** India's domestic sector saw a bumper rabi season, and food grain production for the year is expected to be north of 307mmt. Global cereal prices remain high, leading to 13mmt exports of paddy, 0.5mmt of basmati, and 2mmt of wheat.
- **Plants:** Unlike the previous lockdown, all factories of GOAGRO are operational for 2–3 shifts across locations.
- **Labor unavailability remains concern:** Currently, there is huge demand for shrimp in the international market. India is unable to meet demand as shrimp harvesting is a man-power intensive job and labor availability is currently a major concern. Lower labor supply has led to a shortfall in meeting shrimp demand.
- Owing to an increase in mobile penetration, there is no information asymmetry anymore. Farmers are well-connected and well-informed via mandis and government websites. Increased digitization has led to GOAGRO or the government (post procurement) making direct payments to farmers.
- **Food supply chain:** Despite the pandemic, the food supply chain has not suffered. Although logistic operations have been affected, food supply and availability have been given priority.
- **Contract farming:** 80% of the INR700b Chicken industry is integrated. Integrators supply the feed, chicks, medicines, and vaccines and also transport the chicken from the poultry for sale in the market. Farmers enjoy contract farming charges and see up to 17–18% returns on investment. This model has worked successfully for the domestic Chicken industry – the per capita consumption of chicken increased to 4.5/kg in CY20 from 1/kg in CY'00. The GOAGRO management believes a similar business model should be applied to

other crops, resulting in higher returns for farmers and the streamlining of the entire process.

- **Commodity prices:** The surge in agri-commodity prices is expected to be corrected shortly – as prices are not sustainable at this level (15–20% decline may be expected) and reflect the change in global prices. Cereal prices are expected to remain elevated on increased demand from the Bio-Diesel segment.
- **Rural consumption:** Rural consumption slowed in FY21, largely due to a rise in the number of COVID cases in rural areas and consequent lockdowns. GoI has introduced various initiatives to revive rural demand, such as subsidizing all the fertilizers (namely urea, DAP, and P&K). Another INR190b has been allocated to 95m farmers under the PM Kisan Samman Nidhi (of which 45m farmers have received the funds). The drop in consumption is expected to be temporary, and demand is expected to bounce back faster than expected.
- **eNam:** Maintaining quality control is one of the initial challenges faced by the buyer. The eNam platform is expected to prove effective for inter-state buying/selling.



Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
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