

# Chemical Sector

## Channel Check and Annual Report KTAs

September 01, 2023

### Early days yet despite uptick in prices

#### Key Points

- The trend in Chemical prices has seen an uptick of late, reversing the YoY decline we had seen in 2HFY23 and 1QFY24. This in part is due to the recent increase in oil/gas prices – Brent is up 7.57% MoM in July'23/Aug'23. Given the uncertainty as to when the excess supply from China will abate and the subdued global demand outlook for CPC, this uptick in chemical prices could be transient, and may not sustain. (Please refer next page for chemical price trend).
- On a positive note, the key freight indices are down 77-90% as per the latest trends. This is likely to partly offset the headwinds caused by carryover of high-cost inventory and the muted pre-season booking of pesticides. Further, the 21.9% YoY decline in 2QTDFY24 oil price could imply lower energy costs. Overall, we believe that the CSM/CRAM companies with healthy balance sheets, visible order book/growth and new growth engines offer a better risk-reward over the next six months to one year compared to CPC companies.
- Agrochem CSM leader, PI Industries (our top BUY with TP of Rs4,534) offers new product launches, visible growth in CSM and potential for upside from the scale-up in the newly purchased Pharma business.  
**Risks:** Delay in CSM order execution, uncertain chemical pricing & China supply and adverse weather due to El Nino.
- **CPC sector bidding time for a sustained revival:** Healthy progress in monsoon and sowing (especially in rice) besides good soil moisture augur well for the Kharif season, as per the earnings calls of CPC stocks we tracked post 1QFY24 results.

We also have a BUY on UPL (TP Rs730), but are watchful as its global CPC business still faces headwinds due to weak demand/ pricing and is more likely to recover by 4QFY24E.

We remain cautious on Soda Ash major Tata Chemicals (TTCH) due to expectations of tepid demand and margins over the next 2-4 quarters while beyond FY25E long term demand-supply should revive pricing power, margins and ROCE expansion.

The steep decline in freight rates and excess capacity of container ships (running empty on return voyages) imply savings in freight costs for the CPC sector. The pressure of weak pricing and inventory de-stocking is also abating, according to CPC industry. The recovery in volume growth and margins may vary across companies and may be visible only by 2HFY24E.

Stock	EPS June'25E Rs	*PE June'25E (x)	TP Rs	Rating
PI	131.3	27.6	4534	Buy
UPL	56.1	10.5	730	Buy

\* PE – at CMP; PI TP: SOTP – Agrochem at 34x Jun'25E EPS and Pharma at EV/E of 15x

PI also see the summary KTAs from FY23 annual reports of PI, UPL and CRIN in the Annexure-1

Links:

[PI Annual Report FY23](#)

[UPL Annual Report FY23](#)

[Coromandel International FY23](#)

Please refer to the disclaimer towards the end of the document.

**Exhibit 1: Quarterly and FY23 trend in chemical prices**

Chemical name (currency)	4QFY23	1QFY24	2QTDFY24	FY23
<b>China Methanol spot price (CNY/te)</b>	2479	2220	2277	<b>2557</b>
QoQ	-3.5	-10.5	-	-
YoY	-6.6	-16.5	-6.9	<b>-3.3</b>
<b>Soda Ash FOB China Physical spot (US\$/te)</b>	351	301	255	<b>351</b>
QoQ	6.6	-14.4	-	-
YoY	3.9	-18.7	-29.8	<b>-7.6</b>
<b>Benzene CFR China Physical spot (US\$/te)</b>	925	885	850	<b>1006</b>
QoQ	10.3	-4.3	-	-
YoY	-15.0	-29.5	-19.6	<b>0.4</b>
<b>Acetic Acid China spot price (CNY/te)</b>	3016	2932	3176	<b>3521</b>
QoQ	-5.0	-2.8	-	-
YoY	-39.0	-35.7	-7.4	<b>-44.8</b>
<b>India Ammonia CFR spot price</b>	700	321	351	<b>907</b>
QoQ	-19.3	-54.1	-	-
YoY	-25.4	-71.2	-64.1	<b>27.1</b>

Source: Bloomberg, Nirmal Bang Institutional Equities Research

**Exhibit 2: Monthly trend in chemical prices**

Chemical name (currency)	Apr-23	May-23	June-23	July-23	Aug 23
<b>China Methanol spot price (CNY/te)</b>	2405	2270	1994	2199	2355
MoM	-3.8	-5.6	-12.2	10.3	7.1
YoY	-14.2	-12.1	-23.3	-10.0	-3.9
<b>Soda Ash FOB China Physical spot (US\$/te)</b>	342	316	244	244	267
MoM	-2.6	-7.6	-22.9	0.2	9.3
YoY	-5.3	-13.4	-36.6	-35.7	-23.4
<b>Benzene CFR China Physical spot (US\$/te)</b>	975	880	802	797	903
MoM	6.0	-9.7	-8.9	-0.5	13.2
YoY	-16.5	-28.5	-41.2	-29.8	-7.6
<b>Acetic Acid China spot price (CNY/te)</b>	3034	2983	2785	2973	3378
MoM	-1.3	-1.7	-6.6	6.7	13.6
YoY	-31.4	-37.9	-37.6	-19.0	6.1
<b>India Ammonia CFR spot price</b>	366	303	300	336	366
MoM	-31.4	-17.4	-0.9	12.1	9.0
YoY	-66.6	-73.1	-73.4	-68.5	-58.9

Source: Bloomberg, Nirmal Bang Institutional Equities Research

The YoY reduction in input costs/freight rates imply cut in costs/prices – this could support farmers using more fertilizers/pesticides and mitigate the pressure on margins, especially for leaders. The MoM increase in prices of some key chemicals used in Agrochemicals is in our view transient, but could be a sign of revival if this improves the pricing and margins for the CPC sector. However, the impact on margins and volume growth may vary across companies and geographies. We need to see to what extent this can offset the hit on topline and asset turn, which implies pressure on ROCE. Watch out for companies which can reduce working capital and thereby capital employed besides sustaining unit margins.

**Raw Material costs/revenue across our Agrochem coverage in 1QFY24:**

CRIN - 74.1%, SCIL - 68.9% and PI - 54.8% and UPL - 43.8%.

CRIN's high share was due to the 85%+ share of revenue from Nutrients – while this is profitable, it has lower pricing power and margins vs CPC. In UPL's case, it reflected the benefit of high backward integration (more than 65% as per company). SCIL and UPL could be key gainers if input costs were to decline more than revenue or as the cycle reverses, revenue growth outpaces increase in RM costs.

**Concerns:** The impact of volatile energy costs, RM prices and product prices on gross margins, new products, working capital and channel inventory are weighing on the sector. (i) The weak demand in China and the drought/high energy prices in Europe are hurting sectors like Fertilizers, CPC and other chemicals. This is causing worries for the global chemical supply chain as well as demand. Potential revival in demand and reduction in excess supply in China could be a growth catalyst for the CPC sector, but timing this is difficult.

**Pests and diseases:** Overall intensity of pests and diseases in India remained below the Economic Threshold Level (ETL), except the following:

- Thrips, Pink Bollworm, Jassids, White Fly and Fruit Rot on Cotton in Punjab
- FAW on Maize in Punjab
- Apple Leaf Blotch on Apple in Jammu & Kashmir

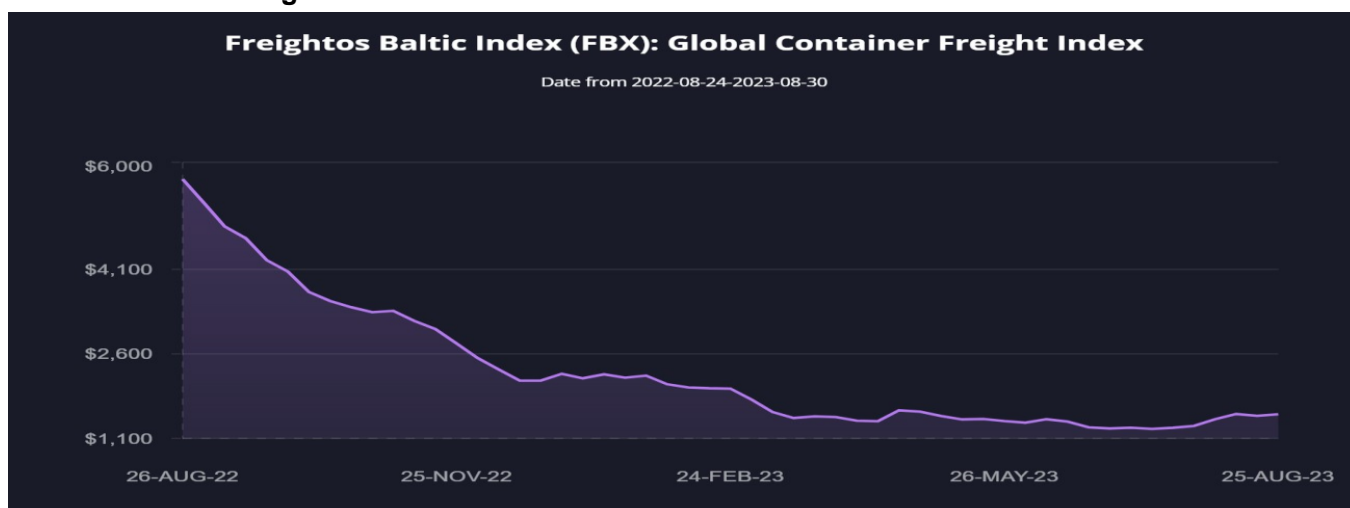
Source: Crop Weather Watch Group (CWWG) minutes dated Aug'28, 2023- <https://agricoop.gov.in>

**Exhibit 3: Comparison of freight index this year vs last year**



Source: Freightos Ltd, Nirmal Bang Institutional Equities Research. Note: Green line refers to CY22 and purple line to CY23

**Exhibit 4: Global freight index sees YoY decline of 73%**



Source: Freightos Ltd, Nirmal Bang Institutional Equities Research

**Exhibit 5: Latest trend in freight rates across routes**

FBX Lane-East Coast	Global	Asia – US West Coast	Asia – US East Coast	Asia – North Europe	North Europe – US East Coast
This Week (US\$)	1529.94	2029.11	3074.89	1747.15	311.34
Ch vs WoW	1.96%	4.82%	2.81%	2.31%	-7.92%

Source: Freightos Ltd, Nirmal Bang Institutional Equities Research

**Exhibit 6: Kharif acreage data as on August 2023**

S.No.	Crops	Normal Area	Area Sown (mn Ha)		Difference in	% of Increase (+)/	
		[DES]			Area Coverage Over	Decrease (-) Over	
		mn ha	2023	2022	2022	2022	% of normal area
<b>1</b>	<b>Rice</b>	<b>39.945</b>	<b>38.41</b>	<b>36.78</b>	<b>1.62</b>	<b>4.4</b>	<b>96.1</b>
<b>2</b>	<b>Total Pulses</b>	<b>13.975</b>	<b>11.74</b>	<b>12.81</b>	<b>-1.06</b>	<b>-8.3</b>	<b>84.0</b>
(i)	Arhar	4.629	4.21	4.44	-0.23	-5.1	91.0
(ii)	Kulthi	0.2	0.03	0.02	0.00	8.3	13.0
(iii)	Urad	3.922	3.11	3.61	-0.50	-13.8	79.3
(iv)	Moong	3.656	3.06	3.33	-0.27	-8.1	83.8
(v)	Other Pulses	1.569	1.33	1.40	-0.07	-5.0	85.0
<b>3</b>	<b>Total Coarse Cereals</b>	<b>18.191</b>	<b>17.83</b>	<b>17.63</b>	<b>0.20</b>	<b>1.1</b>	<b>98.0</b>
(i)	Jowar	1.736	1.38	1.50	-0.12	-7.7	79.7
(ii)	Bajra	7.324	7.00	6.93	0.07	1.0	95.6
(iii)	Ragi	1.094	0.76	0.75	0.02	2.3	69.7
(iv)	Maize	7.571	8.21	8.00	0.21	2.6	108.4
(v)	Small Millets	0.466	0.48	0.45	0.02	5.3	102.6
<b>4</b>	<b>Total Oilseeds</b>	<b>18.621</b>	<b>18.86</b>	<b>19.04</b>	<b>-0.18</b>	<b>-0.9</b>	<b>101.3</b>
(i)	Groundnut	4.504	4.33	4.48	-0.15	-3.3	96.1
(ii)	Sunflower	0.123	0.07	0.19	-0.12	-64.6	54.5
(iii)	Sesamum	1.244	1.18	1.27	-0.09	-7.3	94.9
(iv)	Niger	0.141	0.04	0.08	-0.04		25.5
(v)	Castor	0.865	0.77	0.65	0.12	17.8	88.7
(vi)	Soyabean	11.744	12.47	12.36	0.11	0.9	106.2
(vii)	Other Oilseeds	0	0.01	0.01	0.00	-21.4	0.0
<b>5</b>	<b>Sugarcane</b>	<b>4.885</b>	<b>5.61</b>	<b>5.56</b>	<b>0.05</b>	<b>0.8</b>	<b>114.8</b>
<b>6</b>	<b>Total Jute and Mesta</b>	<b>0.688</b>	<b>0.66</b>	<b>0.70</b>	<b>-0.04</b>	<b>-5.7</b>	<b>95.3</b>
<b>7</b>	<b>Cotton</b>	<b>12.867</b>	<b>12.26</b>	<b>12.48</b>	<b>-0.23</b>	<b>-1.8</b>	<b>95.3</b>
	<b>Grand Total</b>	<b>109.17</b>	<b>105.36</b>	<b>105.00</b>	<b>0.36</b>	<b>0.3</b>	<b>96.5</b>

Source: CWWG, Nirmal Bang Institutional Equities Research

**Exhibit 7: Trend in key crops' area sown in Kharif 2023**

Key crops mn Ha	30-06-2023	09-07-2023	14-07-2023	21-07-2023	28-07-2023	04-08-2023	11-08-2023	18-08-2023	25-08-2023
Rice	2.7	7.1	12.3	18.0	23.8	28.3	32.8	36.1	38.4
Total Pulses	1.8	4.6	6.7	8.6	9.7	10.7	11.3	11.5	11.7
Total Coarse Cereals	3.6	7.3	11.1	13.5	14.6	16.4	17.1	17.6	17.8
Total Oilseeds	2.2	9.4	13.9	16.0	17.1	18.0	18.3	18.6	18.9
Sugarcane	5.4	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Total Jute and Mesta	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Cotton	4.0	7.6	9.6	11.0	11.7	11.9	12.1	12.2	12.3
<b>Grand Total</b>	<b>20.3</b>	<b>42.2</b>	<b>59.8</b>	<b>73.3</b>	<b>83.0</b>	<b>91.5</b>	<b>98.0</b>	<b>102.3</b>	<b>105.4</b>

Source: Nirmal Bang Institutional Equities Research

## Exhibit 8: Progress in area sown in Kharif

Total crop area	30-06-2023	09-07-2023	14-07-2023	21-07-2023	28-07-2023	04-08-2023	11-08-2023	18-08-2023	25-08-2023
Area sown/Normal Kharif area %	18.6	38.6	54.8	67.2	76.1	83.9	89.8	93.7	96.5
Normal Karif Area mn he	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2

Source: Nirmal Bang Institutional Equities Research

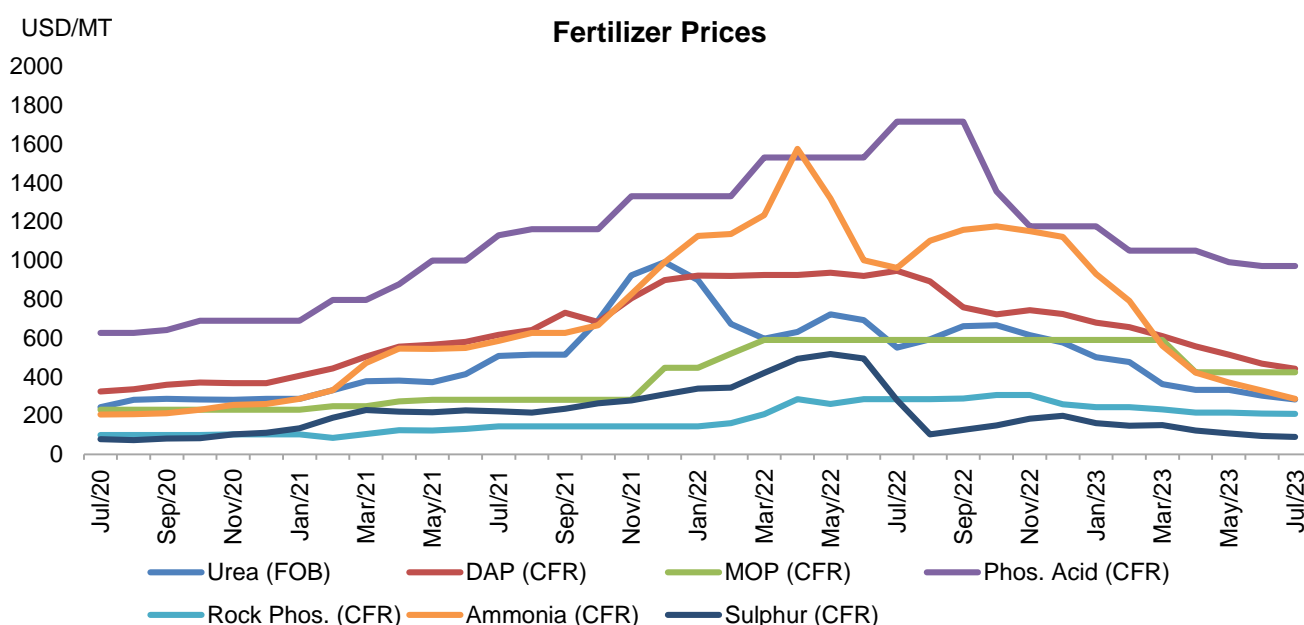
### Storage Levels

Current live storage in 146 reservoirs was 113.58BCM or 64% of total live capacity of 178.19 BCM. The storage is at 77% of the storage last year and 91% of the ten-year average.

### Progress in Monsoon Rainfall for Kharif 2023

During the week of 17-23 August 2023, 22% lower monsoon rainfall was observed compared to the Long Period Average (LPA). Cumulative seasonal rainfall (01 June to 23 August 2023) is lower by 7% vs LPA.

## Exhibit 9: Trend in fertilizer prices



Source: Department of Fertilizer, Nirmal Bang Institutional Equities Research

Sulphur price for July'23 was down 67.7% YoY at US\$90/te. Urea price was down 48.6% YoY at US\$282/tonne, DAP/MOP prices were up 53.4%/28.5% YoY while Rock and Ammonia prices were down by 26.8%/70.3% YoY.

However, there has been some relief in this trend during July-August'23 YoY, with Rock Phosphate price up 52% YoY and MOP price up 50.7% YoY.

**Exhibit 10: Monthly India fertilizer price trend (US\$/tonne)**

Fertilizer	Jul-23	Jul-22	Ch YoY (%)	Jun-23	Ch MoM (%)
Urea (FOB)	282	549	-48.6	302	-6.6
DAP (CFR)	440	945	-53.4	468	-6.0
MOP (CFR)	422	590	-28.5	422	0.0
Phos. Acid (CFR)	970	1715	-43.4	970	0.0
Rock Phos. (CFR)	208	284	-26.8	210	-1.0
Ammonia (CFR)	285	960	-70.3	329	-13.4
Sulphur (CFR)	90	279	-67.7	95	-5.3

Source: Department of Fertilizer, *Nirmal Bang Institutional Equities Research*

**Exhibit 11: Quarterly India fertilizer price trend (US\$/tonne)**

Fertilizer	1QFY24	1QFY23	YoY(%)	4QFY23	QoQ(%)	2QFY24-QTD	Ch YoY (%)
Urea (FOB)	322	681	-52.7	445	-27.7	292	(%)
DAP (CFR)	513	927	-44.6	648	-20.8	454	-36.5
MOP (CFR)	422	1530	-72.4	590	-28.5	422	-24.0
Phos. Acid (CFR)*	1003	1530	-34.4	1092	-8.1	850	-50.7
Rock Phos. (CFR)	213	276	-22.6	238	-10.5	209	-8.7
Ammonia (CFR)	373	1298	-71.2	759	-50.8	307	52.0
Sulphur (CFR)	108	501	-78.4	153	-29.4	93	-45.8

Source: Department of Fertilizer, *Nirmal Bang Institutional Equities Research*

\*Note: The contract price for Phosphoric acid imports was fixed at US\$1050 for 4QFY23, US\$970 for 1QFY24 and US\$850 for 2QFY24 (as per industry), The data as per DOF in 1QFY24, 1QFY23 and 4QFY23 varies from the above contrast prices.

**Exhibit 12: Fertilizer volume data**

Lakh tonnes	Q1FY23	YoY(%)	Q2FY23	YoY(%)	Q3FY23	YoY(%)	Q4FY23	YoY(%)	Q1FY24	YoY(%)	Jul-23	YoY%	MoM%	FY22	FY23	YoY%
Urea	60.84	5.3	111.3	3.2	116.4	23.2	75.86	-3.4	61.83	1.6	45.30	5.79	47.85	338.6	364.4	7.6
DAP	20.86	27.7	30.62	20.5	40.9	8.8	12.98	0.8	21.9	5	12.75	23.31	4.51	92.2	105.4	14.3
MOP	2.58	-56.6	4.5	-46.7	5.78	-13.3	3.49	3.6	2.27	-12	1.34	-5.63	15.52	24.43	16.35	-33.1
Complex Fertilizers	15.34	-37.2	36.63	-4	34.06	-9.5	21.97	6.7	16.12	5.1	12.86	7.44	40.09	120.8	108	-10.6

Source: Department of Fertilizer, *Nirmal Bang Institutional Equities Research*, 1 lakh= 0.1mn

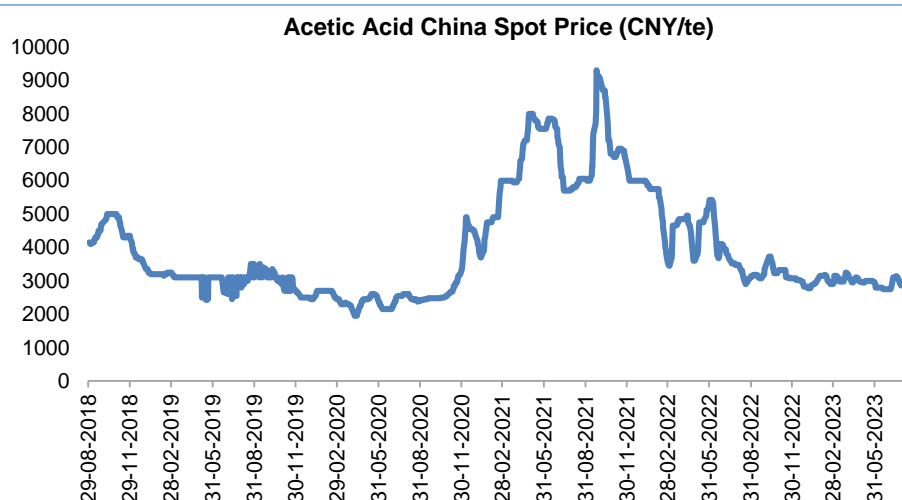
## Chemical price trends

**Exhibit 13: Methanol**



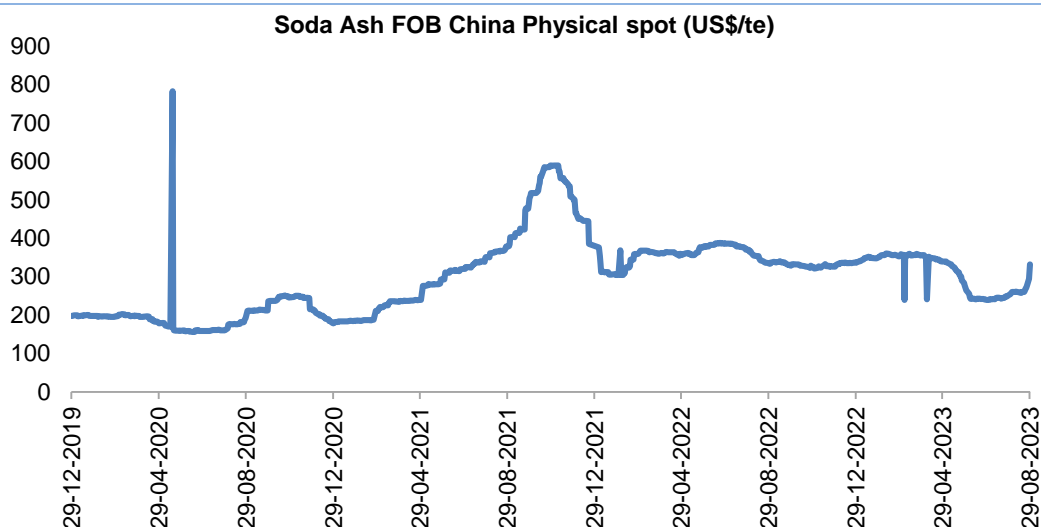
Source: Bloomberg; Nirmal Bang Institutional Equities Research

**Exhibit 14: Acetic Acid**



Source: Bloomberg; Nirmal Bang Institutional Equities Research

**Exhibit 15: Soda Ash**



Source: Bloomberg; Nirmal Bang Institutional Equities Research

**Exhibit 16: Price performance**



Source: Nirmal Bang Institutional Equities Research



## **Annexure-1: KTAs from FY23 Annual Reports – PI, UPL and CRIN**

### **PI Industries FY23 AR**

#### **Global Agrochemicals:**

- The global agriculture market expanded from US\$12,245.63bn in CY22 to US\$13,398.79bn in CY23~ growth of 9.4%,
- India's agricultural sector has grown at 4.6% annually on an average as of FY22.
- As per fiscal policy statements quoted by PI, the Indian agriculture sector is projected to expand by 3.5% in FY23.
- The global market for Agrochemicals is estimated to reach US\$235.2bn in CY23, and anticipated to grow at a CAGR of 3.7% during CY23-CY28.
- Herbicides is the largest segment in CPC in most countries across all regions due to their extensive use in weed control and low cost.
- The global Herbicides market is projected to grow at 10.7% per year, from US\$34.37bn in CY22 to US\$38.04bn in CY23.
- The global Fungicides market will increase by 6.4% per year, from US\$20.77bn in CY22 to US\$22.11bn in CY23.
- In CY22, the global insecticides market was valued at US\$9.12bn and it is estimated to grow at a CAGR of 4.6% from CY23 to CY30
- The global market for biopesticides is anticipated to grow at a CAGR of 15.6% from CY22 to CY27 and will touch US\$11.3bn by CY27.

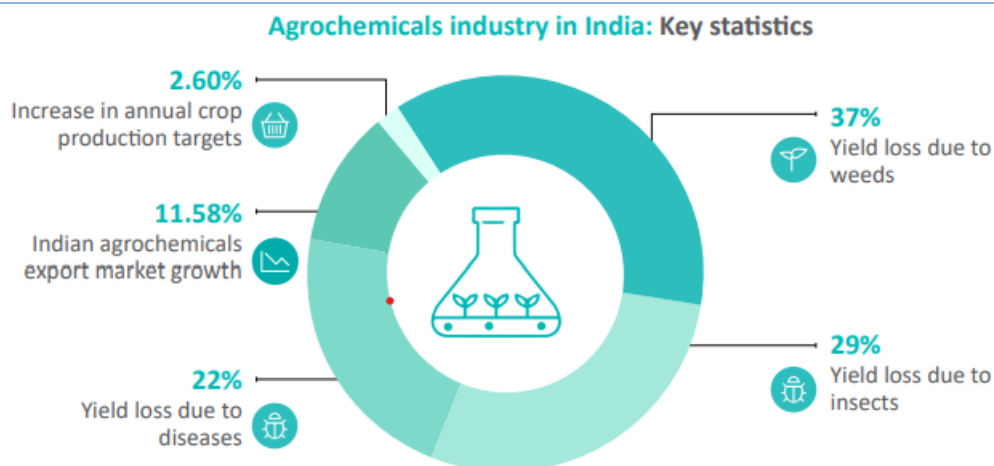
#### **Emerging trends in global CPC sector**

- The company has highlighted the thrust in global agrochemicals towards sustainable chemicals and green chemistry, including bio products. The regulations for the approval of new CPC products in many markets are coming under increasing and tough scrutiny, discouraging renewal and development of harmful chemical pesticides. As per PI, at least 50% of active ingredients have been removed in the EU since 1991. The regulations for biopesticides are still in infancy.
- New trends include biopesticides and bio stimulants besides technology covering advanced hybrids, gene editing as well as AI/robotics.
- The digital transition in agrochemicals will be a key differentiator across all activities. The future of agrochemicals is likely to be driven by digital technology – 4.0, IoT, AI and digitization of processes across the value chain to support fact-based decision making.
- The management has highlighted the need for sustainable agriculture – this includes developing direct seeding of rice (DSR), which offers the most sustainable and economically viable method for rice cultivation. Other measures include managing livestock and manure to do carbon sequestration and reduce greenhouse gas (GHG) emission. There is also need to adopt pest control and agricultural practices that protect soil health.

## Indian Agrochemicals Market

- In 2022, the Indian Agrochemicals market was worth US\$6bn. The market is anticipated to expand at a CAGR of 8.5% between 2023 and 2028 and will touch US\$9.82bn by 2028.
- According to CRISIL, the industry's revenue will increase by 10-12% in FY24 as India continues to benefit from global players' "China plus one" strategy and efforts to diversify their supply chains, and as patents on key molecules expire.

### Exhibit 17: Summary of key data in Indian Agrochem Industry



Source: Tech bulletin published by ICAR –Directorate of Weed Research on 14-Feb-23; Press release published by the Ministry of Agriculture & Farmers Welfare on 14-Feb-23, Monthly bulletin on Foreign Trade published in Mar 2023

### PI R&D and new launches

- PI's R&D team worked on over 40 products in various phases of development and the pipeline contains over 25% non-agrochemical products. PI has registered over 145 patents.

### Domestic business:

During FY23, the company had **launched seven new products**.

- Distrupor, Brofrefya, Dinoace, Taurus (Insecticide), Tomatough (Biostimulant), Provide (Herbicide) and Sectin (Fungicide).
- The company intends **to introduce five new products in the domestic market during FY24**. This, along with subsidiary Jivagro's focus on horticulture (backed by a robust pipeline of new launches) augurs well for growth in FY24 as well as in future. The maturity of recent product launches and the likely record in foodgrains and vegetables will also support PI's growth in the domestic business.
- Jivagro's FY23 Revenue and PAT stood at Rs2,863mn/Rs174mn.

### CSM exports:

- PI plans **to commercialise three new molecules in CSM and two process innovations in FY24**.
- **In CSM, the company has highlighted visibility in revenue and expansion based on the robust order book for exports**. PI is seeing good flow of enquiries and orders in Agrochem and other segments. **The scale-up in R&D investment and efforts are aimed at enhancing its expertise in complex chemistry that will help attract existing and new innovator customers.**

- The new Pharma assets acquired from Archimica Italy in API/CDMO and TRM USA in CRO April'23/May'23 are being scaled up and integrated with PI subsidiary PIHS. This is likely to be an additional growth engine in future to capitalize on contract research, development and manufacturing of complex chemicals and KSM for the big Pharma names.
- PI is **looking at green chemistry and sustainable processes**, technology and products in CSM and domestic pesticides. **It aims to grow its biopesticides business, which is currently 9.2% of its domestic sales.**

## Carbon footprint and waste reduction

**Carbon emission declined by 17% in FY23**, with 12% cut in water used per tonne.

41% hazardous waste was recycled – this was up 80% in FY23. There was a 16% increase in input material recovered and recycled. 4.83% of power came from renewable energy sources. 9-10% of raw material and packaging supplies were assessed for sustainable sourcing/environmental impact.

## UPL FY23 AR

### Global CPC market trend

- Herbicides is the largest and fastest growing segment, driven by pricing. High prices of glyphosate/glufosinate.
- Insecticides aided by insect pressure and growth in cropped area in Brazil. CTPR – Chlorantraniliprole, a leading Insecticide AI based on diamide chemistry recently went off patent in some areas – it is likely to drive volume growth based on its effectiveness in controlling insects.
- Fungicide growth was hurt by adverse weather in US/EU.

### Exhibit 18: Trend in global CPC market

US mn	CY16	CY17	CY18	CY19	CY20	CY21	CY22
Global CPC- excluding bio	59311	61069	64666	63914	65367	68260	75153
Biocontrol products	2317	2420	2585	2788	3040	3344	3562
<b>Global CPC including bio</b>	<b>61628</b>	<b>63489</b>	<b>67251</b>	<b>66702</b>	<b>68407</b>	<b>71604</b>	<b>78715</b>
<b>Change YoY (%)</b>	<b>-6.0</b>	<b>3.0</b>	<b>5.9</b>	<b>-0.8</b>	<b>2.6</b>	<b>4.7</b>	<b>9.9</b>

Source: UPL AR FY23, Nirmal Bang Institutional Equities Research

### Exhibit 19: Crop-wise growth of agrochemical market – CY22

Soyabeans	Growth YoY (%)
Soyabeans	18
Cotton	16.7
Cereals	13.9
Corn	13.8
Rice	3.8
Fruits and vegetables	2.9

Source: UPL AR FY23, Nirmal Bang Institutional Equities Research

**Exhibit 20: Category-wise growth in global markets (US\$ Terms) – CY22**

US\$	Share of global market(%)	Change YoY(%)
Herbicide	46	~14
Insecticide	26	~6-7
Fungicide	25	~7-8
Others(Including PGRs, fumigants and pheromones)	3	~2-3

Source: UPL AR FY23, Nirmal Bang Institutional Equities Research

**India CPC market**

Total market size: Rs765bn. Domestic sales – Rs310bn in FY23 at a growth of 9-10%; Exports – Rs455bn; FY23 growth was 25% - India is the 4<sup>th</sup> largest producer in the world – 60% of production is exported; 13-15% share in global CPC market.

FY22-FY25E CAGR: Indian CPC sector 11-12%; Exports 14-15%.

Value of CPC estimated to go off patent: US\$4.2bn.

**Growth drivers for Indian CPC:**

New products, younger AIs and new technology. India's low-cost manufacturing, manpower, seasonal domestic demand and surplus capacity. Low-cost credit and cash incentives to farmers.

**UPL business summary:**
**UPL Cayman (International CPC business)**
**Adia and TPG – 22.2% stake**

World No 6 in CPC industry

World No 1 in post patent CPC and in bio solutions

**Advanta Enterprises (Global Seeds)**
**KKR – 13.33%**

More than 900 hybrid seeds ~40 crops

30 production sites in 24 countries

32 research centers in 11 countries

**UPL SAS – India CPC**

Brookfield and TPG - 9.09%

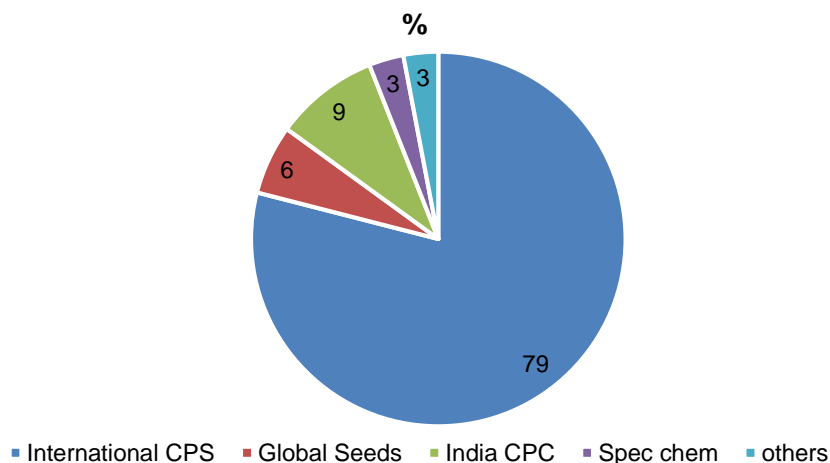
No 1 CPC company in India

**UPL Specialty Chemicals Ltd – Specialty Chem**

600+ clients across sectors; 50 years of manufacturing experience in complex chemistry.

**NBIE view:** This, along with seeds offers some value unlocking potential, but may take some time. The Specialty Chemical piece has internal transfers, which might entail concerns about transfer pricing and margins. If this is made transparent and on an 'arms length' basis and the third-party sales can be ramped up or the third party business is carved out, it could be of interest to investors given the positive tailwinds for Specialty Chemicals and CSM companies.

**Exhibit 21: Revenue mix by platform share %**



Source: UPL AR FY23, Nirmal Bang Institutional Equities Research

**Exhibit 22: Region-wise growth and share**

Region wise international crop protection	Growth YoY(%)	Revenue share in UPL Crop Rev(%)
Latin America	22	49
Europe	7	16
North America	12	19
RoW	13	16

Source: UPL AR FY23, Nirmal Bang Institutional Equities Research

**Exhibit 23: R&D - Category wise granted patents**

Category wise granted patents	%
Herbicides	34
Fungicides	25
Insecticides	12
BioSolutions	14
Others	14

Source: UPL AR FY23, Nirmal Bang Institutional Equities Research

**UPL's peak pipeline composition** : 78% differentiated and sustainable solutions and 22% post-patent solutions. 25 new molecules in development pipeline.

**UPL's peak R&D pipeline composition:**

- 78% differentiated and sustainable solutions and 22% post-patent solutions.
- 25 new molecules in development pipeline.
- UPL's target for annual innovation rate by FY27 is 24%.
- Risk-adjusted peak sales outlook – US\$8.5bn; Risk-adjusted annual sales by FY27 - US\$2.5bn

**Key R&D numbers**

- Professionals – 1000+, facilities nos. – 30
- Granted patents -1884 Registrations – 14236
- R&D spend – about 3% of revenue

## **UPL Cayman (International CPC business) - FY23 product launches**

Feroce: Insecticide for bug and sucker insects on soya and corn; better than Perito

Evolution: Fungicide for soyabean; better multisite technology offers higher productivity

Shenzi: Insecticide, strengthens soyabean, corn and cotton

### **FY23 revenue from new launches:**

Feroce: Rs 4bn, Evolution: Rs7.1bn, Shenzi: Rs2bn;

### **Total from these three: Rs13.1bn**

**The innovation rate** was 14% in FY23 and the share of new products in FY23 revenue was at least 2%.

**Sustainable and Differentiated revenue share** in FY23– 28%

### **Growth drivers in UPL Cayman**

**Product innovations** – improved margins;

Accelerated growth of differentiated products – Feroce, Evolution, Preview and CTPR.

**Increased post-patent share** – focus on key products in major markets, leverage India supply/manufacturing base; favourable product backdrop for soyabean and corn based on higher demand for biofuels.

**Productivity enhancement:** lower overheads, improved collections, inventory management with focus on EBITDA and W/C management

### **Carbon goals:**

- 1GT carbon reduction target by 2040 through sustainable farming
- Targets for emission reduction: 25% per ton targeted cut in Scope 1 and 2 emission FY20-FY25; 63% per ton reduction during FY22-FY35; Scope 3 by 42%
- Carbon neutral by 2040

**Sustainable practices include:** Improved water management, Bio Solutions, crop rotation, cover crops, agro forestry, integrated pest management, integrated, livestock and non-till system.

## **Coromandel International FY23 AR**

- 9 New Product Introduced, 2 New Crop Protection Technical commercialized
- Improved NPK & DAP Fertilisers market share (consumption-based) to 17.2% (vs.16.7% in FY23). SSP market share of 13.8%.
- Investments: The company has committed an investment of ~Rs10bn over the next couple of years for the Chemical business - CDMO and Specialty Chemicals business.
  - The company's new 1,650MT per day Sulphuric Acid plant commissioning is on track and it is likely to be completed by H1 of FY24. With this, the company plans to add 5 lakh MT of Sulphuric Acid per annum, thereby resulting in a cumulative in-house capacity of 11 lakh MT per annum.
  - Commissioned a "Multi Product Facility" at Ankleshwar plant during 4QFY23. On the domestic formulations side, the business introduced five new products (including three novel combinations) spanning herbicides, insecticides and fungicides.
- Bio (Aza Based) manufacturing capacity is 22.5 MT and currently 5.1 MT is produced. So, there is a lot of scope with increased capacity utilization.

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BUY > 15%

ACCUMULATE -5% to 15%

SELL < -5%

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