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India Agrochemicals

GEARING UP TO TAP EXPORTS OPPORTUNITY

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Gearing Up to Tap Exports Opportunity

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UPL (Buy)	
Bloomberg Ticker	UPLL IN
Market Cap (Rsbn/USDbn)	584.5/7.8
CMP	762
Target Price	**910**
Upside (%)	19.4

Rallis India (Hold)	
Bloomberg Ticker	RALI IN
Market Cap (Rsbn/USDbn)	53.9/0.7
CMP	274
Target Price	**265**
Upside (%)	-3.4

Dhanuka Agritech (Buy)	
Bloomberg Ticker	DAGRI IN
Market Cap (Rsbn/USDbn)	36.4/0.5
CMP	760
Target Price	**1,000**
Upside (%)	31.6

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India Agrochemicals – Gearing Up to Tap Exports Opportunity

- Global Agrochem market is expected to grow at a faster clip at 6.6% CAGR over 2019-24E from USD62.5bn to USD86.0bn compared with 5.2% CAGR during 2014-19. The incremental growth is expected to be driven by the rapid adoption of bio-pesticides, which are expected to see ~16% CAGR, while synthetic pesticides should witness ~5% CAGR over 2019-24E *(Source: Frost & Sullivan Research & Analysis, IPL RHP).*
- Indian Agrochem segment is divided between domestic consumption and agrochem exports at ~USD2.7bn and ~USD3.2bn, respectively (2019). Together, it is expected to grow at 8% CAGR, slightly ahead of the global growth rate during 2019-26E. **However, domestic consumption growth is expected to be slower at ~7% CAGR, while export growth is expected to be higher at ~9% CAGR in the same period.**
- Unlike the global agrochem market, which is skewed toward herbicides (55% by value in 2019), the Indian market is insecticides-dominant with ~53% share, followed by herbicides ~24%, and fungicides ~19% (2019).
- Incessant disruptions in China since 2015, due to strengthening environmental regulations/adherence, accidents, the imposition of large fines, and the latest being Covid-related issues, led to capacity closures across the chemical industry, including agrochem, leading to supply-side pressures. Jiangsu, China's largest chemical manufacturing province, reduced the number of chemical companies from 6,000+ before 2015 to ~2,000+ by 2020, and plans to reduce the number to under 1,000 by 2022 *(Source: Newsdirectory3, May-21, ChinaDaily Apr-19).*
- China's pesticide production rose from ~2.8mmt in 2011, peaking in 2016 at ~3.8mmt. Due to the capacity closures, it has witnessed a reduction since 2016, reaching ~2.2mmt in 2020.
- Indian agrochem production, which is still less than 1/10th of China, rose at a CAGR of 5.4% from 143,000MT in FY11 to 217,000MT in FY19.
- Benefiting from the disruptions in China, Indian agrochemical exports reached USD3.6bn in FY21, witnessing ~13% CAGR in the past five years, while the global agrochemicals market saw a 5.2% CAGR during CY2014-19, indicating market share gains, though small.
- However, India's dependency on Chinese imports persists, accounting for over half of total agrochem imports, or ~USD0.8bn (total of ~USD1.7bn agrochem imports).

…continued

India's benefit from China+1

- Capacity closures continue in China, resulting in the rationalization of capacities and the weeding out of marginal/inefficient/non-complying capacities. Most of these companies did not adhere to the same level of environmental safety and regulatory standards. Therefore, the remaining companies will largely have the same level of environmental safety and compliance costs, leading to a similar cost structure as Indian chemical companies.
- Environmental/safety costs have been taking center stage for newer projects, while existing projects are in compliance mode, leading to higher investments. Indian counterparts are compliant with environmental/safety aspects, and are incrementally moving toward zero liquid discharge (ZLD) facilities, implying higher standards.
- The Indian chemicals sector, including agrochemicals companies, has embarked upon an investment/capex drive in the past few years. Capex/investments by 11 Indian listed agrochemical companies (excl. UPL) indicate a cumulative investment of ~Rs41bn in FY17-21. These investments are not only aimed at the domestic market, but also at capitalizing on the export opportunity. Further, the announced capex by 9 of these companies (excl. UPL) suggests an incremental investment of ~Rs20bn over the next couple of years vs. a similar amount invested in the last two years.
- **Globally, MNCs have faced incessant supply-chain challenges from China since 2015, caused by environmental-related closures/partial shutdowns, accidents, enhanced pollution regulations, and the latest being Covid-related disruptions, giving rise to 'China+1' strategy, opening up export avenues for Indian players. China's inherent cost advantage in labor, low-cost finance, etc. has been diminishing, while environmental/safety-related costs are rising. Indian companies are well-placed in environmental/safety compliance, garnering eyeballs from MNCs. We believe this structural change in the agrochemical sector dynamics is opening up export opportunities for Indian players. Companies are trying to seize the opportunity by making further investments and creating capacities not only to cater to domestic growth but also to satiate demand from the global market. The traditional, stereotyped argument of lower per-hectare consumption of pesticides in India persists, but we need to look at domestic agrochem companies from an export opportunity perspective.**

Agrochemical Company Investment Thesis

UPL – 'Buy', TP Rs910 (19% upside)

We assume coverage on UPL Ltd with a Buy rating and a Mar'23E TP of Rs910 (upside 19%). Our fair value is derived using a two-stage growth model and implies target EV/EBITDA and P/E multiples of 8.5x and 12.5x, respectively, on FY24 estimates. Our Buy thesis is underpinned by : 1) ~8% FY22E-25E revenue CAGR, driven by ~19% CAGR in Differentiated and Sustainable (D&S) solutions; 2) EBITDA margin expansion from 22.5% in FY22E to 24.1% in FY25E, supported by innovative products; 3) ~18% PAT CAGR over FY22E-25E, supported by EBITDA margin expansion and lower interest outgo; and 4) substantial net-debt reduction from Rs166bn in FY22E to Rs32bn in FY25E from healthy cashflow generation. Further upside risk stems from the monetization of UPL's fast-growing specialty chemicals business (~Rs45/ share, potentially) and nurture.farm initiative. **Downside risks:** 1) adverse agronomical conditions in key markets; and 2) adverse forex fluctuations.

Rallis India – 'Hold', TP Rs265 (3% downside)

We assume coverage on Rallis India with a Hold rating and a Mar'23E TP of Rs265, based on DCF (downside 3%). Our TP implies a forward P/E multiple of 17.5x Mar'24E EPS, which is 24% below the 10-year historical average of 22.7x for the stock. We forecast a PAT CAGR of ~24% for FY22E-25E, driven by a 12% revenue CAGR, thanks to an uptick in capex (Rs8bn over FY20-24E). However, concerns about challenges in scaling up the seeds business, portfolio gaps for the Kharif season, and depressed existing contract manufacturing activity are likely to remain headwinds in the short- to medium term. **Upside risk:** 1) continued higher capex momentum after the execution of Rs8bn capex.

Dhanuka Agritech – 'Buy', TP Rs1,000 (32% upside)

We assume coverage on Dhanuka Agritech with a Buy rating and a Mar'23E TP of Rs1,000 (upside 32%). Our fair value estimate implies a target P/E multiple of 19x Mar'24E EPS. Our high-conviction Buy on Dhanuka is based on: 1) substantial capex of Rs3bn in FY22E-24E to tap export opportunities; 2) ~13% revenue CAGR in FY22-25E vs. ~7% in FY15-20; 3) debt-free balance sheet with cumulative FCFF generation of ~Rs3.7bn in FY22-25E. Dhanuka's foray into the export markets through technicals manufacturing is supported by offtake visibility from its strong and long-lasting relationships with global agrochem players, along with the China+1 strategy. The export foray is expected to derisk its current 100% reliance on the domestic market, which is subjected to the vagaries of the monsoons. **Downside risks:** 1) Since India is a monsoon-dependent agrarian market, the key risk stems from vagaries of the monsoons; 2) For the first time, the company is undergoing significant capex, and any delays in operationalizing/stabilizing these new capacities can materially impact our export revenue assumptions.

Financial Summary

(Rsmn) Except EPS (Rs)	UPL			Rallis India			Dhanuka Agritech		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	4,27,313	4,61,071	4,99,483	26,162	29,091	32,564	14,310	15,728	18,296
EBITDA	96,329	1,06,481	1,18,547	3,007	3,983	4,809	2,488	2,674	3,184
Adj. PAT	39,844	46,607	56,075	1,827	2,423	2,940	1,964	2,074	2,426
Net Debt	1,59,239	1,20,226	73,213	-2,269	-2,092	-2,317	-3,095	-3,236	-3,660
EPS	52.08	60.92	73.30	9.39	12.46	15.12	42.17	44.52	52.09
Growth YoY (%)	**FY22E**	**FY23E**	**FY24E**	**FY22E**	**FY23E**	**FY24E**	**FY22E**	**FY23E**	**FY24E**
Revenue growth	10.4	7.9	8.3	7.7	11.2	11.9	3.1	9.9	16.3
EBITDA growth	15.3	10.5	11.3	-6.9	32.5	20.7	-7.6	7.5	19.1
Adj. PAT growth	33.8	17.5	20.1	-16.6	32.6	21.3	-6.7	5.6	17.0
Margin (%)	**FY22E**	**FY23E**	**FY24E**	**FY22E**	**FY23E**	**FY24E**	**FY22E**	**FY23E**	**FY24E**
Gross Margin	52.5	52.5	53.0	37.7	39.0	40.0	37.2	37.2	37.3
EBITDA Margin	22.5	23.1	23.7	11.5	13.7	14.8	17.4	17.0	17.4
Adj. PAT	11.6	12.6	13.9	7.0	8.3	9.0	13.7	13.2	13.3
Returns ratios (%)	**FY22E**	**FY23E**	**FY24E**	**FY22E**	**FY23E**	**FY24E**	**FY22E**	**FY23E**	**FY24E**
ROE	17.8	18.1	18.7	11.1	13.7	15.4	22.6	20.4	20.8
ROCE	15.7	17.4	19.1	14.6	18.0	20.2	29.9	27.1	27.6
ROIC	17.7	19.2	21.0	17.7	21.6	24.1	39.6	34.7	35.0
Valuation (x)	**FY22E**	**FY23E**	**FY24E**	**FY22E**	**FY23E**	**FY24E**	**FY22E**	**FY23E**	**FY24E**
P/E	14.6	12.5	10.4	29.2	22.0	18.2	18.0	17.1	14.6
P/BV	2.4	2.1	1.8	3.1	2.9	2.7	3.8	3.3	2.8
EV/Sales	1.7	1.5	1.3	2.0	1.8	1.6	2.3	2.0	1.7
EV/EBITDA	7.7	6.6	5.5	17.0	12.9	10.6	13.0	12.0	10.0

Source: Company, Emkay Global

Bloomberg Consensus

	UPL								
(Rsmn)	Emkay Estimates			Bloomberg Consensus			Delta (%)		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	4,27,313	4,61,071	4,99,483	4,29,992	4,65,869	5,06,549	*-0.6*	*-1.0*	*-1.4*
EBITDA	96,329	1,06,481	1,18,547	94,845	1,05,848	1,16,906	*1.6*	*0.6*	*1.4*
EBITDA margin (%)	22.5	23.1	23.7	22.1	22.7	23.1	*49*	*37*	*66*
Adj. PAT	39,844	46,607	56,075	39,901	47,773	54,553	*-0.1*	*-2.4*	*2.8*
EPS (Rs)	52.08	60.92	73.30	51.19	61.25	71.45	*1.8*	*-0.5*	*2.6*

	Rallis India								
(Rsmn)	Emkay Estimates			Bloomberg Consensus			Delta (%)		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	26,162	29,091	32,564	26,492	30,061	33,287	*-1.2*	*-3.2*	*-2.2*
EBITDA	3,007	3,983	4,809	3,221	4,139	4,711	*-6.7*	*-3.8*	*2.1*
EBITDA margin (%)	11.5	13.7	14.8	12.2	13.8	14.2	*-67*	*-8*	*62*
Adj. PAT	1,827	2,423	2,940	2,090	2,714	3,103	*-12.6*	*-10.7*	*-5.3*
EPS (Rs)	9.39	12.46	15.12	10.73	13.94	15.95	*-12.5*	*-10.6*	*-5.2*

	Dhanuka Agritech								
(Rsmn)	Emkay Estimates			Bloomberg Consensus			Delta (%)		
	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
Revenue	14,310	15,728	18,296	14,736	16,468	18,460	*-2.9*	*-4.5*	*-0.9*
EBITDA	2,488	2,674	3,184	2,720	3,073	3,475	*-8.5*	*-13.0*	*-8.3*
EBITDA margin (%)	17.4	17.0	17.4	18.5	18.7	18.8	*-107*	*-166*	*-142*
Adj. PAT	1,964	2,074	2,426	2,115	2,364	2,618	*-7.1*	*-12.3*	*-7.3*
EPS (Rs)	42.17	44.52	52.09	45.20	50.55	55.87	*-6.7*	*-11.9*	*-6.8*

Source: Bloomberg, Emkay Global

Company Snapshot

	UPL		Rallis		Dhanuka Agritech	
Incorporation	1969					
Key Geographies	Latin America		Asia		India	
	Europe		Europe			
	North Americas		North America			
	ROW		South America			
			Africa			
Geographical Split (FY21- Revenue)	Latin America	38.4	Asia	80.7	100% domestic	
	Europe	16.6	Europe	2.2		
	North Americas	14.7	North America	10.8		
	ROW	18.2	South America	5.7		
	India	12.1	Africa	0.6		
Key Segments	Branded generics		Agri Inputs		Sale of products	
	Differentiated and Sustainable		Polymers		Traded goods	
Distribution	Supplier strength	3,049	Dealers-(Cropcare/Seeds)	3,879/2,881	Distributors	7,500
			Retailers-(Cropcare/Seeds)	47,687/31,358	Retailers	80,000
			Depots-(Cropcare/Seeds)	28/19	Warehouses	40
			Regional offices-(Cropcare/Seeds)	12/25		
Announced Capex	Rs22.5bn/annum		From FY20-FY24E Rs8bn		FY22-24E Rs3bn	

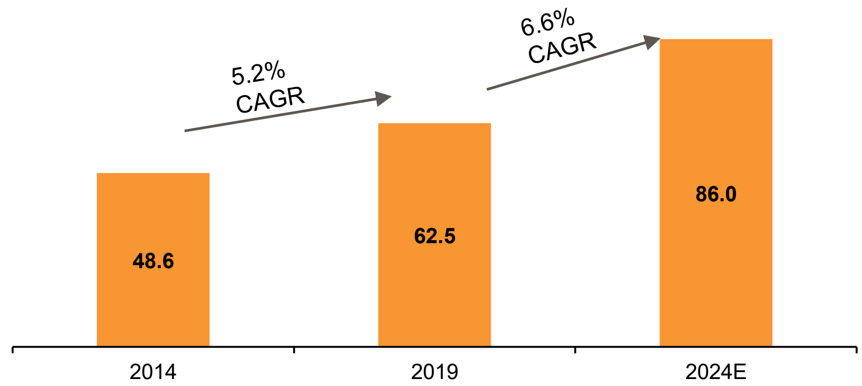
Source: Company, Emkay Global

Global Agrochem Market – To Grow at a Faster Clip in 2019-24E vs. 2014-19

Bio-pesticides to remain focus area due to its non-harmful/nonhazardous ingredients

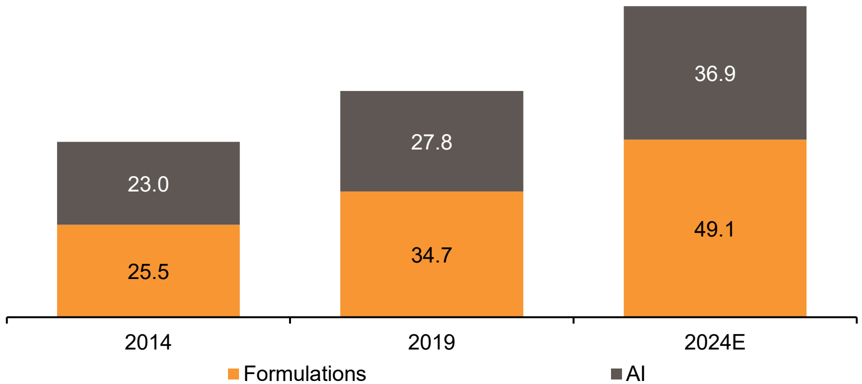
- During 2019-24E, global Agrochem market is expected to grow at faster clip then the previous five-year period due to rising demand for food security in the wake of rising global population, increased pest attacks, further agrochem penetration in lesser developed regions, increasing consumption in developing countries
- Bio-pesticides are gaining prominence over conventional pesticides due to natural based without any adverse effects. From a smaller base of USD4.3bn in 2014, the bio-pesticides market is expected to reach a sizable level of ~USD15.5bn by 2024E growing at a 15.6% CAGR (FY19-24E), constituting ~18% of overall pesticides market, while Synthetic-pesticides would continue to grow at 5% CAGR in FY19-24E to ~USD70.5bn.
- Due to increasing penetration across developing markets, formulations market is growing faster than active ingredients (AIs) and the momentum is expected to continue with 7.2% and 5.8% CAGR in formulations and Ais, respectively, in 2019-24E.

Global Agrochemical Market Growth Trend (USD bn)



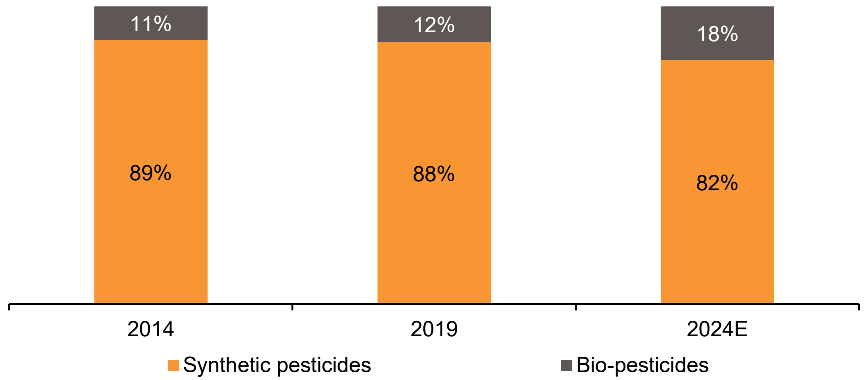
Source: Frost & Sullivan Research & Analysis, IPL RHP

Formulations to outpace AI growth (USD bn)



Source: Frost & Sullivan Research & Analysis, IPL RHP

Rising Adoption of Bio-pesticides

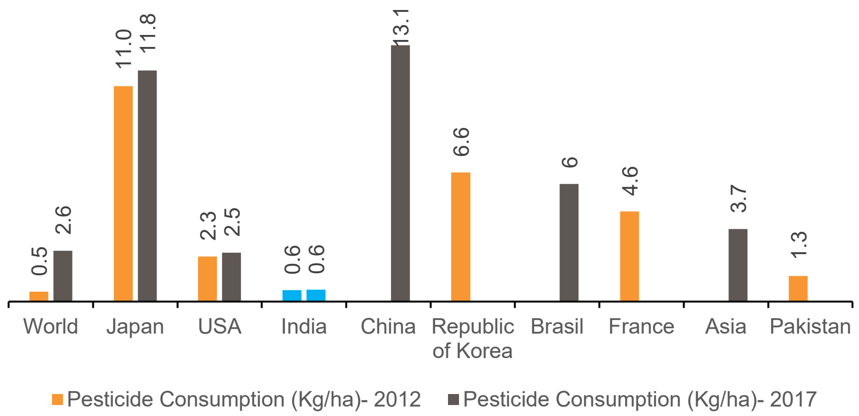


Source: Frost & Sullivan Research & Analysis, IPL RHP

Global Agrochem Market – India lags in consumption of pesticides/hectare

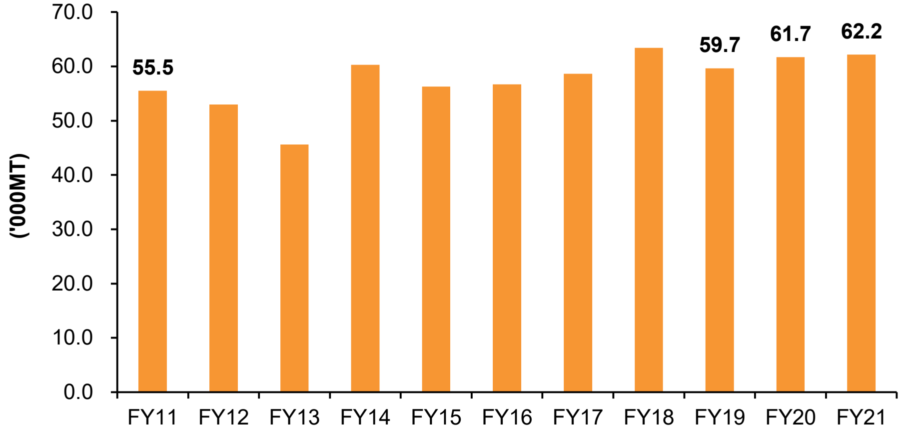
Rising penetration levels in developing countries will drive growth of pesticides/Agro-chem

Global Agrochemical Market Growth Trend (USD bn)



Source: FICCI Agrochemicals Report Dec'2020, Dhanuka Agritech – Annual Report FY12

Domestic Consumption ('000MT)



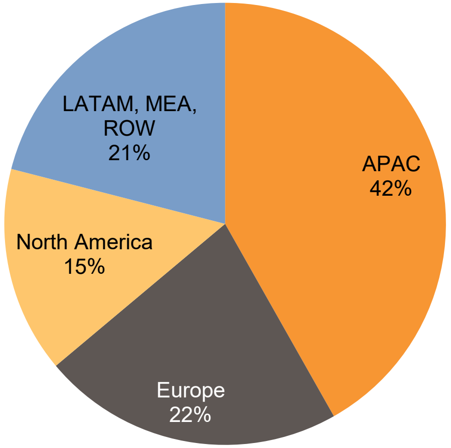
Source: Ministry of Chemicals and Fertilizers

Global Agrochem Market – Demand Dominated By APAC (2019)

APAC dominates the agrochemical consumption to satiate already higher and growing population

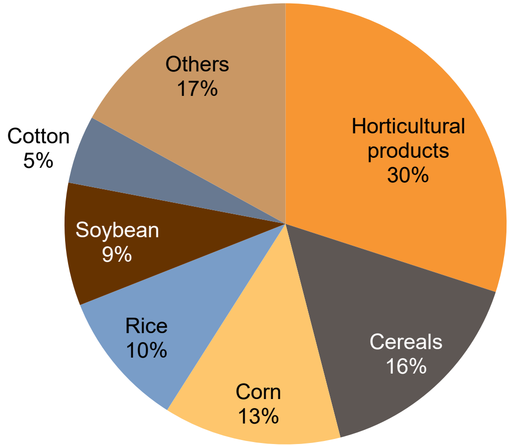
- APAC region dominates the geographic demand for agrochemicals due to large population countries.
- China, India, Indonesia, Australia dominate the agrochemicals usage in the APAC region.
- North America and Europe too remain high demand regions for agrochemicals with import dependency from China for active ingredients .
- Horicutltural products (due to high value) account for the highest agrochemical consumption followed by cereals.
- Globally, weeds cause the maximum crop losses signifying higheest share by herbicides under the agrochemicals umbrella.

APAC dominates agrochem demand



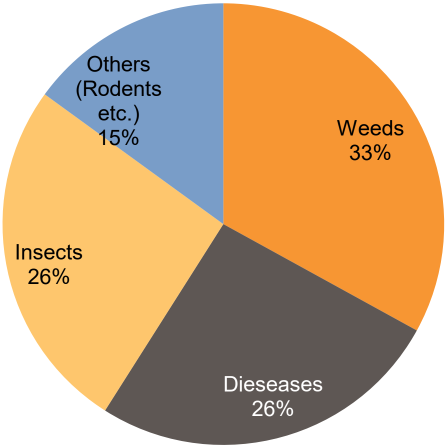
Source: Frost & Sullivan Research & Analysis, IPL RHP

Horticulture accounts for largest agrochem consumption



Source: Frost & Sullivan Research & Analysis, IPL RHP

Globally weeds cause the highest crop losses



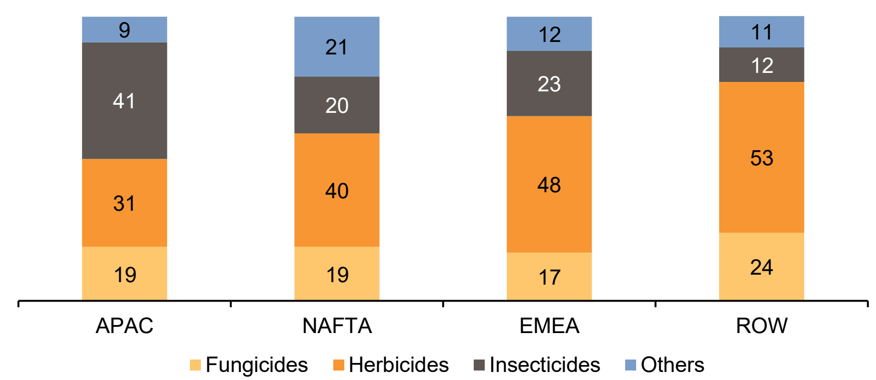
Source: Frost & Sullivan Research & Analysis, IPL RHP

Global Agrochem Market – Segmentation (2019)

Due to manual labor availability, herbicide penetration is lower in APAC unlike global market which is dominated by herbicides

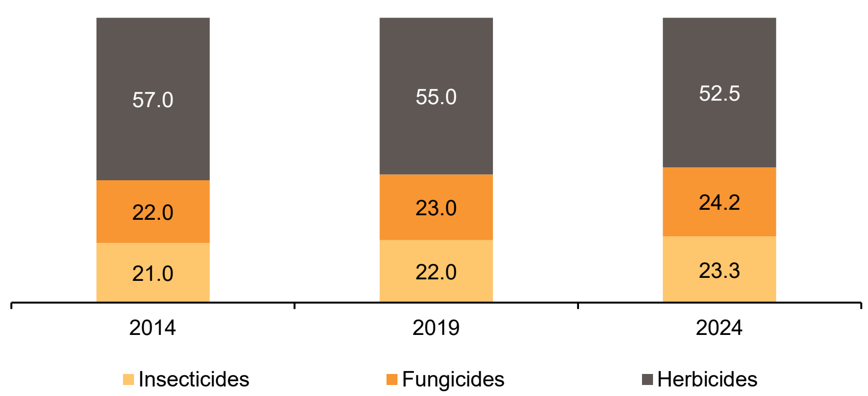
- Globally, the agrochemicals market is skewed towards herbicides while APAC is insecticides dominated.
- Penetration of herbicides is lower in APAC due to availability of large pool of manual labour for picking weeds.
- Under the synthetic agrochemicals segment, globally, more than 50% agrochemical requirement is herbicide driven, however fungicides are expected to garner more pie going forward.
- Under the bio-pesticides segment, globally, insecticides constitutes larger proportion albeit with a slight margin over herbicides. However, going ahead, herbicides is expected to be the focus area and is likely to dominate the segment by 2024E.

Herbicides dominate globally, insecticides in APAC (%)



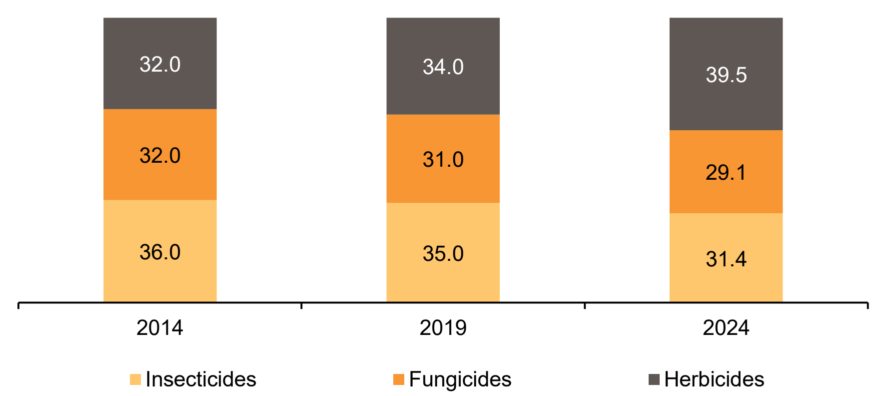
Source: Frost & Sullivan Research & Analysis, IPL RHP

Synthetic Agrochem – Herbicide Dominant (%)



Source: Frost & Sullivan Research & Analysis, IPL RHP

Bio-pesticides – Insecticides Dominant (%)



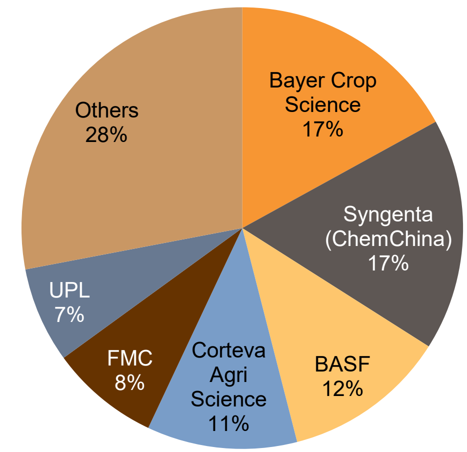
Source: Frost & Sullivan Research & Analysis, IPL RHP

Global Agrochem Market – Consolidation

Chinese exports share going up, India too following albeit at a lower base

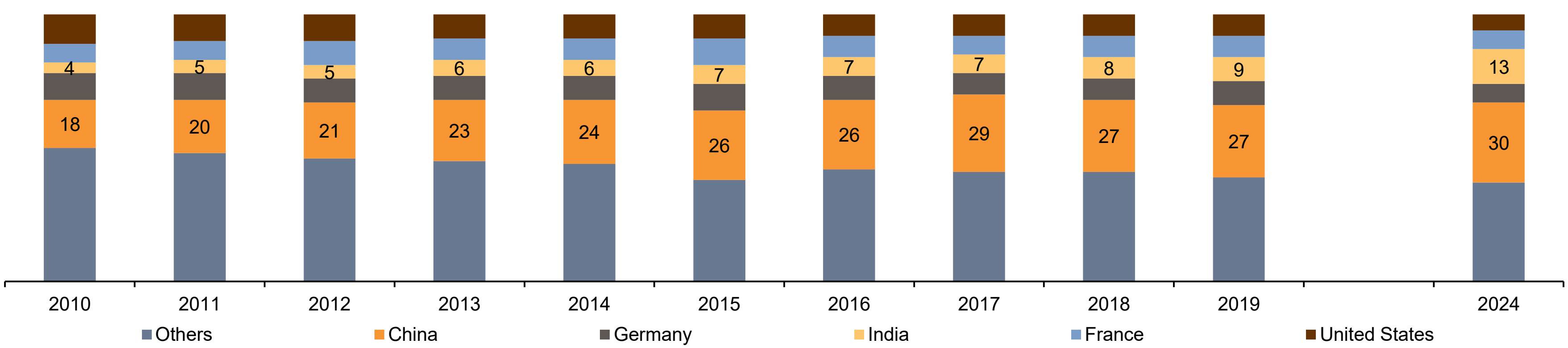
- Consolidation has been a key driver in global agrochem market in the past few years.
- Top-6 companies accounted for ~70% market share of the agrochem market.
- With Arysta acquisition (July 2018), UPL became the 5th largest agrochemical player globally.
- Agrochemical exports witnessed a sea change in the past decade, with China's contribution in exports moving up from 18% in 2010 to 27% in 2019, and further expected to grow to 30% by 2024E.
- Indian contribution has more than doubled from 4% in 2010 to 9% in 2019, albeit at a lower base. However, with the government emphasis and private sector investments, the contribution is expected to rise further from 9% in 2019 to 13% by 2024E.

Arysta acquisition made UPL 6th largest agrochem player globally



Source: Frost & Sullivan Research & Analysis, IPL RHP

Chinese share in exports rose at a faster clip (2010-19), Indian share in exports more than doubled albeit at a lower base (%)



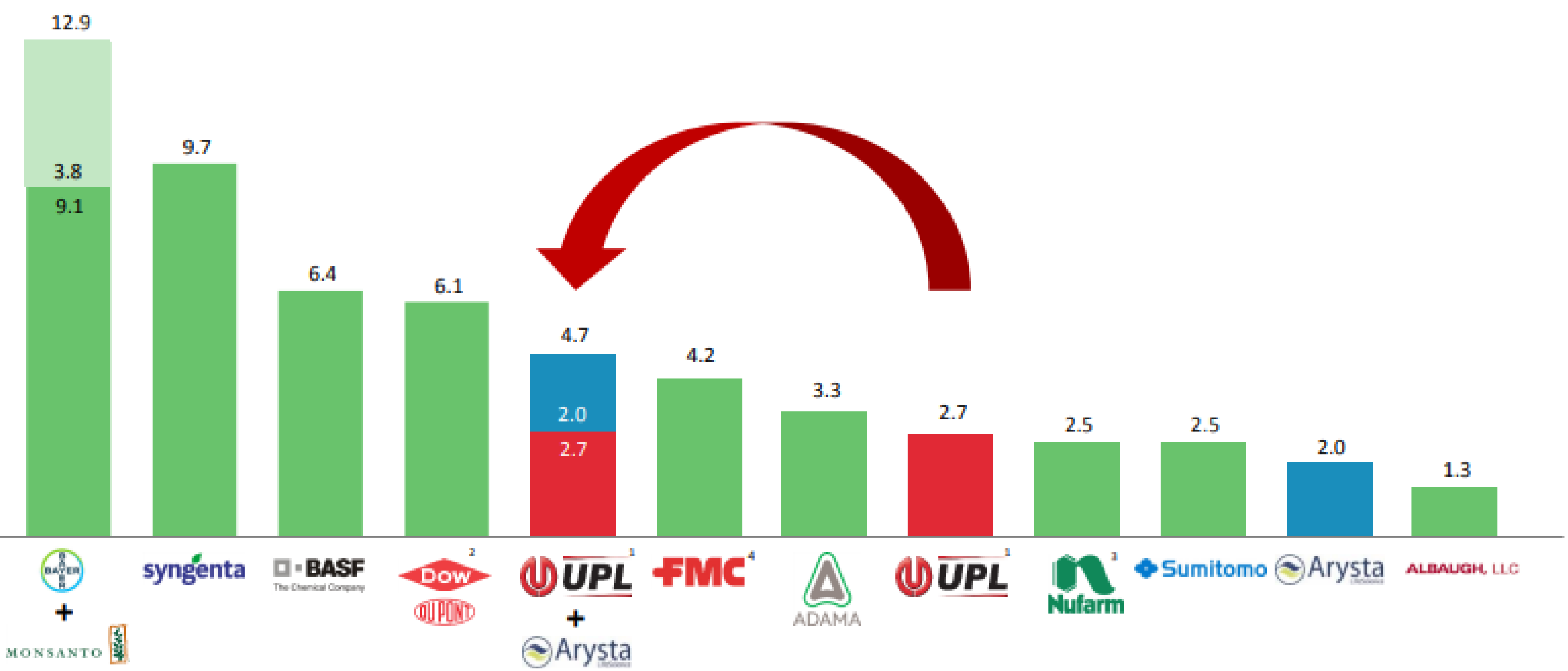
Source: Frost & Sullivan Research & Analysis, IPL RHP

Global Agrochem Market – Consolidation

Agrochem market has undergone consolidation in the last decade

- Agrochemical industry over the last few years has witnessed a lot of consolidation resulting in creation of large entities with substantial economies of scale and global reach.
- Few notable M&As are Bayer+Monsanto, Dow+DuPont, UPL+Arysta, and latest being Albaugh+Rotam.

Agrochemical Revenue (US$bn)



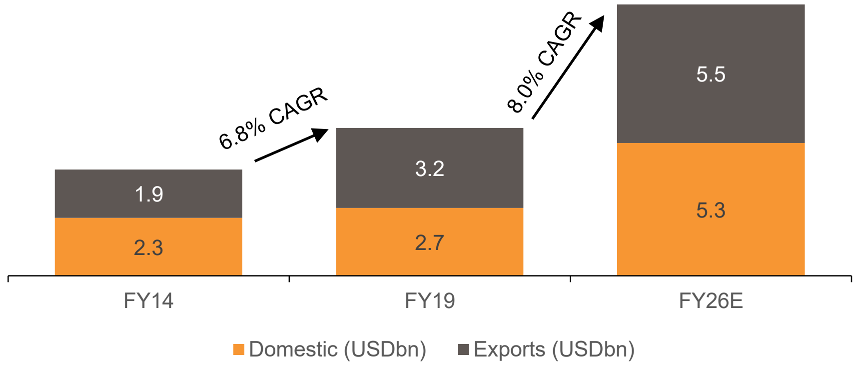
Source: UPL July 2018 presentation, Emkay Global

Indian Agrochem Market – Export Oriented Growth During 2019-26E

Despite lower per hectare agrochem consumption, exports likely to remain focus area for domestic agrochem players

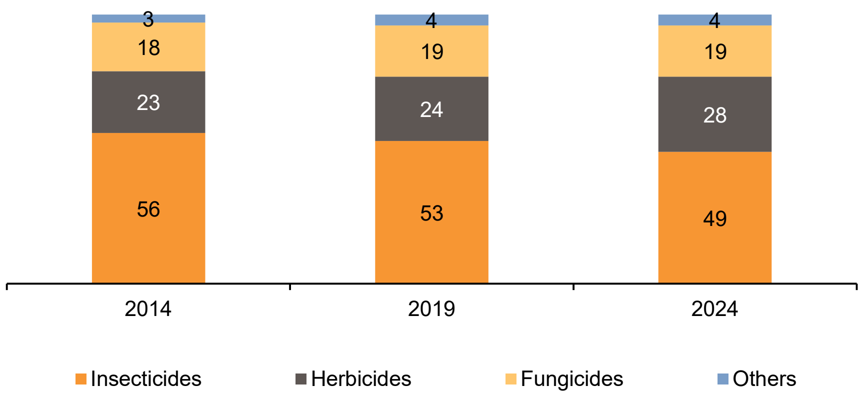
- During 2019-26E, Indian Agrochem segment (domestic consumption + exports) is expected to see an 8.0% CAGR ahead of the expected global growth rate of 6.6% CAGR.
- During 2019-26E, domestic agrochem consumption is expected to grow at ~7% CAGR while exports to lead the overall growth with ~9% CAGR.
- The Indian agrochem market is characterised by higher insecticides proportion, unlike the global market, which is dominated by herbicides due to the availability of low-cost labor in India. However, incrementally herbicides proportion in overall agrochem consumption is set to rise due to rising labor cost as well as labor shortage.
- Contrarily, exports will still be dominated by herbicides.

Exports to grow at ~9% vs. domestic at ~7% during 2019-26E



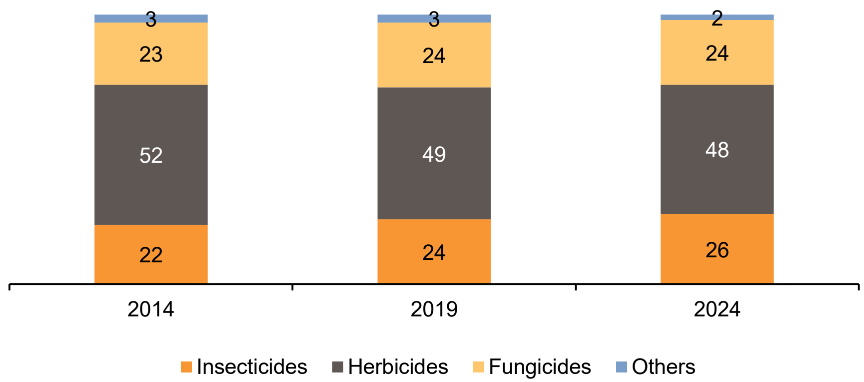
Source: FICCI

Adoption of herbicides expected to rise in Indian domestic market (%)



Source: Frost & Sullivan Research & Analysis, IPL RHP

Herbicides to dominate exports in future too (%)



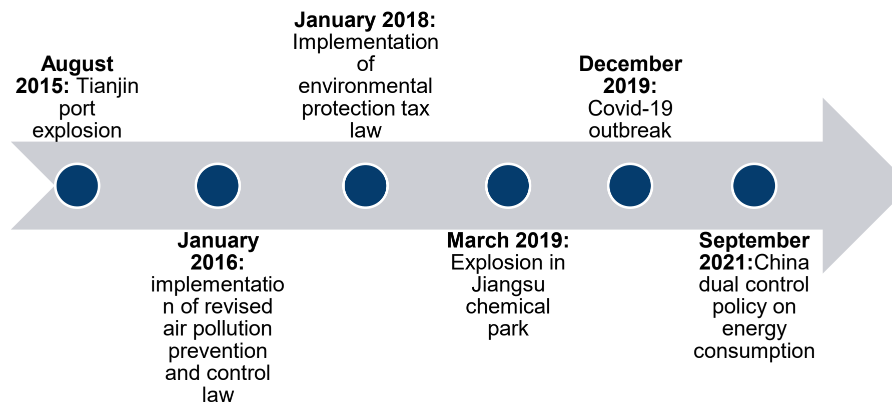
Source: Frost & Sullivan Research & Analysis, IPL RHP

China Disruptions Impact Agrochem Production

China agrochem production peaked at 3.8mmt in 2016 and declined thereafter; however, rose ~18% YoY in 2021 till November

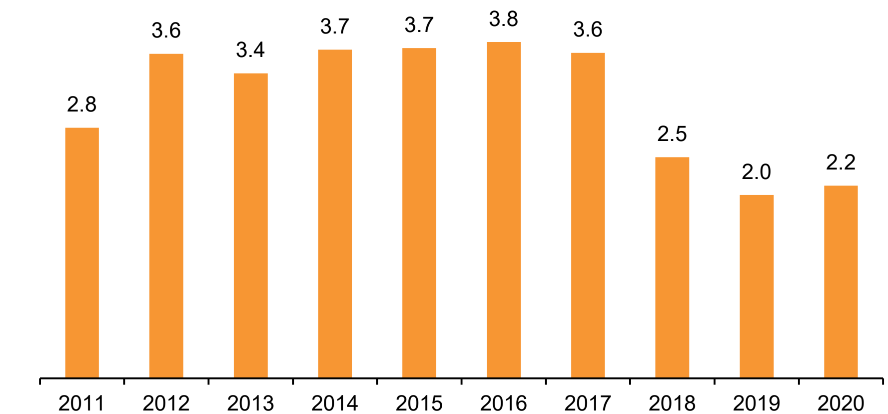
- Since the tightening of environment compliance from 2013-14, Chinese chemical/agrochemical industry has faced multiple disruptions, including accidents, environmental inspections and closures thereof, relocation of industries from urban to industrial parks, Covid-19, and latest being Dual control policy on energy consumption.
- Multiple disruptions in China led to capacity closures, partial shutdowns, relocations, etc., impacting agrochem production.
- Looking at past 10-year data, Chinese agrochem production rose from 2.8mmt in 2011, peaking at 3.8mmt in 2016, while declining thereafter to 2.0mmt in 2019.
- Despite being a Covid-impacted year, agrochem production rose ~5% YoY in 2020 at 2.15mmt.
- In January-August 2021 too, Chinese agrochem production rose ~20% YoY to 1.69mmt (1.41mmt).

China Disruptions Timeline



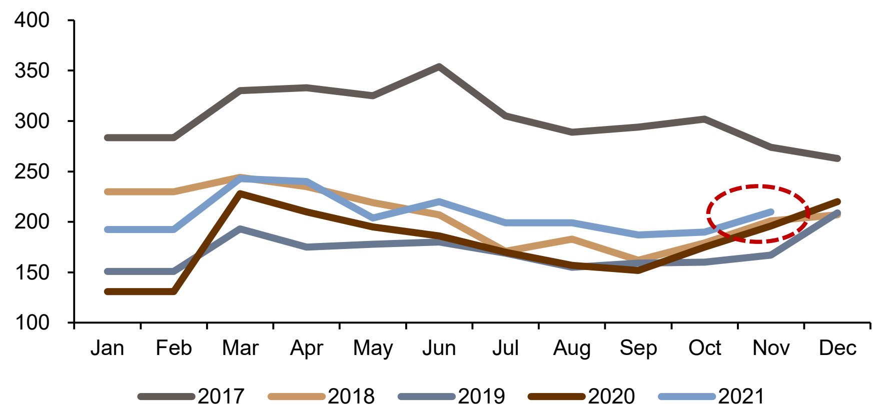
Source: The US-China Business Council, Emkay Global

Chinese Agrochem Production Peaked in 2016 (mmt)



Source: China government

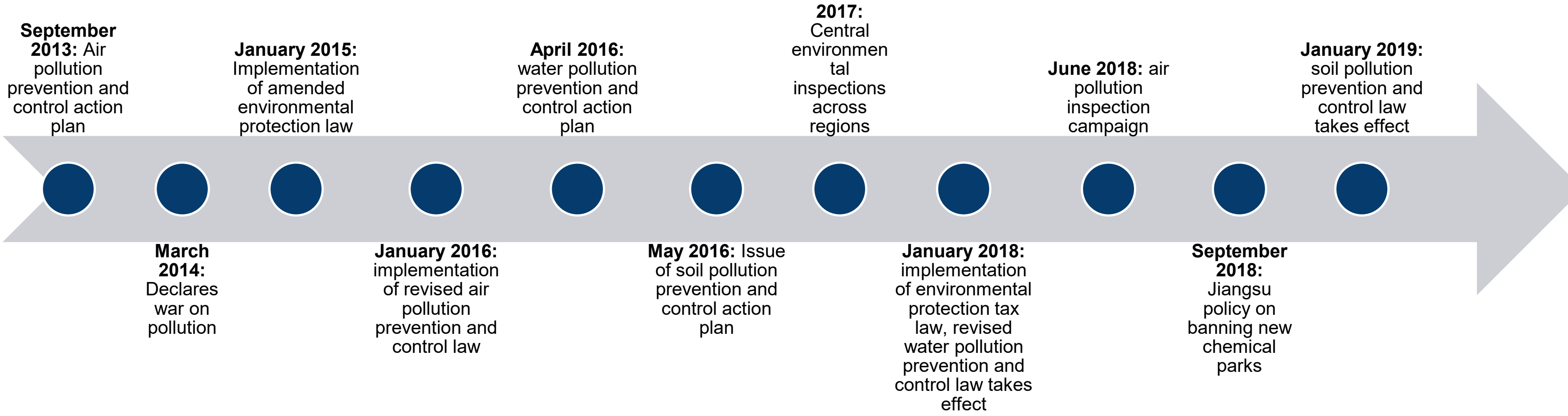
2021 Chinese Agrochem Production up ~18% YoY till November ('000MT)



Source: China government

China Environmental Events Timeline

China environmental regulations escalated since 2013



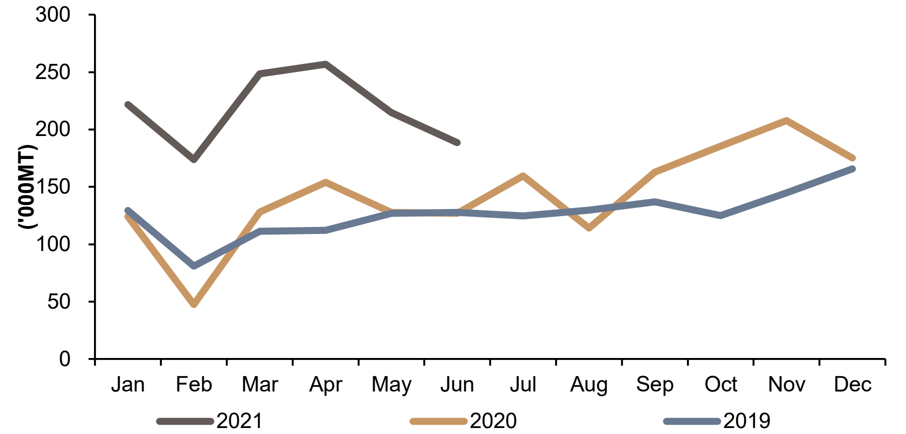
Source: The US-China Business Council, Emkay Global

China Agrochem Exports Surge Substantially in H12021

Input cost pressure coupled with favorable demand-supply dynamics benefits average realizations

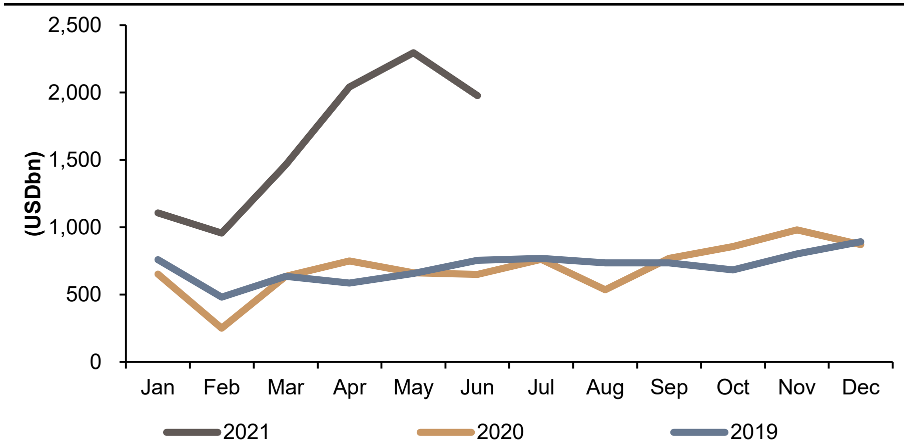
- In 2020, China agrochemicals exports declined marginally by 1.4% YoY to USD8.4bn (USD8.5bn). However, agrochem export volumes jumped 13.1% YoY at 1.7mmt (1.5mmt), signifying 12.3% decline in average realizations. Export volumes were impacted in early-2020 due to Covid-related issues.
- In H12021, agrochem exports witnessed a massive recovery, with exports surging by 173.4% YoY at USD9.8bn from USD3.6bn. We need to note that the first quarter of 2020 was impacted by Covid-related issues. Agrochem export volumes surged 84.1% YoY at 1.3mmt from 0.7mmt. Due to the incessant increase in chemical prices since mid-2020, coupled with favorable demand-supply dynamics, average realizations have been surging and rose 48.4% YoY. Particularly, a significant ~100% YoY surge in average realization was witnessed in the month of May and June.

China Agrochem exports volumes rose ~84% YoY



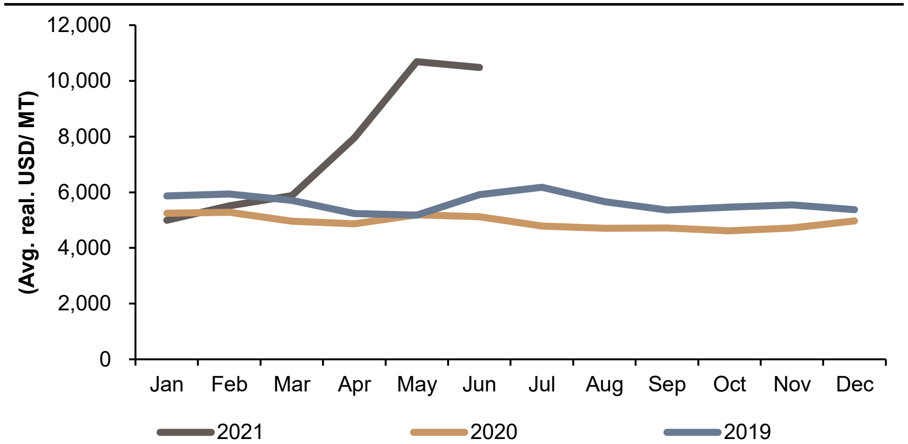
Source: AgriBusiness Global

Chinese Agrochem Exports surged in 1H2021



Source: AgriBusiness Global

Agrochem average real. surge in 2021 owing to input cost inflation



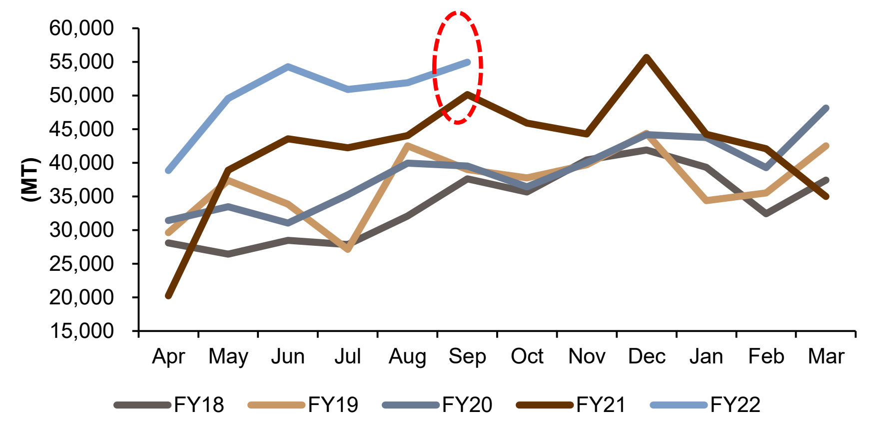
Source: AgriBusiness Global

India Agrochem Exports On a Rising Trend

Due to a mix of technicals and formulations, average exports realizations are lower than import prices

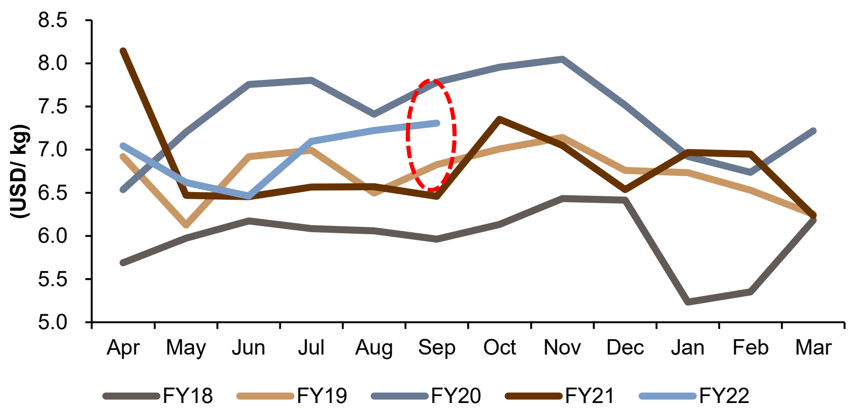
- In FY21, exports volumes surged 9.4% YoY, while export value remained flat YoY at USD3.4bn. Avg. export realizations remained largely flat in the first half of FY21, while showing some recovery in the second half.
- Import volumes and value data for the Apr-Sep 2021 period suggests a significant surge in both on a YoY basis; however, we need to consider the data with respect to the Covid-affected period last year.
- For Apr-Sep 2021, the data suggests a rising trend in realizations, with average realizations up by ~5% YoY for the period.
- Although average import prices seemed to have risen ~12% YoY in Apr-Sep 2021, average export realizations have not moved up in tandem with the increase in input prices, signifying the inability to fully pass on the increase.

Agrochem Monthly Exports – Volume



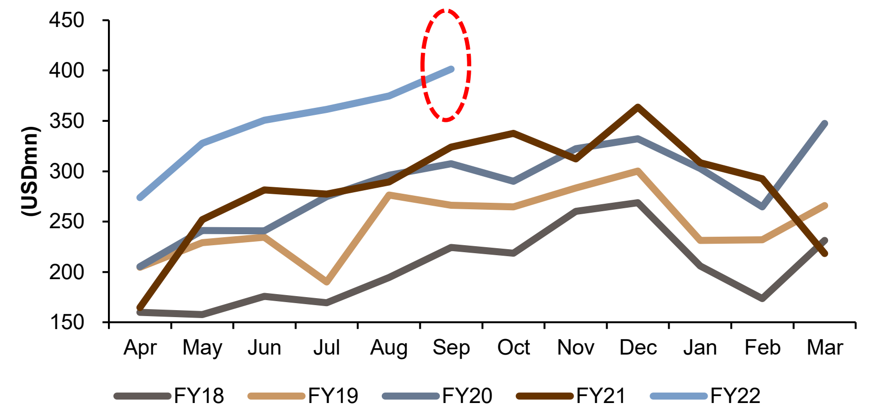
Source: Chemexcil

Agrochem Average Exports Realisations (USD/kg)



Source: Chemexcil

Agrochem Monthly Exports – Value



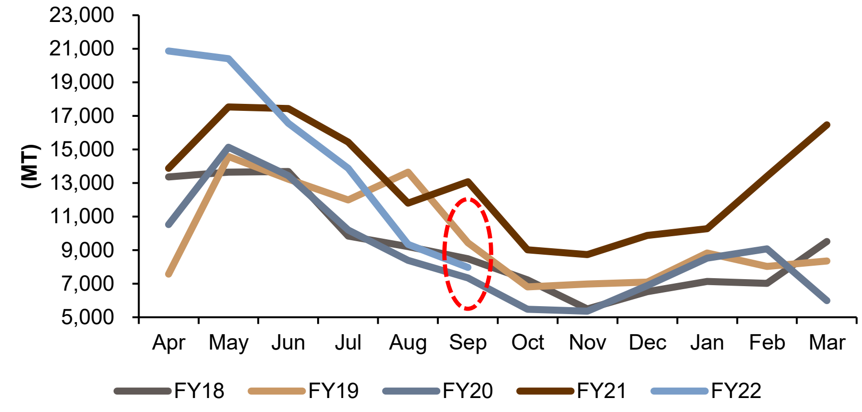
Source: Chemexcil

India Agrochem Imports Rising Too

Rising input costs, coupled with surging logistics costs, leading to surge in import prices

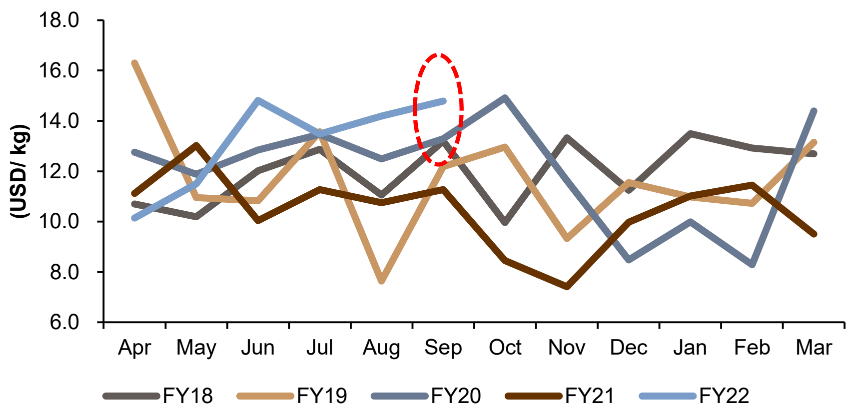
- During FY21, import volumes surged 47.5% YoY, while import value rose 30.8% YoY to USD1.7bn. Avg. import prices remained lower in the first of FY21, affected by Covid-related issues, while recovering from H2FY21.
- Import volumes for Apr-Sep 2021 suggest a considerable surge in the first three months and a decline in the next three, with cumulative volumes remaining flat YoY. However, we need to consider the data with respect to the Covid-affected period (Apr-Jun) last year.
- On the other hand, import value surged ~12% YoY in Apr-Sep 2021, owing to an increase in input costs. Flat volumes and a rise in imports in value terms suggest that the average import prices rose due to higher input costs, coupled with rising logistics costs.

Agrochem Monthly Imports – Volume



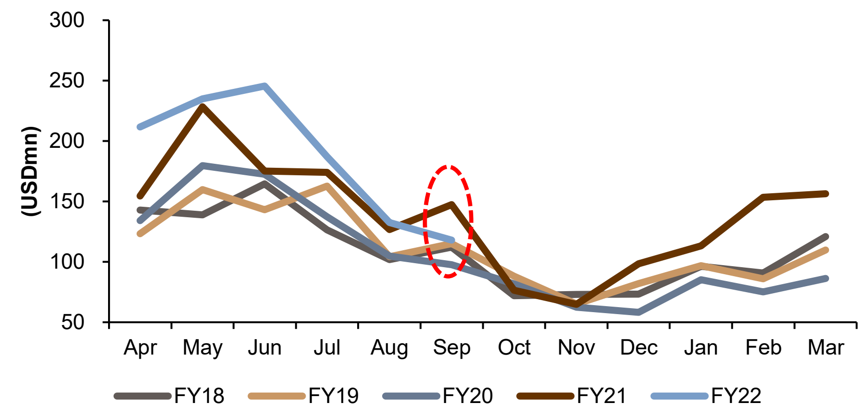
Source: Chemexcil

Agrochem Average Imports Price (USD/kg)



Source: Chemexcil

Agrochem Monthly Imports – Value



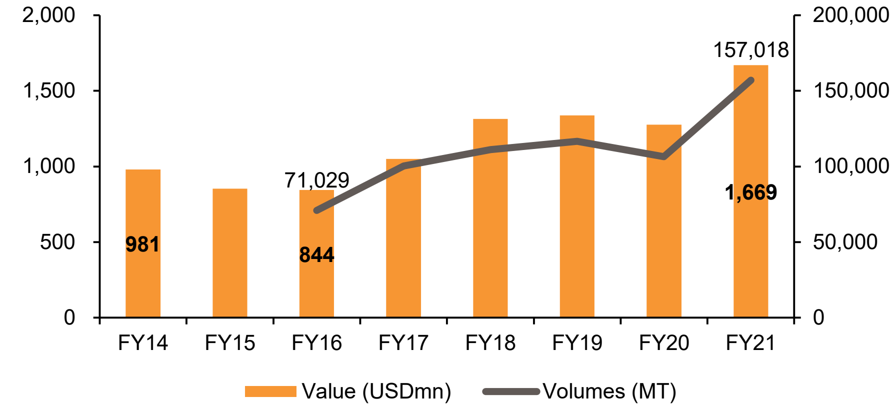
Source: Chemexcil

Indian Agrochem Exports Picked Up Materially in FY16-21

Agrochem exports surged ~82% in FY16-21 driven by volumes, Imports to more than doubled in the same period

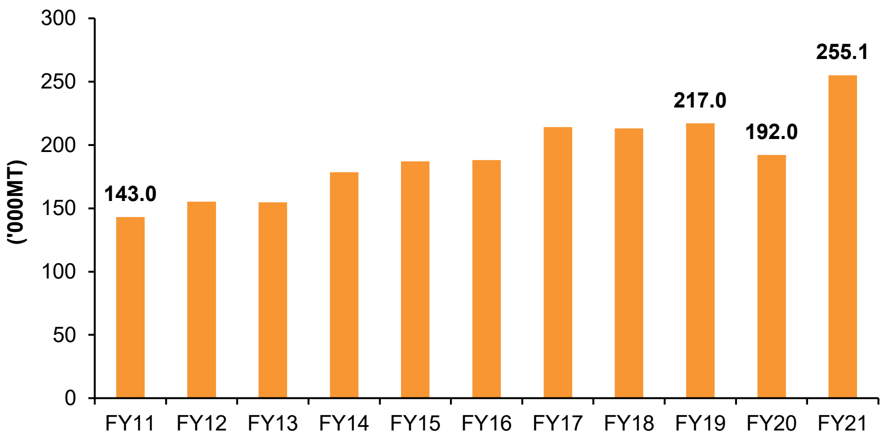
- During FY16-21, Indian agrochemicals exports surged ~82%, primarily driven by volumes which rose by ~73%. To some extent, this trend can be correlated to the decline in agrochem production in China during the same period and supply-chain challenges faced by global players.
- However, India's dependency on imports too surged ~98% in the same period, driven by a rise in volumes by ~121%, reflecting a decline in average pricing.
- Domestic agrochem production has risen consistently over the past decade, owing to increasing domestic demand and rising exports. Production in FY20 was lower YoY due to delayed monsoons, volatility on RM costs, and low pest pressure.

India Agrochem Imports Trend



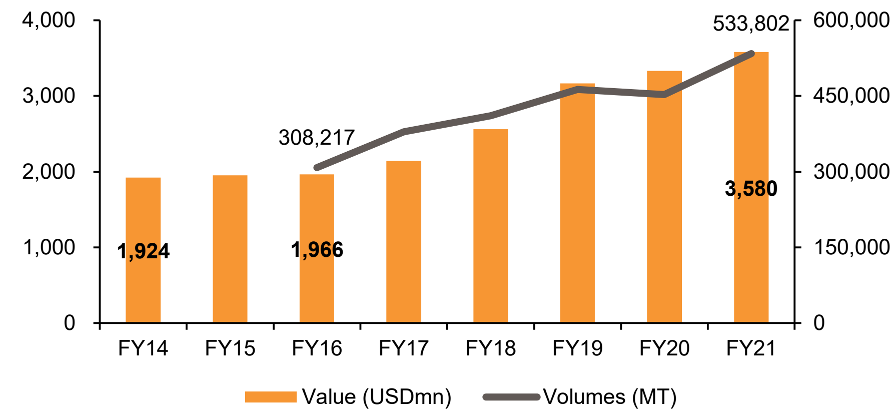
Source: Chemexcil

Rising Domestic Agrochem Production



Source: Ministry of Chemicals and Fertilisers

India Agrochem Exports Trend

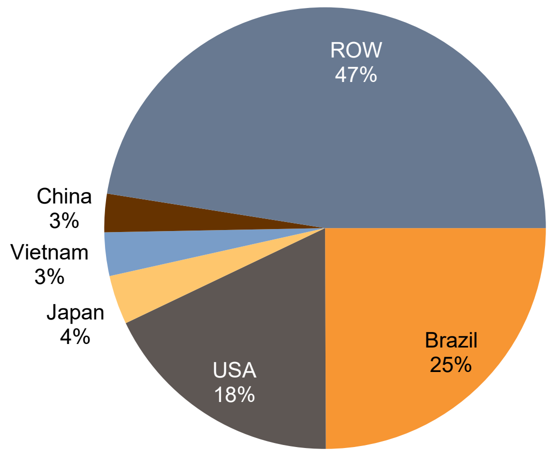


Source: Chemexcil

Indian Agrochem Exports Destined For LATAM, mainly Brazil

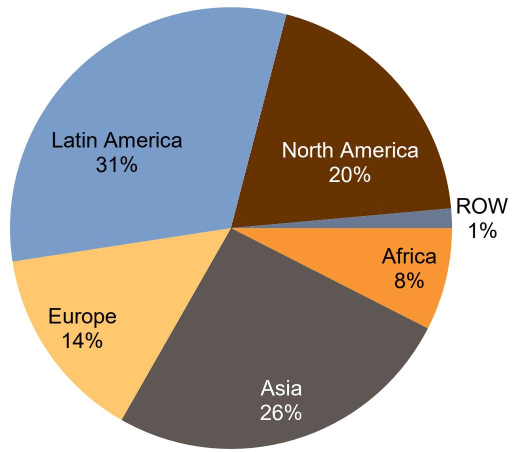
Input cost pressure coupled with favorable demand-supply dynamics benefits average realizations

Brazil Accounts for over 1/4th of total exports (FY21)



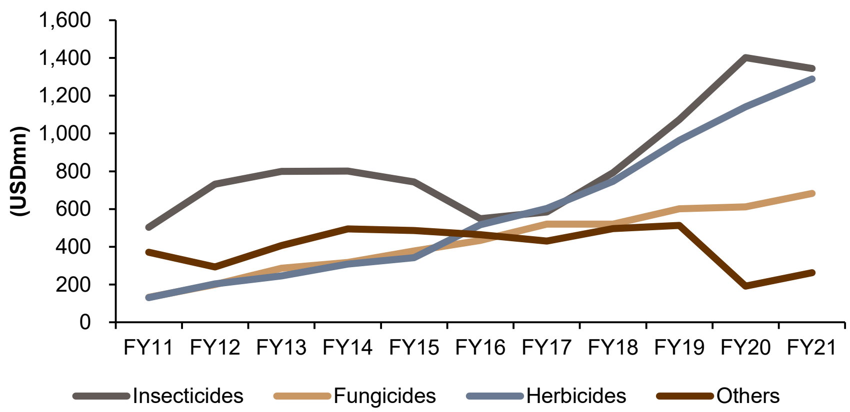
Source: Ministry of Commerce

Over 1/3rd exports destined towards LATAM (FY21)



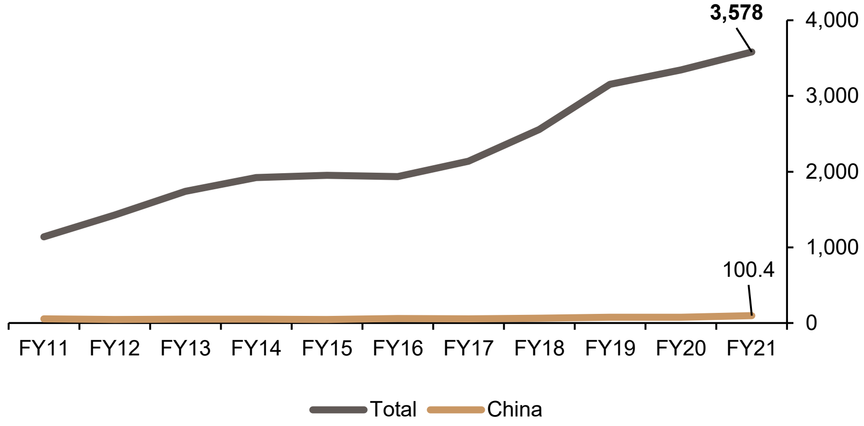
Source: Ministry of Commerce

Insecticides and Herbicides dominate Indian agrochem exports



Source: Ministry of Commerce

Exports to China at paltry ~3% (FY21)



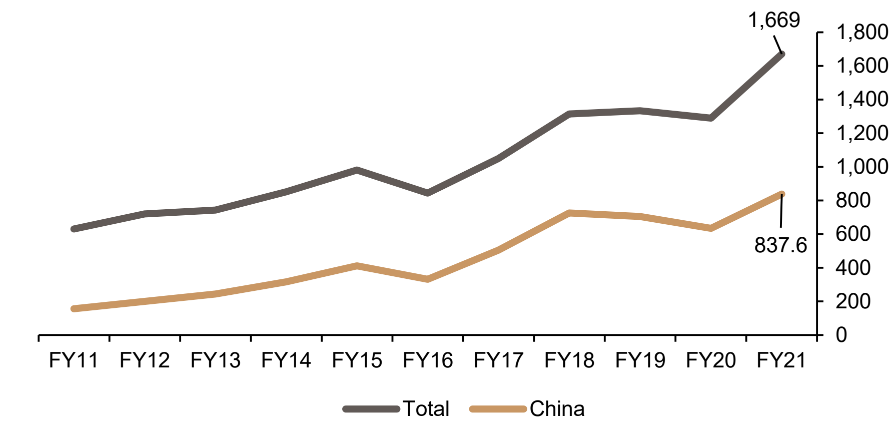
Source: Ministry of Commerce

Dependency On Chinese Imports Still Remains High At ~50%

China still a dominating factor in providing agrochem inputs (intermediates, technicals) to India

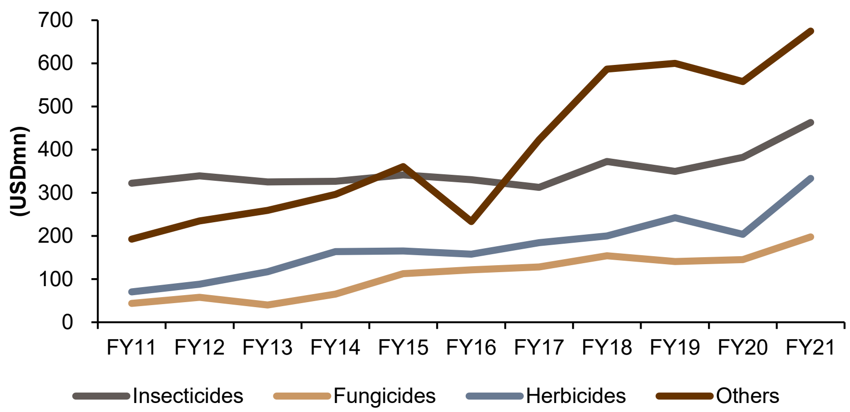
- Despite increasing agrochem manufacturing capacity, production, exports, dependency on imports from China has surged in the past decade. Chinese imports accounted for ~25% of total imports in FY11 which surged to ~50% by FY21.
- Indian agrochem companies are trying backward integration to alleviate the dependence from Chinese imports; however, it still seems far away till the Indian dependence on Chinese imports drops meaningfully.
- Similar to exports dominated by insecticides, the imports too are dominated by insecticides.

Chinese imports at ~50% of total imports (FY21)



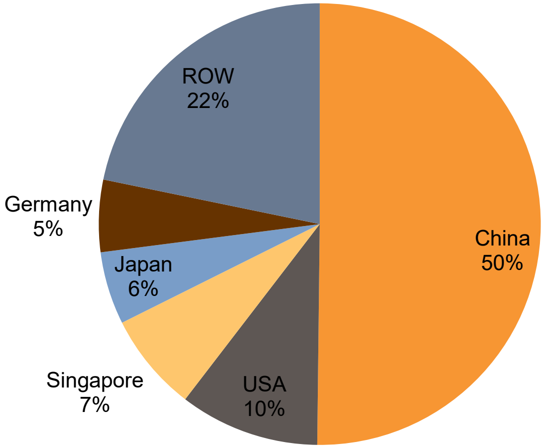
Source: Ministry of Commerce

Imports dominated by Insecticides



Source: Ministry of Commerce

US, Singapore, Japan, Germany account for ~1/4th of total imports



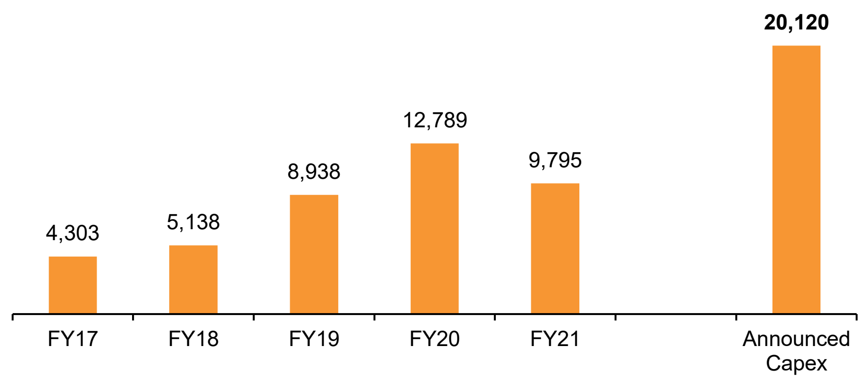
Source: Ministry of Commerce

Indian Agrochem Investments On A Rise

Agrochem capex momentum to continue going ahead

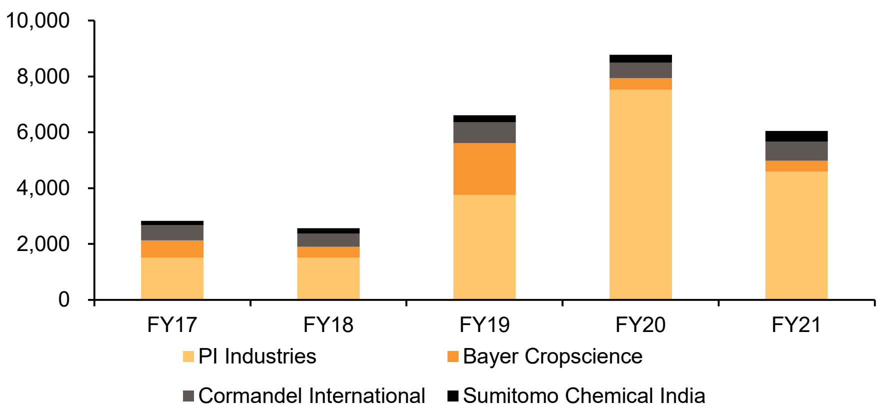
- Indian chemicals sector, including agrochemicals companies, embarked upon an investment/capex drive in the past few years. Capex/investments by 11 Indian listed agrochemical companies (excl. UPL) indicate cumulative investment of ~Rs41bn in FY17-21.
- These investments are not only targeted at catering to the domestic market but also with a keen focus on tapping the export opportunities. Further, the announced capex by 9 of these companies (excl. UPL) suggests incremental investment of ~Rs20bn in the next couple of years vs. a similar amount invested in the last two years.
- UPL, post Arysta acquisition, invested ~Rs47bn over FY20-21 and is expected to keep up the run-rate at ~Rs21-23bn per annum in the next couple of years.

Agrochem capex accelerated in recent past and expected to continue



Source: Company Annual Reports

Agrochem companies with high quantum of capex (Rs mn)



Source: Company Annual Reports

Exports Opportunity – Increasingly a Focus Area For Indian Agrochem Cos

Excerpts from management commentaries suggest rising thrust on exports from incremental growth perspective

- **Aimco Pesticides**

  Aimco's growing emphasis is on expanding its Technicals vertical through a combination of strategies, including a) expanding operations of current products, export registration in new markets, and capacity expansion, and b) developing processes, commercializing new products, and registering them in export markets.

- **Bhagiradha Chemicals**

  We see opportunities to manufacture several agrochemical products nearing off patent. Supported by our R&D team, we have already lined up some molecules for commercialization. Keeping in view the products in our repertoire and to broaden our customer base, we are focusing on new domestic and overseas registrations.

- **Bharat Rasayan**

  Apart from loyal customer base that the Company is enjoying since last several years now, many more new domestic as well as overseas customers are added to the portfolio of the Company during the year & same is expecting to increase in near future due to Company's commitment of supplying high quality product in a time bound manner.

- **Dhanuka Agritech**

  Your Company is setting up a plant for Technical Manufacturing of Pesticides i.e. Backward Integration Process, at Dahej, Gujarat. The Company has acquired a plot of approx. 137,000 square meters at Dahej, Gujarat in the year 2013. The setting up of this unit will involve an investment outlay of approx. Rs. 200 Crores initially, which will be managed from internal accruals of the Company. The setting up of said unit will improve the Company's position with other players for procuring the raw materials under the barter system. It will also help the Company to expand its market share and to open new avenues for the export of the Company's products.

- **Coromandel International**

  India's low-cost manufacturing in crop protection and high capacity opens significant export potential. Further, Covid 19 induced sourcing diversification approach by major global players has improved opportunities for Indian Agrochemical players.

- **Heranba Industries**

  In addition, our priority will be to focus on product registrations in foreign markets to enhance the export of our technicals and formulations. We are looking to register our products in the regulated markets of Europe, USA and Latin America. There have already been some positive developments in the EU market and we expect the momentum to continue in the US and Latin America markets as along with untapped market. We also see a good potential in our existing markets. With these focus areas, we are confident of entering regulated markets and other untapped geographies in export markets.

Source: FY21 Annual Reports

…Continued

- **Indofil Industries**

  Strong focus on expanding export business in key geographies including China, Bangladesh and Egypt. With the help of Reagens Brazil team, we started export of modifiers in Brazil and Chile. Along with it, relaxation of in norms for investment in agricultural infrastructure, increased for exports induced by demand from other countries and international price competitiveness augurs well for growth of agriculture and allied industries, which in turn offers Indofil ample opportunity for growth.

- **Insecticides India**

  Working on registration in new countries with 100+ export Agreements. Expanding in new geographies, exporting to 20+ countries, Expand to 50+ countries and 100+ customers by the end of FY23. In recent times the global supplies has been disrupted and India being the fourth largest manufacturer of agro-chemicals, the company can play a pivotal role in the global value chain and start its exports more aggressively by identifying rapid growing avenues.

- **Meghmani Organics**

  Meghmani's enjoys a competitive advantage via its presence in the entire value chain (less dependent on raw material) in the highly regulated Agrochemicals industry. The Company has a strong portfolio of 310 export registrations, 370 CIB registrations in FY21. Meghmani's diverse global client base accounts 79% of its Agro Chemical export sales. The Company exports Technical as well as Formulation (bulk and branded) products to Africa, Brazil, LATAM, US and European countries.

- **NACL Industries**

  The outlook for the sector remains strong, with favourable agroclimatic conditions, remunerative crop prices, stable exports and other supportive conditions. We are enthused about the role our industry and company in supporting the agriculture sector.

- **PI Industries**

  With enhanced utilization of multipurpose plants located at Jambusar, SEZ and commissioning of new plant, your Company expects growth momentum in exports in coming years.

- **Punjab Chemicals And Crop Protection**

  As your Company has a long and proven history for manufacturing and exporting various agro and speciality chemicals, it stands the chance to increase the volume and add new products either under CRAM or for outright sale. We have started discussions with several companies to increase business in exports and domestic markets. The Company has proven track record and has long experience and relations with many Indian and other MNCs and is working to strengthen this relationship with new products and increased business.

- **Rallis India**

  International Business: Maximise revenue from current Active Ingredient portfolio by scale up / debottlenecking capacities. Expand B2B partnership base and intensify B2C play in select products/geographies for revenue maximisation of existing portfolio. Resume few discontinued Active Ingredients Investment in Multi-Purpose Plant (MPP). Widening portfolio with new Active Ingredients developing innovative formulation and investment in registration.

Source: FY21 Annual Reports

…Continued

- **Sharda Cropchem**

  The Company continues to bank on smart IP management for identifying the generic molecules going off-patent and focus on seeking registrations to strengthen its portfolio of formulations and generic active ingredients across Europe, NAFTA, LATAM and the Rest of the World. Sharda Cropchem scouts to obtain registrations of new formulations by leveraging its existing dossiers and portfolio of formulations & generic active ingredients.

- **Sumitomo Chemical**

  In the export market, demand remains robust given the need for food security. In fact, demand for specific agrochemical products has increased as buyers are trying to shift their sourcing away from China. Orders are coming in from key international markets like Brazil, Japan, the U.S. etc., given the cost advantages of India.

- **UPL**

  Agrochemical exports are expected to remain steady as agronomic conditions across most markets of the world improve compared to last year and crop prices remain buoyant, boding well for farmer profitability. The government is expected to bring a production-linked incentive (PLI) scheme for the promotion of domestic manufacturing of agrochemicals providing a well-timed opportunity to further increase global market share as customers increasingly diversify their supplies away from China. The industry is also focusing on increasing backward integration capacities for the manufacturing of technical grade pesticides, in a bid to become self-sufficient and reduce reliance on China.

Source: FY21 Annual Reports

Digital Investments

Digital technologies – Part of forward integration for agrochem companies

Dhanuka Agritech – To invest in drone manufacturer IoTechworld Avigation

- Total amount of Rs300mn in IoTech in the form of subscription of Compulsory Convertible Preference Shares ("CCPS") in two tranches.
- IoTech is engaged in the business of Manufacturing of Drones, providing Drones, and drone related parts and services.
- Io-Tech will utilize the funds for Capital Expenditure, Technology Development, Software Development and building a strong and capable team.
- Post conversion of CCPS, Dhanuka to have 15% to 24% stake in IoTech based on revenue milestones.

UPL – Investment in nurture.farm

- Through Nurture platform, UPL is aiming to make agriculture simple, profitable for farmers and environmentally sustainable today and in the future through technology-led solutions.
- It makes multiple interventions with solutions spanning practices, products and services across the crop cycle. It combines sustainable, scientific, high-yield practices for growth, harvest, post-harvest and supply chain, with centralized access to diverse, curated products, services and intelligence across input and output for sustainable farming at scale.
- Covering every step of the farming life cycle nurture.farm will operate as an open platform in the supply of products, innovation, and mechanization.

DCM Shriram Industries – Zyrone Dynamics Havacilik Danismanlik Ve Ar-Ge San. TZyrone Dynamics Havacilik Danismanlik Ve Ar-Ge San, Turkey

- Investment of USD1.05mn for a 30% stake.
- ZD will provide technological support to manufacture two variants of UAVs in India and both the parties will support each other in marketing the products in India and globally.

Products Going Off-patent Pose Significant Opportunity

20+ products going off-patent in current decade with an opportunity size of over USD5bn+

Patent Expiry	Molecules	Inventor	Opportunity Size (USDmn, 2019)	Usage
Jan-2021	Fluopyram	Bayer Cropscience	250-350	Used against fungal diseases - Gray mold (Botrytis), powdery mildew, apple scab, Alternaria, Sclerotinia, and Monilinia
Jan-2021	Penflufen	Bayer Cropscience	500-100	Potato: Black Scurf (Rhizoctonia solani), Silve Scurf (Helminthosporium solani), Dry rot (Fusarium spp.), Smut, (Rape, soybean, cotton), and a number of seed-borne pathogens
Jan-2021	Pyriofenone	Ishihara	200-400	Fungicide developed for control of powdery mildew in cereals and grape vines
Jan-2021	Sedaxane	Syngenta AG	350-400	Long-lasting protection against difficult-to-control seed-, soil-, and air-borne pathogens such as Rhizoctonia spp., Ustilago spp. (on cereals), . It offers unique RootingPower that results in stronger, healthier roots for higher crop productivity
Mar-2021	Isopyrazam	Syngenta AG	300-350	Broad spectrum fungicide. Controls a wide range of fungal pathogens including Septoria tritici, Puccinia recondita, and Puccinia striformis on wheat
Apr-2021	Pyroxsulam	Corteva Agriscience	400-450	Broad spectrum grass and braodleaf weeds of cereals
Jul-2021	Mandipropamid	Syngenta AG	60	Late blight of potato and tomato. Also used in tobacco, F&V, and vine.
Dec-2021	Fluxapyroxad	BASF SE	450-500	Broad spectrum fungicide for cereals, soybean, speciality crops, and turf.
2021	Aminopyralid	Corteva Agriscience	160	Broad spectrum weedicide for pasture, rangeland, oil palm, rubber, F&V, and cereals
2022	Fenpyrazamine	Sumitomo Chemicals	200-300	Highly effective against grey mold, stem rot, and brown rot in fruits and vegetables
Sep-2023	Bixafen	Bayer Cropscience	1,200	Broad spectrum fungicide for cereals
Apr-2024	Chlorantraniliprole	Corteva/FMC	1,500	Chewing insects of soyabean, F&V, rice, cotton, maize, pome fruit, potato, sugarcane and cereals
2024	Flubendiamide	Bayer Cropscience	700-900	Mainly effective for controlling lepidopteron pests including resistant strain in rice, cotton, corn, grapes, other fruits, and vegetables
2024	Fluopicolide	Bayer Cropscience	400-500	Fungicide for grapes, potatoes, fruits, and vegetables.
2024	Penthiopyrad	Corteva Agriscience	600-700	It offers unique RootingPower that results in stronger, healthier roots for higher crop productivity
2024	Thiencarbazone-methyl	Bayer Cropscience	900-950	Herbicide used for the selective control of grasses and broadleaf weeds primarily in corn
2024	Valifenalate	Ishihara	500-600	Used to control mildew in many crops including grapes, potatoes, and tomatoes
2024	Saflufenacil	BASF	225	Broadleaf weeds of soybean, maize, sugarcane, cereals, non-crop, and orchards
Sep-2026	Cyantraniliprole	Corteva/ FMC/ Syngenta	700-900	Effective against larval stages of lepidopeteran insects; and also on thrips, aphids, and some other chewing and suckin pests on a variety of crops
2026	Pinoxaden	Syngenta AG	681	Highly selective systemic herbicide used to control monocotyledonous grass weeds in crops such as wild oats, rye-grass, and black grass in winter and spring wheat and winter and spring barley
2027	Sulfoxaflor	Corteva Agriscience	190	Sucking pests of turf, soybean, cotton, cereals, and F&V
2028	Benzovindiflupyr	Syngenta AG	419	Control broad range of fungal diseases-blight, ,mildew, rust, scab, leafspot on corn, soybean, ornamentals, turf, etc.

Source: Frost & Sullivan Research & Analysis, IPL RHP

Kharif 2021-22 – 1st Advance Estimates for Production of Food grains

Kharif food grain production expected to be 0.6% higher YoY for 2021-22 season

Crop (mn tonnes)	Season	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
												4th Adv.Est.	Targets	1st Adv.Est.
	Kharif	80.65	92.78	92.37	91.50	91.39	91.41	96.30	97.14	102.04	102.28	104.41	104.30	107.04
Rice	Rabi	15.33	12.52	12.87	15.15	14.09	13.00	13.40	15.62	14.44	16.59	17.86		
	Total	**95.98**	**105.30**	**105.24**	**106.65**	**105.48**	**104.41**	**109.70**	**112.76**	**116.48**	**118.87**	**122.27**	**104.30**	**107.40**
Wheat	Rabi	86.87	94.88	93.51	95.85	86.53	92.29	98.51	99.87	103.60	107.86	109.52		
	Kharif	3.44	3.29	2.84	2.39	2.30	1.82	1.96	2.27	1.74	1.70	1.85	2.20	1.54
Jowar	Rabi	3.56	2.69	2.44	3.15	3.15	2.42	2.60	2.53	1.74	3.08	2.94		
	Total	**7.00**	**5.98**	**5.28**	**5.54**	**5.45**	**4.24**	**4.57**	**4.80**	**3.48**	**4.77**	**4.78**	**2.20**	**1.54**
Bajra	Kharif	10.37	10.28	8.74	9.25	9.18	8.07	9.73	9.21	8.66	10.36	10.86	10.50	9.35
Ragi	Kharif	2.19	1.93	1.57	1.98	2.06	1.82	1.39	1.99	1.24	1.76	1.96	1.90	1.52
Small Millets	Kharif	0.44	0.45	0.44	0.43	0.39	0.39	0.44	0.44	0.33	0.37	0.35	0.61	0.36
	Kharif	16.44	15.95	13.59	14.06	13.93	12.10	13.52	13.91	11.97	14.19	15.02	15.21	12.76
Nutri Cereals	Rabi	3.56	2.69	2.44	3.15	3.15	2.42	2.60	2.53	1.74	3.08	2.94		
	Total	**20.01**	**18.64**	**16.03**	**17.20**	**17.08**	**14.52**	**16.12**	**16.44**	**13.71**	**17.26**	**17.96**	**15.21**	**12.76**
	Kharif	16.64	16.49	16.19	17.14	17.01	16.05	18.92	20.12	19.41	19.43	21.44	22.10	21.24
Maize	Rabi	5.09	5.27	6.06	7.11	7.16	6.51	6.98	8.63	8.30	9.34	10.07		
	Total	**21.73**	**21.76**	**22.26**	**24.26**	**24.17**	**22.57**	**25.90**	**28.75**	**27.72**	**28.77**	**31.51**	**22.10**	**21.24**
Barley	Rabi	1.66	1.62	1.75	1.83	1.61	1.44	1.75	1.78	1.63	1.72	1.67		
	Kharif	33.08	32.44	29.79	31.20	30.94	28.15	32.44	34.03	31.38	33.61	36.46	37.31	34.00
Nutri/Coarse Cereals	Rabi	10.32	9.58	10.25	12.09	11.92	10.37	11.33	12.94	11.67	14.13	14.68		
	Total	**43.40**	**42.01**	**40.04**	**43.29**	**42.86**	**38.52**	**43.77**	**46.97**	**43.06**	**47.75**	**51.15**	**37.31**	**34.00**
	Kharif	113.73	125.22	122.16	122.70	122.34	119.56	128.74	131.16	133.42	135.89	140.87	141.61	141.04
Cereals	Rabi	112.52	116.98	116.63	123.09	112.53	115.66	123.24	128.44	129.71	138.59	142.06		
	Total	**226.25**	**242.20**	**238.79**	**245.79**	**234.87**	**235.22**	**251.98**	**259.60**	**263.14**	**274.48**	**282.93**	**141.61**	**141.04**
Tur	Kharif	2.86	2.65	3.02	3.17	2.81	2.56	4.87	4.29	3.32	3.89	4.28	4.30	4.43
Gram	Rabi	8.22	7.70	8.83	9.53	7.33	7.06	9.38	11.38	9.94	11.08	11.99		
	Kharif	1.40	1.23	1.48	1.15	1.28	1.25	2.18	2.75	2.36	1.33	1.60	2.70	2.05
Urad	Rabi	0.36	0.53	0.47	0.55	0.68	0.70	0.66	0.74	0.70	0.75	0.75		
	Total	**1.76**	**1.77**	**1.95**	**1.70**	**1.96**	**1.95**	**2.83**	**3.49**	**3.06**	**2.08**	**2.34**	**2.70**	**2.05**
	Kharif	1.53	1.24	0.79	0.96	0.87	1.00	1.64	1.43	1.78	1.83	2.01	2.02	2.05
Moong	Rabi	0.27	0.40	0.40	0.65	0.64	0.59	0.52	0.59	0.67	0.68	1.08		
	Total	**1.80**	**1.63**	**1.19**	**1.61**	**1.50**	**1.59**	**2.17**	**2.02**	**2.46**	**2.51**	**3.09**	**2.02**	**2.05**
Lentil	Rabi	0.94	1.06	1.13	1.02	1.04	0.98	1.22	1.62	1.23	1.10	1.45		
Other Kharif Pulses	Kharif	1.33	0.93	0.62	0.71	0.77	0.72	0.89	0.83	0.63	0.87	0.80	0.80	0.94
Other Rabi Pulses	Rabi	1.33	1.34	1.60	1.51	1.74	1.50	1.77	1.78	1.45	1.49	1.76		
	Kharif	7.12	6.06	5.91	5.99	5.73	5.53	9.58	9.31	8.09	7.92	8.69	9.82	9.45
Total Pulses	Rabi	11.12	11.03	12.43	13.25	11.42	10.82	13.55	16.11	13.98	15.10	17.02		
	Total	**18.24**	**17.09**	**18.34**	**19.25**	**17.15**	**16.35**	**23.13**	**25.42**	**22.08**	**23.03**	**25.72**	**9.82**	**9.45**
	Kharif	120.85	131.27	128.07	128.69	128.06	125.09	138.33	140.47	141.52	143.81	149.56	151.43	150.50
Total Food grains	Rabi	123.64	128.01	129.06	136.35	123.96	126.47	136.78	144.55	143.70	153.69	159.08		
	Total	**244.49**	**259.29**	**257.13**	**265.04**	**252.02**	**251.57**	**275.11**	**285.01**	**285.21**	**297.50**	**308.65**		

Source: Department of Agriculture & Farmers Welfare

Kharif 2021-22 – 1st Advance Estimates for Production of Oil seeds and Commercial Crops

Kharif oilseeds and commercial crops production expected to 0.5% higher YoY for 2021-22 season

Crop (lakh tonnes)	Season	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
												4th Adv.Est.	Targets	1st Adv.Est.
Groundnut	Kharif	66.43	51.27	31.87	80.58	59.30	53.68	60.48	75.95	53.87	83.89	85.56	81.51	82.54
	Rabi	16.22	18.37	15.08	16.56	14.71	13.66	14.14	16.57	13.40	15.63	16.53		
	Total	**82.65**	**69.64**	**46.95**	**97.14**	**74.02**	**67.33**	**74.62**	**92.53**	**67.27**	**99.52**	**102.10**	**81.51**	**82.54**
Castorseed	Kharif	13.50	22.95	19.64	17.27	18.70	17.52	13.76	15.68	11.97	18.42	16.51	18.67	15.98
Sesamum	Kharif	8.93	8.10	6.85	7.15	8.28	8.50	7.47	7.55	6.89	6.58	8.11	9.57	6.72
Nigerseed	Kharif	1.08	0.98	1.02	0.98	0.76	0.74	0.85	0.70	0.45	0.41	0.39	1.35	0.51
Soyabean	Kharif	127.36	122.14	146.66	118.61	103.74	85.70	131.59	109.33	132.68	112.26	128.97	147.65	127.20
Sunflower	Kharif	1.92	1.47	1.87	1.54	1.11	0.66	0.98	0.85	0.90	0.92	0.77	1.26	0.95
	Rabi	4.59	3.69	3.57	3.50	3.23	2.30	1.53	1.37	1.26	1.21	1.53		
	Total	**6.51**	**5.17**	**5.44**	**5.04**	**4.34**	**2.96**	**2.51**	**2.22**	**2.16**	**2.13**	**2.30**	**1.26**	**0.95**
Rapeseed & Mustard	Rabi	81.79	66.04	80.29	78.77	62.82	67.97	79.17	84.30	92.56	91.24	101.12		
Linseed	Rabi	1.47	1.52	1.49	1.41	1.55	1.25	1.84	1.74	0.99	1.21	1.12		
Safflower	Rabi	1.50	1.45	1.09	1.13	0.90	0.53	0.94	0.55	0.25	0.44	0.39		
Total Nine Oilseeds	Kharif	219.22	206.91	207.91	226.12	191.89	166.80	215.13	210.06	206.76	222.47	240.32	260.00	233.89
	Rabi	105.57	91.08	101.52	101.37	83.21	85.71	97.62	104.53	108.46	109.72	120.69		
	Total	**324.79**	**297.99**	**309.43**	**327.49**	**275.11**	**252.51**	**312.76**	**314.59**	**315.22**	**332.19**	**361.01**	**260.00**	**233.89**
Sugarcane	**Total**	**3,423.82**	**3,610.37**	**3,412.00**	**3,521.42**	**3,623.33**	**3,484.48**	**3,060.69**	**3,799.05**	**4,054.16**	**3,705.00**	**3,992.53**	**3,970.00**	**4,192.52**
Cotton #	**Total**	**330.00**	**352.00**	**342.20**	**359.02**	**348.05**	**300.05**	**325.77**	**328.05**	**280.42**	**360.65**	**353.84**	**370.00**	**362.19**
Jute # #	**Total**	**100.09**	**107.36**	**103.40**	**110.83**	**106.18**	**99.40**	**104.32**	**95.91**	**94.97**	**94.46**	**91.21**	**100.00**	**91.95**
Mesta # #	**Total**	**6.11**	**6.63**	**5.90**	**6.07**	**5.08**	**5.83**	**5.30**	**4.42**	**3.23**	**4.31**	**4.35**	**6.00**	**4.14**
Jute & Mesta # #	**Total**	**106.20**	**113.99**	**109.30**	**116.90**	**111.26**	**105.24**	**109.62**	**100.33**	**98.20**	**98.77**	**95.56**	**106.00**	**96.08**

Note: # Lakh bales of 170 kgs. Each, # # Lakh bales of 180 kgs. each

Source: Department of Agriculture & Farmers Welfare

Kharif Sowing 2021-22 – Marginally down YoY

Despite delay in Monsoon, Kharif sowing area declined marginally YoY

- Delay in monsoon caused delay in Kharif sowing which was lagging by ~4.7% YoY till end-July. However, monsoon pick up in August and September recovered sowing with end-September Kharif sowing area down by just 0.5% YoY.
- Rice area witnessed 1.4% YoY growth and pulses too witnessed 2.1% YoY growth.
- Cotton sowing disappointed with a substantial 6.1% YoY decline in sowing area. Similarly, Bajra sowing too declined 7.6% YoY.

Kharif Sowing Area down by 0.5% YoY

Crop	Area sown (lakh ha)				
As on 24/09/2021	**2021-22**	**2020-21**	**2019-20**	**1018-19**	**2017-18**
Rice	420.4	414.6	385.7	386.9	377.1
Pulses	141.6	138.6	133.9	136.4	140.1
Jowar	14.6	15.2	17.1	17.8	18.3
Bajra	63.4	68.6	66.1	65.3	70.6
Maize	82.1	81.2	82.3	79.9	76.6
Total coarse cereals	175.7	180.2	180.4	176.9	184.1
Oilseeds	195.4	198.0	179.6	179.3	173.4
Sugarcane	55.2	54.1	51.9	55.5	50.0
Jute & Mesta	7.0	6.9	6.9	7.2	7.1
Cotton	120.1	127.9	127.7	121.1	122.6
Total	**1,115.3**	**1,120.4**	**1,066.1**	**1,063.2**	**1,054.4**

Source: Department of Agriculture & Farmers Welfare

Cotton Sowing Area down 6.1% YoY

% Chg. YoY	2021-22	2020-21	2019-20	1018-19	2017-18
Rice	*1.4*	*7.2*	*2.3*	*2.6*	*-1.4*
Pulses	*2.1*	*1.6*	*-4.4*	*-2.6*	*-2.0*
Jowar	*-3.7*	*-14.3*	*-6.7*	*-3.0*	*-8.0*
Bajra	*-7.6*	*5.0*	*-6.4*	*-7.5*	*0.1*
Maize	*1.1*	*1.6*	*7.5*	*4.4*	*-8.7*
Total coarse cereals	*-2.5*	*1.9*	*-2.0*	*-3.9*	*-3.0*
Oilseeds	*-1.3*	*10.4*	*3.6*	*3.4*	*-8.7*
Sugarcane	*2.0*	*-2.5*	*3.8*	*11.0*	*9.6*
Jute & Mesta	*1.0*	*-3.8*	*-3.4*	*1.4*	*-6.6*
Cotton	*-6.1*	*5.6*	*4.1*	*-1.3*	*19.3*
Total	***-0.5***	***5.4***	***1.1***	***0.8***	***-0.6***

Source: Department of Agriculture & Farmers Welfare

Rice Sowing Area rose while Cotton, Bajra, Oilseeds declined YoY

Abs. YoY inc./ (dec.)	2021-22	2020-21	2019-20	1018-19	2017-18
Rice	5.7	27.7	8.6	9.8	-5.3
Pulses	3.0	2.2	-6.2	-3.7	-2.9
Jowar	-0.6	-2.5	-1.2	-0.6	-1.6
Bajra	-5.2	3.3	-4.5	-5.3	0.1
Maize	0.9	1.2	5.7	3.3	-7.3
Total coarse cereals	-4.5	3.3	-3.8	-7.2	-5.7
Oilseeds	-2.6	18.7	6.2	5.9	-16.6
Sugarcane	1.1	-1.4	1.9	5.5	4.4
Jute & Mesta	0.1	-0.3	-0.2	0.1	-0.5
Cotton	-7.8	6.8	5.1	-1.6	19.8
Total (lakh ha)	**-5.1**	**57.1**	**11.6**	**8.8**	**-6.8**

Source: Department of Agriculture & Farmers Welfare

Water Reservoir Levels/Rainfall

Input cost pressure, coupled with favorable demand-supply dynamics, benefits average realizations

- In the current monsoon season, rainfall was delayed, impacting sowing during the early part of Kharif season. However, the rainfall picked up in August and further gained momentum in September, wiping out the deficit to a large extent. By end September, rainfall deficit remained marginal.
- Rainfall also led to an increase in the overall water reservoir levels, higher than 10-yr average.
- However, the distribution across water reservoir levels remains a bit erratic, with Northern and Eastern regions below normal, while Western and Southern regions above normal, Central region being largely at par.

Overall rainfall marginally lower than normal

Cumulative rainfall (mm)	Actual	Normal	% Departure
East & North-East India	1,246	1,410	(11.6)
North-West India	576	600	(3.9)
Central India	1,013	977	3.7
South Peninsula	804	726	10.7
Country as a whole	875	881	(0.7)

Source: Department of Agriculture & Farmers Welfare

Overall water reservoir levels better than 10-yr. average, Northern and Eastern regions lower than average

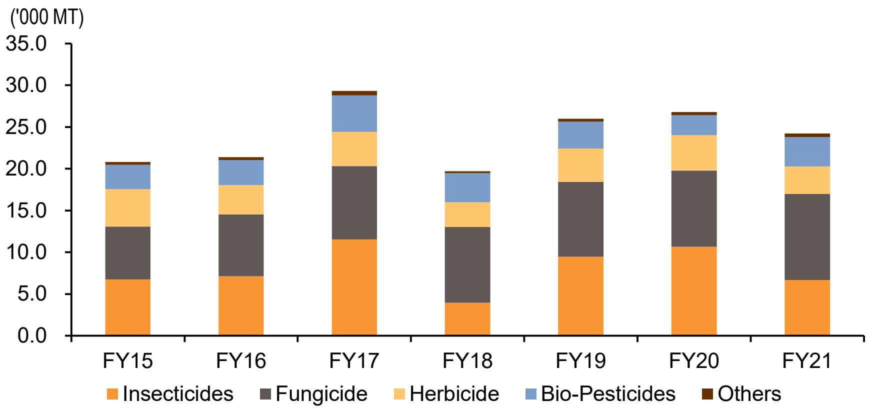
Region	No. of Res.	Live Storage				Storage as % of Capacity		
		Live Cap. (BCM)	Current Year	Prev. Year	10 yr. avg.	Current Year	Prev. Year	10 yr. avg.
Northern Region	9	19.4	11.9	12.1	14.7	61.6	62.7	75.8
Eastern Region	21	20.1	14.4	14.9	15.2	71.5	74.2	75.8
Western Region	42	35.2	30.3	32.6	25.5	85.9	92.4	72.4
Central Region	24	45.5	36.9	39.8	36.3	81.2	87.6	79.8
Southern Region	37	52.3	44.6	47.1	35.0	85.2	90.0	66.8
Country as a whole	133	172.5	138.1	146.5	126.6	80.0	84.9	73.4

Source: Department of Agriculture & Farmers Welfare

Consumption and demand scenario of Pesticides in India

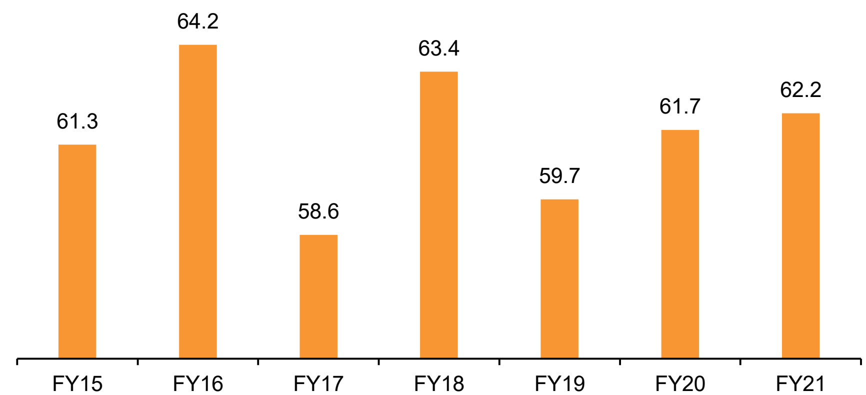
Domestic pesticide consumption up 0.8% YoY in FY21

Consumption of Indigenous Pesticides (’000 MT)



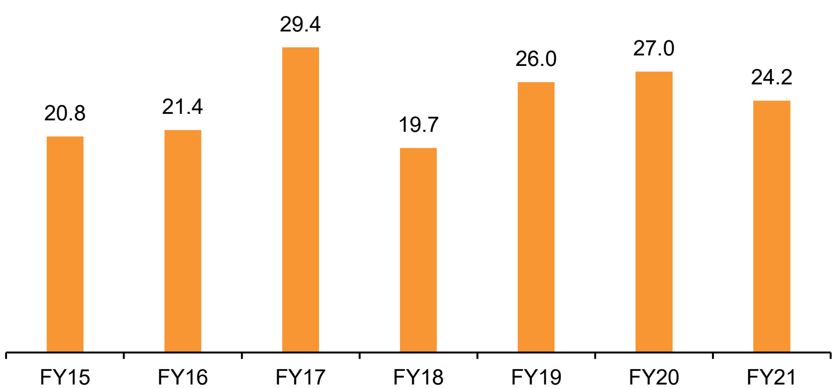
Source: PPQS

Pesticide consumption in India (’000MT)



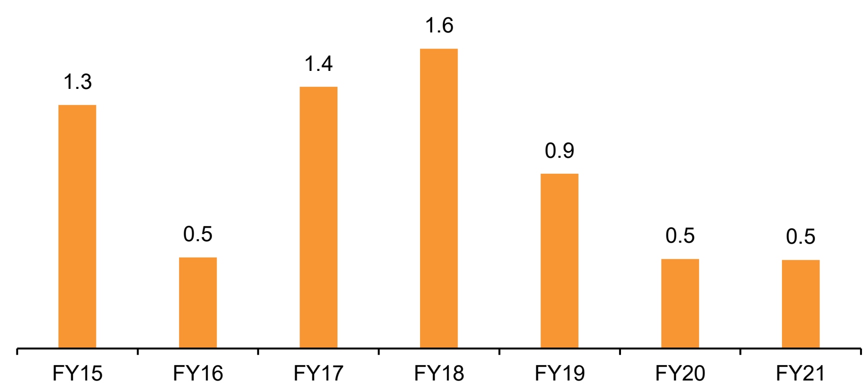
Source: PPQS

Domestic consumption of indigenous pesticides (’000MT)



Source: PPQS

Domestic consumption of imported pesticides (’000MT)



Source: PPQS

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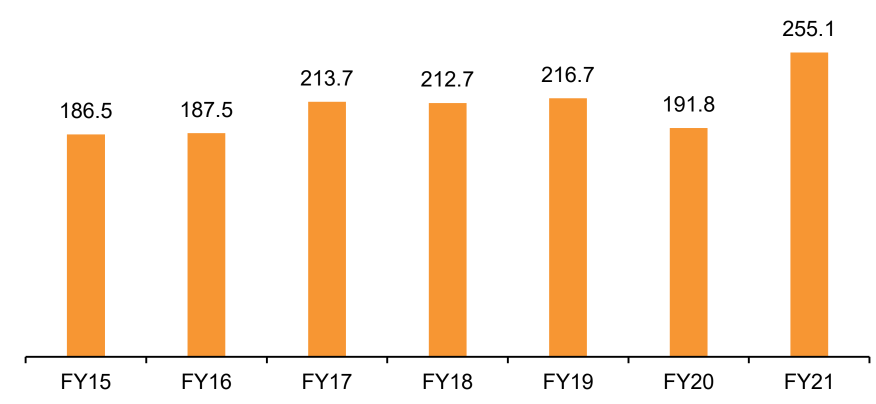
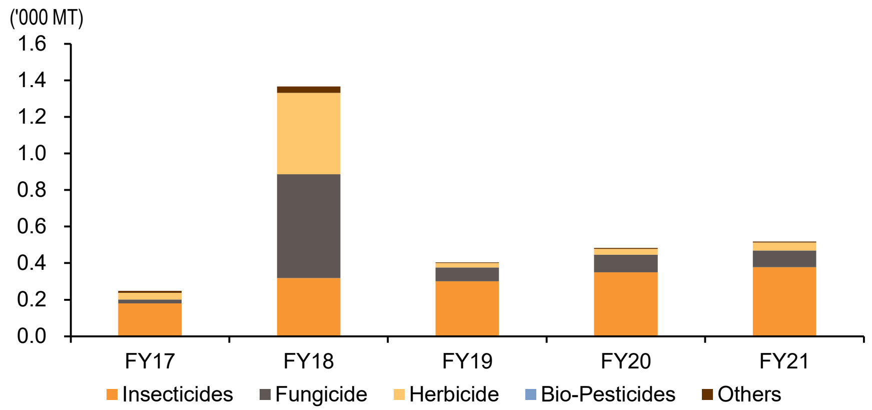
Pesticide production ('000MT)



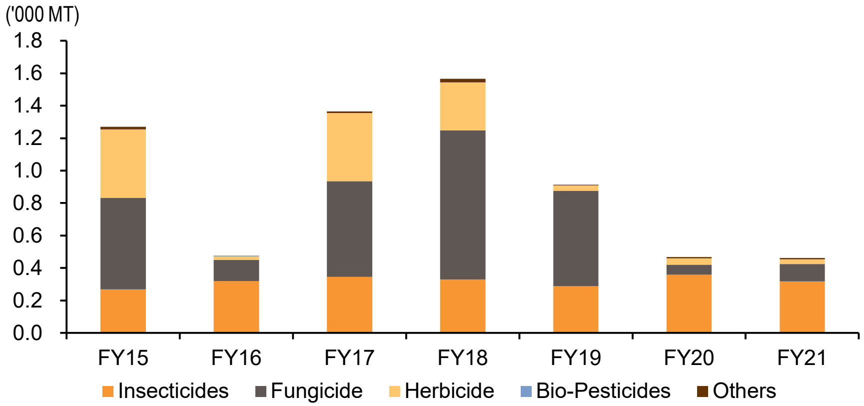
Source: PPQS

Pesticide demand of Imported pesticide ('000MT)



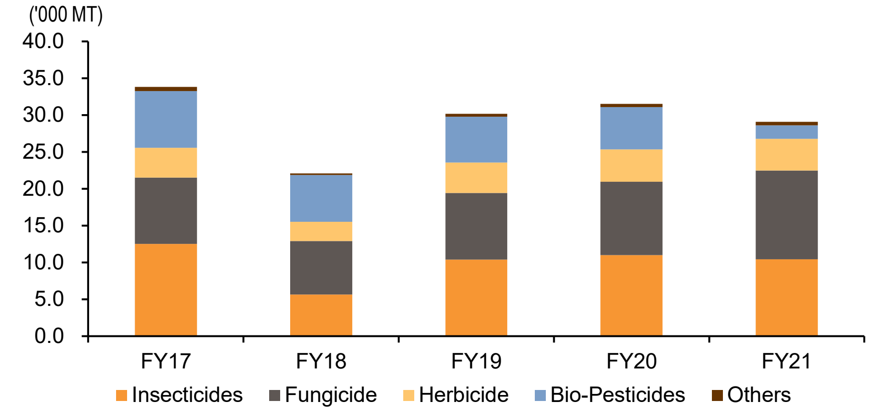
Source: PPQS

Consumption of Imported Pesticides ('000MT)



Source: PPQS

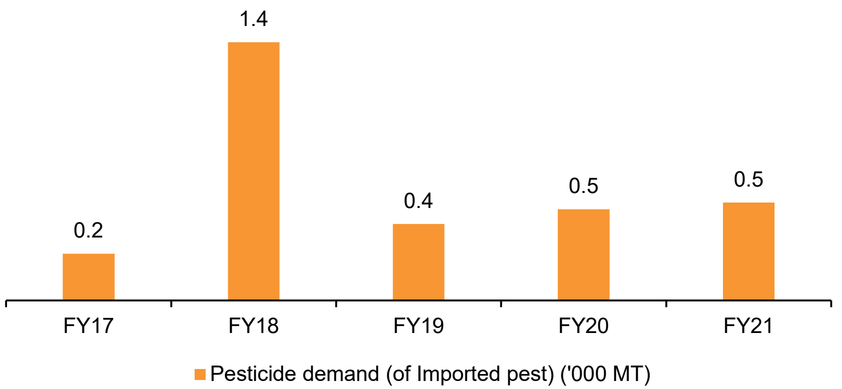
Pesticide demand of Indigenous pesticides ('000MT)



Source: PPQS

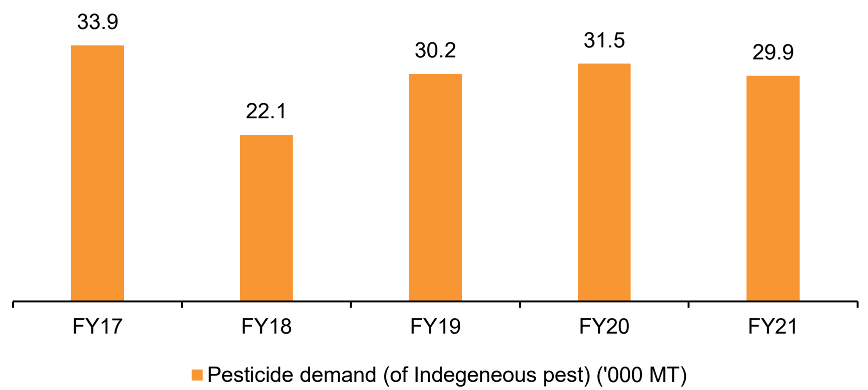
Pesticide demand in India

Demand for imported pesticides



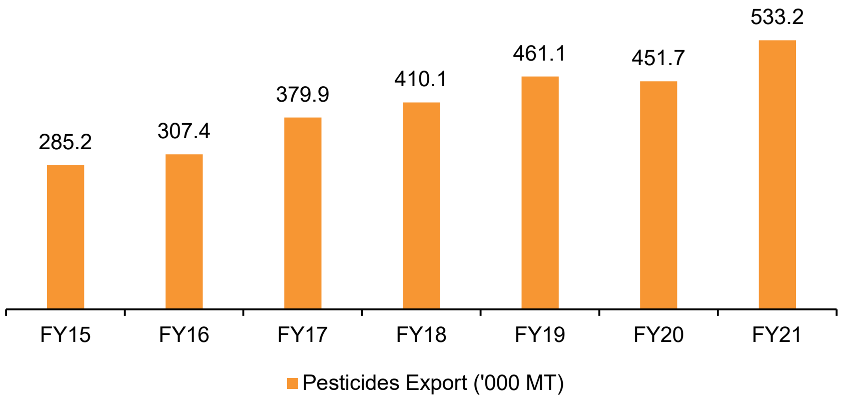
Source: PPQS

Demand for indigenous pesticides



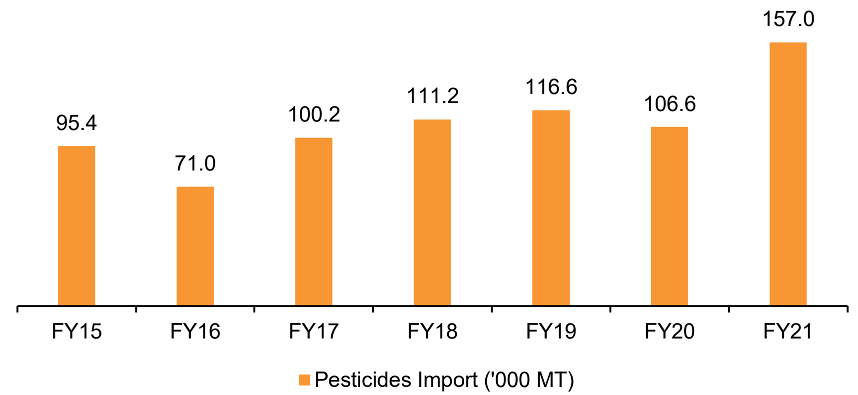
Source: PPQS

Pesticide export



Source: PPQS

Pesticide Import.



Source: PPQS

Labor cost advantage for India vs. China, power cost still higher than China

Labor cost advantage in China has waned off over a period of time

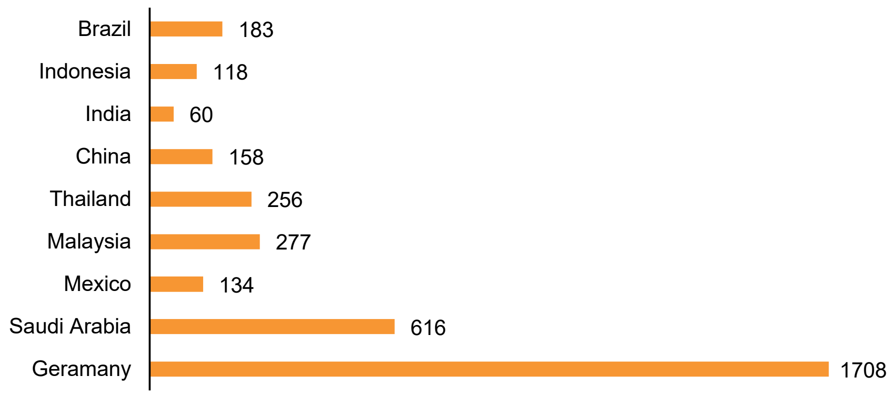
- Data from FICCI report suggests that India's minimum labor wage rate is ~60% lower than that of China.
- However, India's power cost is ~20% higher than that of China.

Market favourability across regions

Region	Feedstock access	Market access	Capital Cost	Operating cost	Commissioning period	Overall
Middle east	4.0	1.0	2.0	2.0	1.0	**2.0**
US	4.0	2.0	2.0	2.0	3.0	**2.3**
Europe	2.0	2.0	1.0	1.0	2.0	**1.3**
India	2.0	4.0	3.0	4.0	2.0	**3.0**
China	3.0	4.0	3.0	3.0	3.0	**3.3**
South East Asia	2.0	3.0	3.0	3.0	2.0	**2.7**

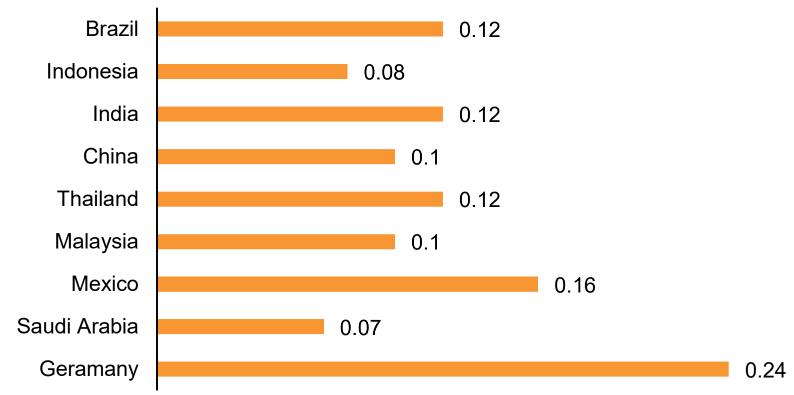
Source: FICCI, Legend: Market favourability between 1-4 in descending order with 4 being most favourable.

Minimum labour rates (USD/month)



Source: FICCI

Power rates (USD/kWh)



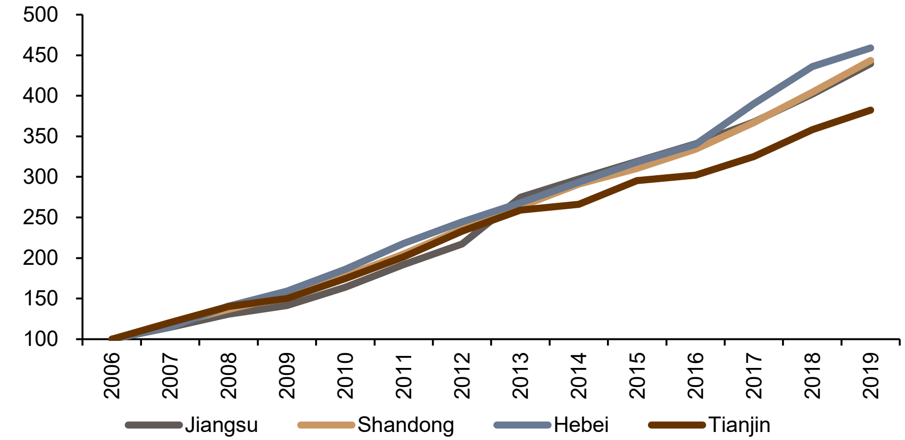
Source: FICCI

China's Wage Inflation Higher Than India's

Labor cost advantage in China has waned off over a period of time

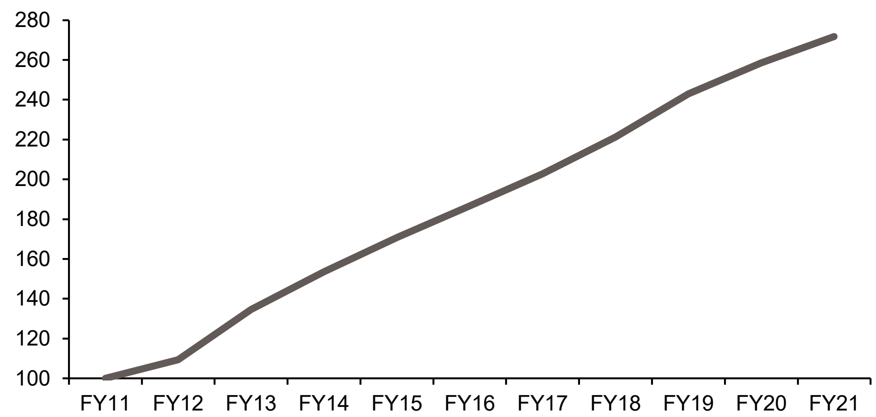
- China enacted New Minimum Wage regulations in 2004, which led to progressive rise in wages in China.
- Average wages data for four of the large manufacturing provinces in China suggests that average wages have quadrupled over 2006-19.
  - Jiangsu and Shandong are the largest hubs for chemicals manufacturing. These provinces have experienced average wage inflation of 12.1% CAGR each.
  - Hebei and Tianjin, the other manufacturing hubs, have experienced average wage inflation of 12.4% and 10.9% CAGRs, respectively.
- Indian average wage inflation (data for ~2,500 listed manufacturing companies) in FY11-21 suggests, average wage inflation at 10.5% CAGR.

China Wage Inflation Across Key Manufacturing Hubs



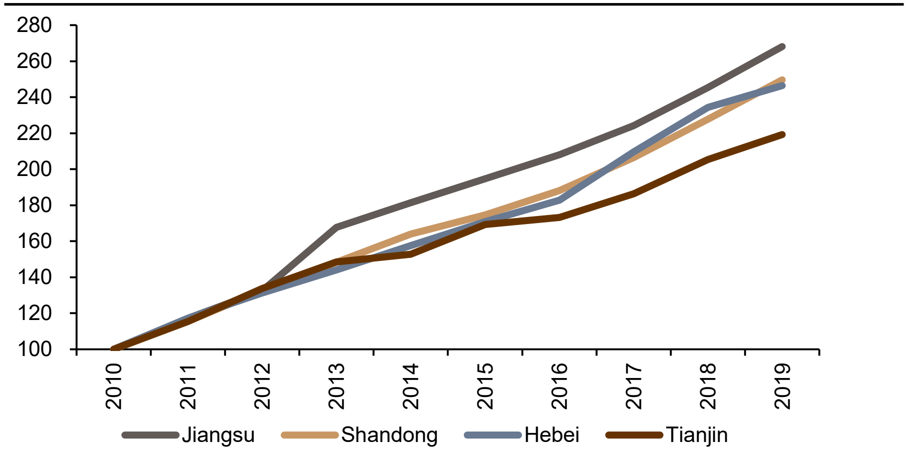
Source: China Government

India Average Wage Manu. Inflation at 10.5% CAGR during FY11-21



Source: Capitaline

China like-to-like Wage Inflation during 2010-19



Source: China Government

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Your success is our success

UPL (Buy, TP Rs910)

Refer to important disclosures at the end of this report

Metamorphosis from branded generics to differentiated solutions

This report is solely produced by Emkay Global. The following person(s) are responsible for the production of the recommendation:

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We assume coverage on UPL Ltd with a Buy rating and a Mar'23E TP of Rs910 (upside 19%). Our fair value is derived using a two-stage growth model and implies target EV/EBITDA and P/E multiples of 8.5x and 12.5x, respectively, on FY24 estimates. Our Buy thesis is underpinned by : 1) ~8% FY22E-25E revenue CAGR, driven by ~19% CAGR in Differentiated and Sustainable (D&S) solutions; 2) EBITDA margin expansion from 22.5% in FY22E to 24.1% in FY25E, supported by innovative products; 3) ~18% PAT CAGR over FY22E-25E, supported by EBITDA margin expansion and lower interest outgo; and 4) substantial net-debt reduction from Rs166bn in FY22E to Rs32bn in FY25E from healthy cashflow generation. Further upside risk stems from the monetization of UPL's fast-growing specialty chemicals business (~Rs45/ share, potentially) and nurture.farm initiative. **Downside risks:** 1) adverse agronomical conditions in key markets; and 2) adverse forex fluctuations.

Financial Snapshot (Consolidated)

(Rsmn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	3,86,940	4,27,313	4,61,071	4,99,483	5,39,295
EBITDA	83,520	96,329	1,06,481	1,18,547	1,30,161
EBITDA Margin (%)	21.6	22.5	23.1	23.7	24.1
APAT	31,090	39,844	46,607	56,075	65,635
EPS (Rs)	40.6	52.1	60.9	73.3	85.8
EPS (% chg)	29.6	28.2	17.0	20.3	17.0
ROE (%)	15.5	17.8	18.1	18.7	18.9
P/E (x)	18.8	14.6	12.5	10.4	8.9
EV/EBITDA (x)	9.2	7.7	6.6	5.5	4.6
P/BV (x)	2.8	2.4	2.1	1.8	1.6

Source: Company, Emkay Research

About UPL

UPL is a global provider of sustainable agriculture products and solutions, with annual revenue exceeding USD5bn. Through OpenAg, UPL is focused on facilitating progress for the entire agricultural value chain. UPL is building a network that redefines the way the entire industry thinks and works – open to fresh ideas, innovative ways and new answers as it strives to achieve its mission of making every food product more sustainable. UPL's robust portfolio consists of biologicals and traditional crop protection solutions, with more than 13,600 registrations.

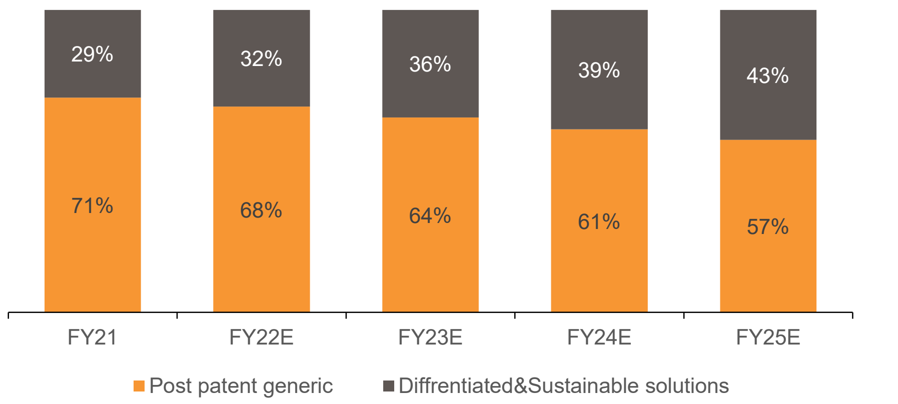
UPL (Buy)	
Bloomberg Ticker	UPLL IN
Market Cap (Rsbn/USDbn)	584.5/7.8
CMP	762
Target Price	**910**
Upside (%)	19.4

Price Performance

(%)	1M	3M	6M	12M
Absolute	7	8	(5)	61
Rel. to Nifty	3	8	(16)	28

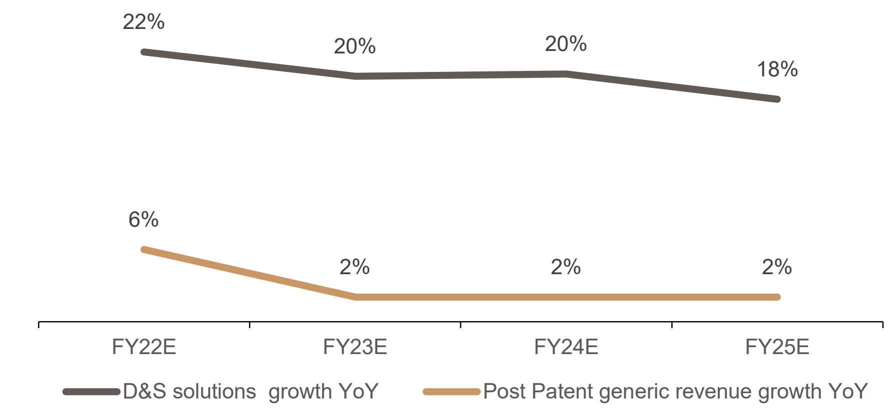
UPL – Story in Charts

Mix Improving in favour of D&S solutions portfolio (%)



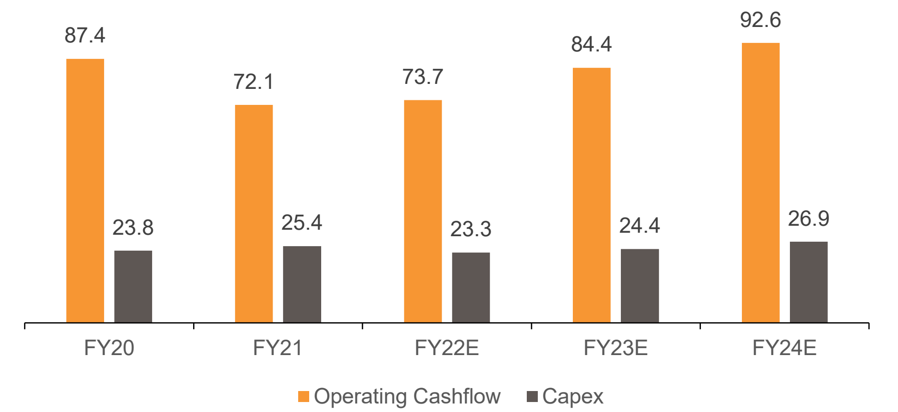
Source: Company, Emkay Global

Growth driven by D&S solutions portfolio



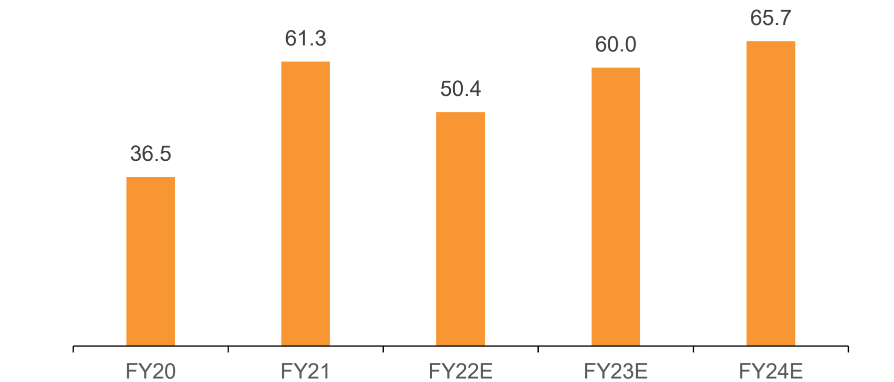
Source: Company, Emkay Global

Capex to rise from FY23E (Rsbn)



Source: Company, Emkay Global

FCF generation to stay above Rs50bn post FY22E (Rsbn)



Source: Company, Emkay Global

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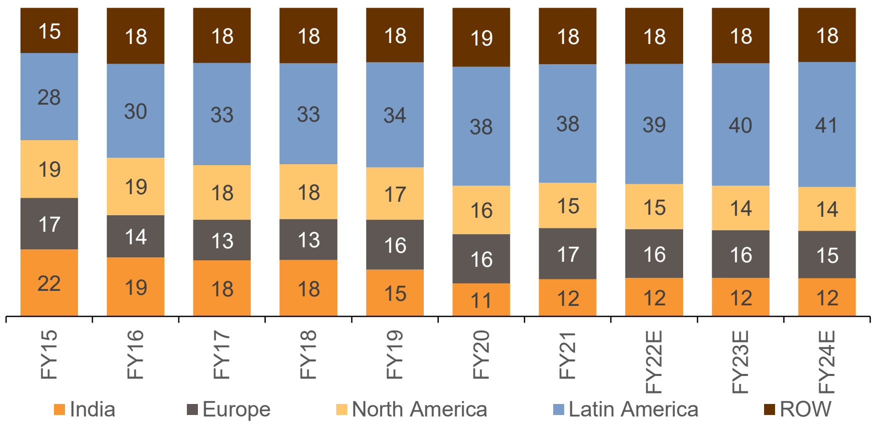
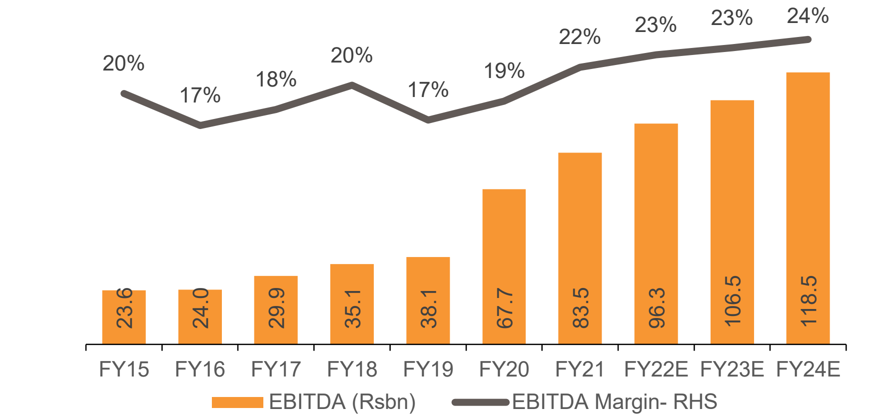
LatAm contribution in geographic mix expected to increase further (%)



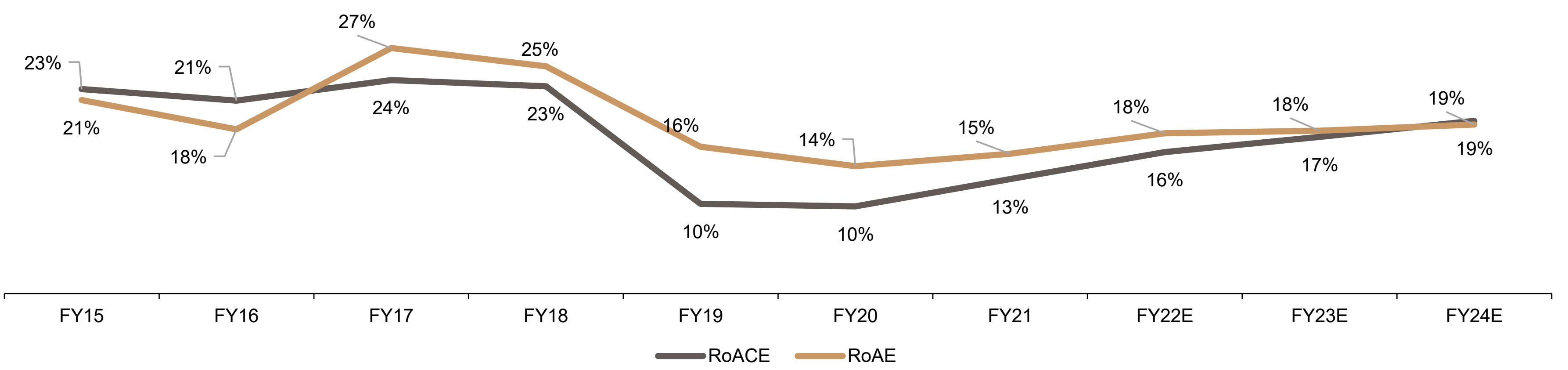
Source: Company, Emkay Global

Improving product mix aiding EBITDA margin expansion



Source: Company, Emkay Global

Arysta acquisition impact on FY19 return ratios; consistent improvement thereafter



Source: Company, Emkay Global

Metamorphosis – From Branded Generics To Differentiated Solutions

We assume coverage on UPL Ltd with a Buy rating and a Mar'23E TP of Rs910 (upside 19%). Our fair value is derived using a two-stage growth model and implies target EV/EBITDA and P/E multiples of 8.5x and 12.5x, respectively, on FY24 estimates. Our Buy on UPL is based on: 1) ~8% FY22E-25E revenue CAGR, driven by ~19% CAGR in Differentiated and Sustainable solutions (D&S); 2) EBITDA margin expansion from 22.5% in FY22E to 24.1% in FY25E aided by innovative products; 3) ~20% PAT CAGR over FY22E-25E supported by EBITDA margin expansion and low interest outgo; and 4) substantial net-debt reduction from Rs167bn in FY22E to Rs25bn in FY25E from healthy cashflow generation. Further upside risk stems from the monetization of UPL's fast-growing specialty chemicals business (~Rs45/ share, potentially) and nurture.farm initiative. Downside risks: 1) adverse agronomical conditions in key markets; and 2) adverse forex fluctuations.

- **Growth driven by metamorphosis from a largely branded generic into differentiated and sustainable solutions company:** We estimate UPL's ~8% revenue CAGR over FY22E-25E will be driven by a 7.6% CAGR in the agro segment and a 14.9% CAGR in the specialty chemicals segment, albeit at a lower base. Growth in the agro segment is expected to be driven by the crop protection segment (~8% CAGR in FY22E-25E), while the seeds+post-harvest segment is expected to see a marginal increase (~1% CAGR in FY22E-25E). The key driver for UPL's growth is likely to be the D&S segment, which is expected to record a ~19% CAGR over FY22E-25E with cumulative incremental sales of ~Rs104bn (~USD1.4bn). Thus, the D&S share in the crop protection segment is likely to increase from ~32% in FY22E to ~43% in FY25E (UPL guidance of ~50% contribution by D&S in FY26E), while its post-patent share is likely to decline from ~68% to ~57% in the same period.

- **Collaborations with FMC and Meiji exemplify UPL's formidable position in the global agrochem market; new/innovative products to garner higher margins:** Based on the multiyear agreement with FMC, UPL will have early access to the technology for manufacturing AI for FMC in India and developing new formulations for the global market. Similarly, UPL reinforced its partnership with Meiji (Japan) to develop new formulations for its Flupyrimin insecticide for the rice protection market in southeast Asia. Products developed from these collaborations form a part of the D&S segment of UPL. Such innovative products are expected to garner higher margins, enabling a companywide EBITDA margin expansion (from 22.5% in FY22E to 24.1% in FY25E).

- **Healthy cashflow generation with consistent deleveraging:** We expect UPL's FCF to improve from Rs50.4bn in FY22E to Rs71.6n in FY25E, backed by revenue growth and margin expansion. Consequently, these consistent cashflows will enable UPL to reduce its gross debt from Rs197bn in FY22E to Rs56bn in FY25E, resulting in an improvement in Net Debt/EBITDA from 1.7x to 0.1x in the same period. RoAE and RoAIC, which were depressed in FY20 (post Arysta acquisition) at ~14% and ~15%, respectively, are expected to increase to ~19% and ~28% in FY25E.

- **Assume coverage with Buy and TP of Rs910:** We believe UPL's strategic focus on developing the D&S portfolio augurs well for: 1) overall revenue growth leading to higher-than-industry growth; 2) innovative product-led EBITDA margin expansion; 3) improvement in return ratios; and 4) continuous deleveraging leading to improving Net Debt/EBITDA. We arrive at a Mar'23 TP of Rs910, using the DCF methodology. Our key assumptions are: 1) 11.50% WACC; 2) 6% EBITDA CAGR in FY26E; 3) FY25E exit EBITDA of Rs130bn; and 4) terminal growth rate of 4% starting FY35E. Our TP implies FY24E EV/EBITDA at 8.5x, which is 27% below 1-year forward 5-year average EV/EBITDA of 11.7x (~20% below 10-yr avg. EV/EBITDA 10.6x).

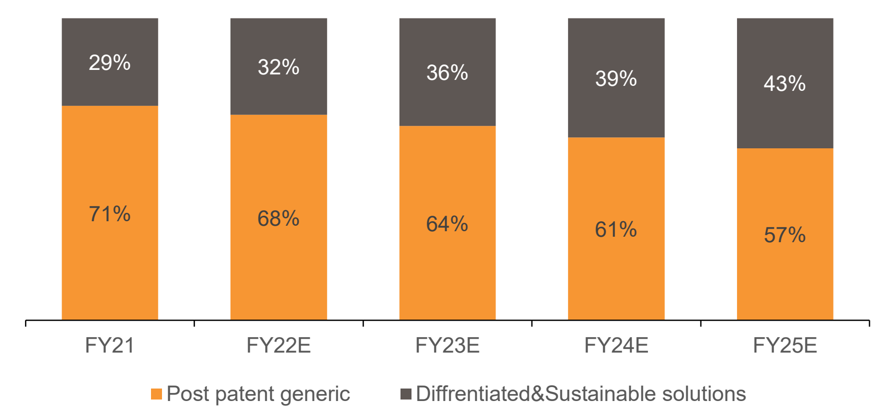
- **Upside risks:** 1) monetization of UPL's fast-growing specialty chemicals business and nurture.farm initiative, specialty chemicals if valued at current market EBITDA multiple for specialty chemicals at ~15x can potentially provide an upside of Rs45/ share; 2) faster adoption of bio-solutions; **Downside risks:** 1) adverse agronomical conditions in key markets, 2) adverse forex fluctuations

Metamorphosis from branded generics to differentiated solutions

Journey from a branded generics company to a differentiated and sustainable (D&S) solutions offering company

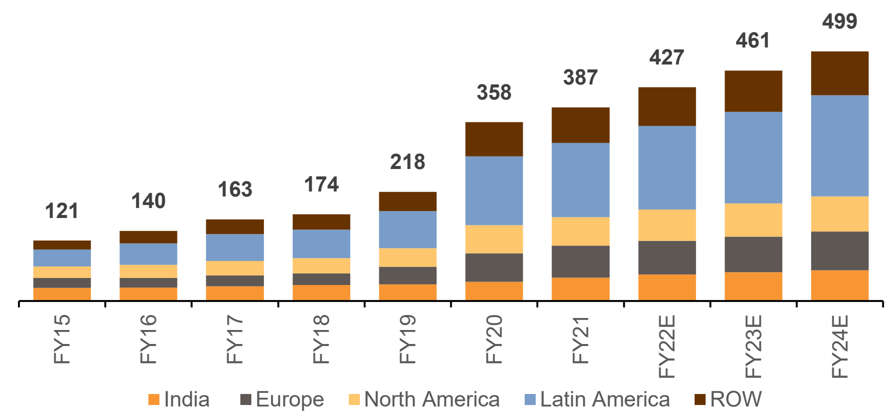
- **Metamorphosis from a largely branded generic firm into a differentiated and sustainable solutions company − *Focus on increasing contribution from the D&S portfolio in the overall revenue mix.***
- UPL intends to increase the share of D&S solutions in its topline from 29% in FY21 to 50% by FY26, with a consequent reduction in the share of post-patent products from 70% to 50%.
- The OpenAg ecosystem is expected to provide further impetus to growth in D&S through collaborations with other industry players for R&D. This will provide fertile ground for market development of such solutions, resulting in faster and deeper penetration of D&S offerings across geographies.
- UPL is the largest manufacturer and distributor of bio-solutions globally. The company has created a new segment, NPP, to consolidate its bio-solution offerings and R&D efforts under one umbrella. The bio-solution segment enjoys substantially higher margins than other crop protection chemical (CPC) offerings. Additionally, the market for bio-solutions is poised to grow at a faster clip. With an increased emphasis on natural-based products having a lower environmental impact, the bio-solution market is expected to reach USD10bn by 2025.
- Given its extensive global manufacturing presence and robust R&D capabilities, along with a deep understanding of crop patterns, soil conditions and topical issues in markets, UPL is well positioned to make good headway by combining bio-solutions and differentiated offerings with conventional chemicals.

D&S share (%) expected to rise to 43% by FY25E



Source: Company, Emkay Global

LatAm to remain key market in terms of revenues (Rsbn)



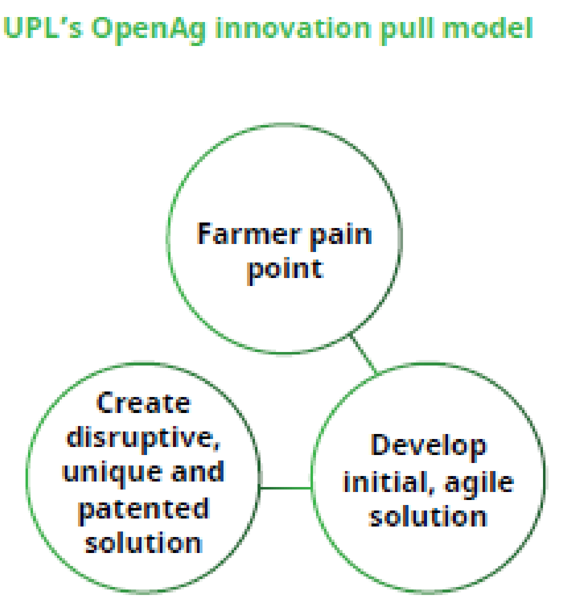
Source: Company, Emkay Global

OpenAg platform to accelerate innovation and market consolidation

OpenAg and digital platform for innovation

- **OpenAg and digital platform for innovation – *Revolutionizing the food value chain through innovation, technology and collaborations***
- UPL's novel initiative is aimed at developing an open-source ecosystem of technologies that would enable collaboration among partners across the food value system to provide personalized solutions to farmers. Instead of a push-driven model, this initiative starts with understanding farmers' pain points. Based on the observations, the company develops solutions through focused research efforts and collaboration among stakeholders. This process is expected to expedite the penetration of differentiated solutions in key markets through faster development of new products via in-house development as well as external partnerships.
- This new architecture is expected to offer agile, differentiated solutions as well as optimization of R&D expenditure. Given its R&D prowess and extensive manufacturing presence across geographies, UPL is expected to benefit immensely in the coming years. With ~15 molecules in the development pipeline, UPL expects a revenue upside of USD2.5bn in the next five years.

OpenAg model



Source: Company, Emkay Global

OpenAg: Aimed at creating an ecosystem

Source: Company, Emkay Global

Strategic collaborations with global agrochem players

Mutually beneficial collaborations with global companies

- **Collaborations with other innovators aid market consolidation and portfolio optimization.**
- In Mar'21, FMC collaborated with UPL for early access to its patented molecule Chlorantraniliprole (CTPR) insecticide. It will help UPL commercialize the molecule in key markets before patent expiry. UPL will toll-manufacture the molecule for FMC in India. The total available market (TAM) for the molecule is ~USD5bn, and the company has 17 formulations in the pipeline currently.
- Similarly, the collaboration with Meiji for Flupyrimin, a patented insecticide for rice, since 2018 has enabled UPL to have a complete portfolio for rice in India and Asia. This patented molecule has a TAM size of USD2.5bn.
- Such collaborations would help UPL consolidate its global market position and gain further market share.

Innovation/ R&D focus

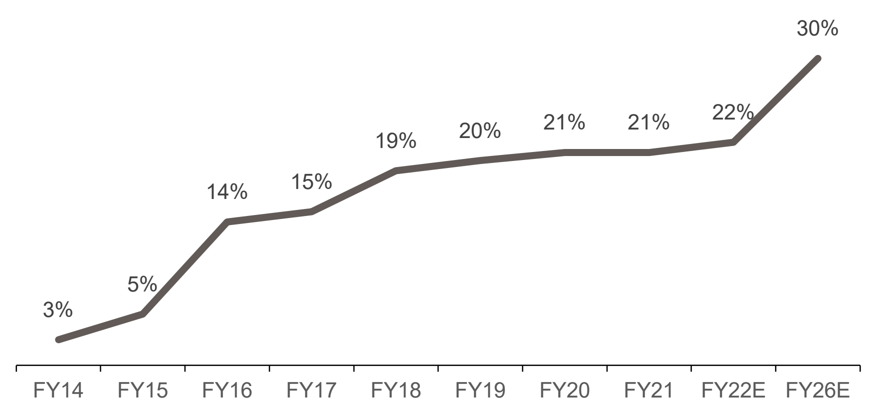
- **Innovation drive and R&D focus – Consistent investments in R&D, high drive for innovation**
- After integration with Arysta, UPL's R&D footprint has expanded significantly, and now the company has a sizeable R&D infrastructure with over 20 facilities globally and 750 dedicated employees. UPL is now among the top 10 innovators in the space globally. UPL's R&D prowess and agility are demonstrated through a high innovation index.
- With its OpenAg initiative, the advancement in R&D is expected to accelerate further through strategic alliances with external partners for accessing new technologies (including biologicals and digital) and sharing intel and collaborations on R&D efforts to deploy the 'field-to-lab' approach. Currently the company has collaborations with 78 such external partners.

Innovation drive to gain momentum further

R&D investments to scale up further

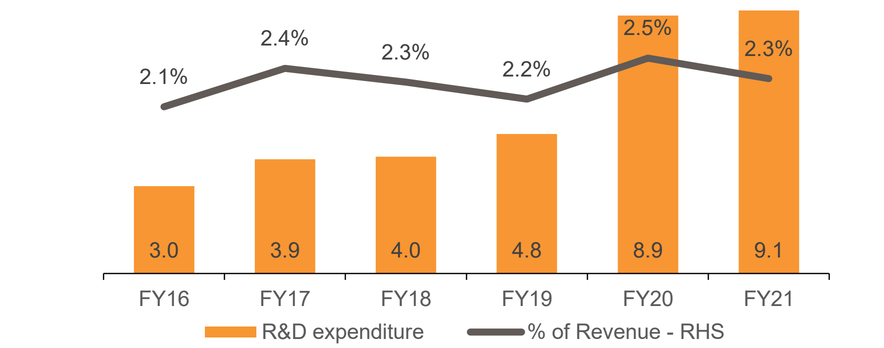
- UPL's global transformation over the years has been a result of its increasing focus on R&D, which is also reflected in its upgradation from generics to branded generics and further to offering differentiated solutions. Simultaneously, the R&D innovations can also be observed in its innovation turnover, which has soared from just 3% in FY14 to over 21% in FY21 and is expected to rise further to 30% by FY26.
- The company has been meticulously investing ~2.5% of its revenues in R&D, and the investments are expected to go up as the company is moving to offer more differentiated solutions and expects to increase its innovation turnover from current levels.
- The rising innovation rate is expected to lead to a better growth rate than the industry average via mix improvement and margin expansion. R&D capabilities are also crucial for UPL to achieve its goal of developing not only differentiated solutions but also innovative bio-solutions that offer higher growth rates, agile adoption and better margins.
- Recent global R&D initiatives
  - Launched an international-level R&D hub, the OpenAg Center, in Research Triangle Park, NC, USA.
  - OpenAg Farm launched in Brazil in an area of 25,000 ha divided into 7 farms, partnering with multiple growers to optimize plant health and sustainability.
  - Opened new field trial stations in Bujalmoro, Spain, and Shray Hill, Shropshire, UK.
  - Additional field trial stations planned in Mexico, Brazil and North America.

Innovation turnover momentum to continue led by R&D investments



Source: Company, Emkay Global

Rising R&D investments (Rsbn)



Source: Company, Emkay Global

NPP and Nurture.farm to focus on bio-solutions portfolio and agri services

Natural Plant Protection (NPP)

Globally, due to pesticide residue issues from conventional pesticides, bio-solutions are gaining prominence despite higher pricing. Over the years, UPL has also increased its offerings in the segment, with bio-solutions accounting for over 7% of its revenues. Given the growing adoption of bio-solutions, UPL has carved out a separate vertical in Jun'21 just to focus on and consolidate its bio-solutions portfolio and offerings thereof under a single umbrella with concentrated efforts in market development and investments in R&D.

Key attributes of the NPP platform

- A new global business unit housing UPL's comprehensive portfolio of natural and biologically derived agricultural inputs and technologies.
- A standalone brand, consolidating UPL's existing bio-solution portfolio, network of R&D laboratories and facilities worldwide.
- The strength of NPP shall be a catalyst for UPL's progressive approach to sustainable agriculture to meet the innovation and technology needs of farmers, consumers and the environment.

Nurture.farm

It is an initiative under the OpenAg architecture to create an ecosystem of agri solutions and agri services for farmers through the digital mode. UPL formally launched this platform in Jul'21; however, it has been making investments in the platform for more than a year and has invested over USD45-50mn. Further, the company intends to invest USD150-200mn over the next five years in the development of the platform. This digital platform will provide last-mile connectivity to UPL to provide an array of products and services to the farmers.

Key attributes of the nurture.farm platform

- A digital platform that advances resilience for farmers and the food system, making agriculture simple, profitable and sustainable through technology-led solutions for generations to come.
- Covering every step of the farming life cycle, nurture.farm will operate as an open platform in the supply of products, innovation and mechanization.

Four components of the platform

- Services – For availing agri services such as logistic solutions, renting equipment and booking other services like drones, etc.
- Market linkage – Providing a platform for trade of agri commodities.
- Application – For online purchase of agri inputs.
- Sustain – Aimed at farmer education on making agriculture more sustainable and reducing the carbon footprint.

Valuation based on two-stage growth model

Valuation drivers

- We assume coverage on UPL Ltd with a Buy rating and a Mar'23 TP of Rs910 based on DCF.
- We estimate a 11% EBITDA CAGR during FY22E-FY25E.
- Our TP implies a forward EV/EBITDA multiple of 8.5x Mar'24 EBITDA, which is 20% below the 10-year average of 10.6x for the stock and 27% below the 5-year historical average of 11.7x.
- ***Key assumptions in our two-stage growth model:***
  - *Revenue/EBITDA CAGR (FY22E-FY25E): 8%/10%*
  - *EBITDA Growth (FY26E-FY35E): 6%*
  - *Terminal EBITDA growth: 4%*
  - *Sustainable ROIC: 25%*
  - *WACC: 11.50%*

UPL's growth profile expected to remain consistent.

YoY Growth (%)	FY22E	FY23E	FY24E	FY25E
Revenue	10.4	7.9	8.3	8.0
EBITDA	15.3	10.5	11.3	9.8
EBIT	21.2	11.4	12.3	10.2
EPS	28.2	17.0	20.3	17.0
ROE (%)	17.8	18.1	18.7	18.9
ROIC (%)	17.7	19.2	21.0	22.5

Source: Company, Emkay Global

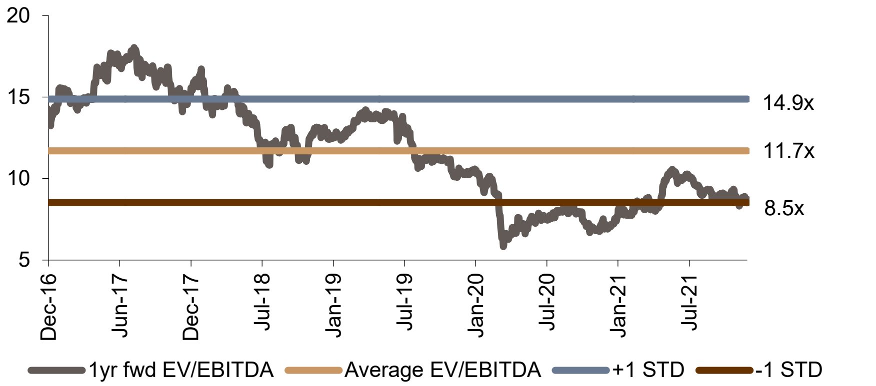
UPL Valuation: Summary of two-stage growth model

Revenue CAGR [FY22E-25E] (%)	8
EBITDA CAGR [FY22E-25E] (%)	11
Stage-1: FY25E-35E	
EBITDA in Yr-0 [FY25E] (Rs bn)	130
EBITDA in Yr-1 (Rs bn)	138
EBITDA CAGR (%)	6.0
Years of growth [n]	10.0
Incremental RoIC (%)	25.0
WACC (%)	11.50
Tax rate (%)	19.0
Sustainable D&A to EBITDA (%)	20.0
Net debt to EV (%)	11.0
Implied FCFF ratio (%)	76
Terminal stage	
Terminal EBITDA growth (%)	4.0
Incremental RoIC (%)	25.0
Implied FCFF ratio (%)	84.0
Fair value EV/EBITDA in Mar'25E (x)	**7.8**
EV in Mar'25E (Rs bn)	1,083
Mar'23 NPV of FCFFs (Rs bn)	173
Mar'23E Gross EV (Rs bn)	**1,010**
Minority share of EV (Rs bn)	**202**
Mar'23E EV (net of minority share) (Rs bn)	**808**
Adj. net debt (Rs bn)	110.6
Fair value of Equity in Mar'23E (Rs bn)	**697**
Mar'24E EBITDA (Rs bn)	119
Implied fair value EV/EBITDA in Mar'23E (x)	**8.5**
Premium applied to fair value of equity (%)	0.0
Target m-cap (Rs bn)	**697**
Equity shares outstanding (mn)	765
Target price in Mar'23E (Rs/share)	**910**
CMP (Rs/share)	762
Upside/(downside) (%)	***19***

Source: Company, Emkay Global

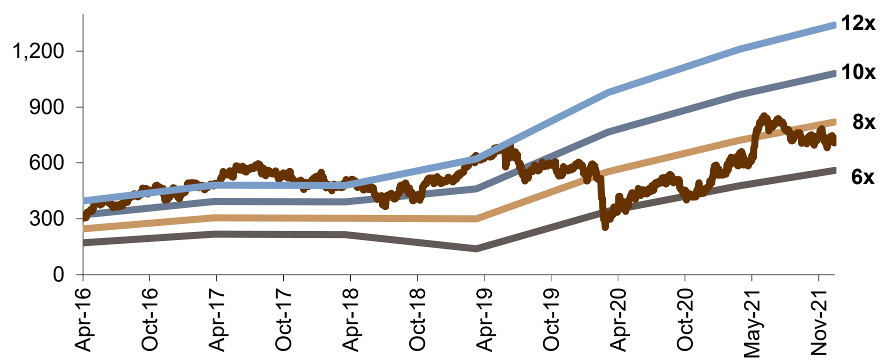
UPL – Valuation Charts

UPL's implied fwd EV/ EBITDA multiple at a discount to 5-yr hist. avg.



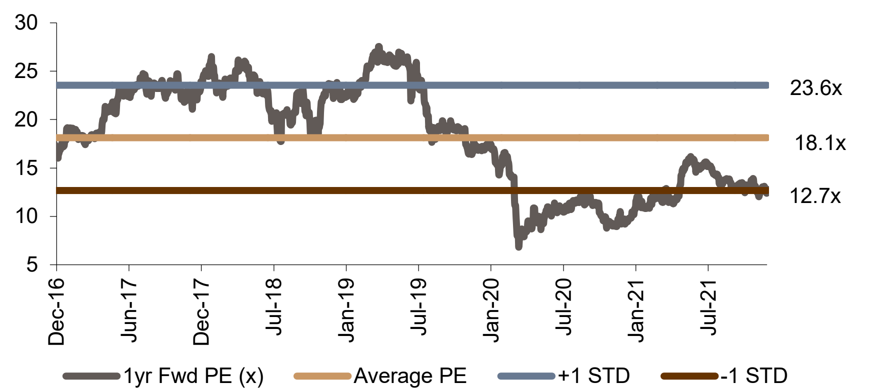
Source: Company, Emkay Global

UPL's EV/EBITDA ranged between 6x and 8x in past 1.5 years



Source: Company, Emkay Global

UPL trading at a 25% discount to 5-yr historical avg. P/E



Source: Company, Emkay Global

UPL – Q2FY22 results and key observations

- Healthy growth in revenues on the back of strong performance in LatAm and Europe; favorable pricing led to gross margins expanding by 100bps YoY.
- Higher opex due to increase in power/fuel/logistic costs led to EBITDA margin contraction by 30bps YoY despite expansion in gross margins.
- Management expects concerns around issues relating to China to persist till Dec'21 and expects the situation to start normalizing from early CY22.

UPL (Cons.)

Y/E March (Rs mn)	Q2FY22	Q2FY21	*YoY (%)*	Q1FY22	*QoQ (%)*	1HFY22	1HFY21	*% chg.*
Net sales	**1,05,670**	**89,390**	***18.2***	**85,150**	***24.1***	**1,90,820**	**1,67,720**	***13.8***
Cost of Goods	52,210	45,090	*15.8*	37,030	*41.0*	89,240	80,580	*10.7*
% of sales	*49.4*	*50.4*		*43.5*		*46.8*	*48.0*	
Employee benefit expenses	10,790	9,240	*16.8*	10,300	*4.8*	21,090	17,940	*17.6*
% of sales	*10.2*	*10.3*		*12.1*		*11.1*	*10.7*	
Other expenditure	23,360	18,390	*27.0*	20,080	*16.3*	43,440	34,210	*27.0*
% of sales	*22.1*	*20.6*		*23.6*		*22.8*	*20.4*	
Operating profit	**19,310**	**16,670**	***15.8***	**17,740**	***8.9***	**37,050**	**34,990**	***5.9***
OPM (%)	*18.3*	*18.6*		*20.8*		*19.4*	*20.9*	
Dep. and amor.	5,660	5,330	*6.2*	5,510	*2.7*	11,170	10,550	*5.9*
EBIT	**13,650**	**11,340**	***20.4***	**12,230**	***11.6***	**25,880**	**24,440**	***5.9***
Interest	3,590	3,430	*4.7*	6,070	*(40.9)*	9,660	8,940	*8.1*
Other income	470	750	*(37.3)*	480	*(2.1)*	950	1,420	*(33.1)*
Excp. Item	-400	-2,110	*(81.0)*	-630	*(36.5)*	-1,030	-2,360	*(56.4)*
PBT	**10,130**	**6,550**	***54.7***	**6,010**	***68.6***	**16,140**	**14,560**	***10.9***
Provision for tax	2,490	1,120	*122.3*	-1,520	*(263.8)*	970	2,550	*(62.0)*
eff. tax rate	*24.6*	*17.1*		*(25.3)*		*6.0*	*17.5*	
PAT	**7,640**	**5,430**	***40.7***	**7,530**	***1.5***	**15,170**	**12,010**	***26.3***
Minority Interest	1,400	740	*89.2*	720	*94.4*	2,120	1,760	*20.5*
Share of Profit/(Loss) from Asso.	100	-60		-40		60	-110	
PAT (rep.)	**6,340**	**4,630**	***36.9***	**6,770**	***(6.4)***	**13,110**	**10,140**	***29.3***
NPM (%)	*6.0*	*5.1*		*7.9*		*6.8*	*6.0*	
Sales by region	**Q2FY22**	**Q2FY21**	***YoY (%)***	**Q1FY22**	***QoQ (%)***	**1HFY22**	**1HFY21**	***% chg.***
India	14,830	14,090	*5.3*	19,140	*(22.5)*	33,970	29,200	*16.3*
Latin America	50,880	42,330	*20.2*	25,070	*103.0*	75,950	62,480	*21.6*
Europe	13,360	10,220	*30.7*	15,220	*(12.2)*	28,580	27,250	*4.9*
ROW	17,020	15,030	*13.2*	13,500	*26.1*	30,520	30,810	*(0.9)*
North America	9,580	7,730	*23.9*	12,210	*(21.5)*	21,790	18,000	*21.1*
Total	**1,05,670**	**89,400**	***18.2***	**85,140**	***24.1***	**1,90,810**	**1,67,740**	***13.8***
Sales by region %								
India	14.0	15.8		22.5		17.8	17.4	
Latin America	48.1	47.3		29.4		39.8	37.2	
Europe	12.6	11.4		17.9		15.0	16.2	
ROW	16.1	16.8		15.9		16.0	18.4	
North America	9.1	8.6		14.3		11.4	10.7	

Source: Company, Emkay Research

UPL – Quarterly Trend

Rs mn	Q2FY19	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22	Q2FY22	YoY%	QoQ%
Sales	**42,570**	**49,210**	**85,250**	**79,060**	**78,170**	**88,920**	**1,11,410**	**78,330**	**89,390**	**91,260**	**1,27,960**	**85,150**	**1,05,670**	**18.2**	**24.1**
Cost of Raw Material	18,760	22,230	49,660	42,750	38,650	44,270	62,480	35,490	45,090	41,170	69,210	37,030	52,210	15.8	41.0
as % of sales	*44.07*	*45.17*	*58.25*	*54.07*	*49.44*	*49.79*	*56.08*	*45.31*	*50.44*	*45.11*	*54.09*	*43.49*	*49.41*		
Employee expenses	4,670	5,040	6,700	8,610	8,310	7,310	9,680	8,700	9,240	9,520	9,660	10,300	10,790	16.8	4.8
as % of sales	*10.97*	*10.24*	*7.86*	*10.89*	*10.63*	*8.22*	*8.69*	*11.11*	*10.34*	*10.43*	*7.55*	*12.10*	*10.21*		
Other Expenses	11,270	12,560	15,980	15,300	16,740	16,320	20,210	15,820	18,390	18,550	22,580	20,080	23,360	27.0	16.3
as % of sales	*26.47*	*25.52*	*18.74*	*19.35*	*21.41*	*18.35*	*18.14*	*20.20*	*20.57*	*20.33*	*17.65*	*23.58*	*22.11*		
Total Expenditure	**34,700**	**39,830**	**72,340**	**66,660**	**63,700**	**67,900**	**92,370**	**60,010**	**72,720**	**69,240**	**1,01,450**	**67,410**	**86,360**	**18.8**	**28.1**
EBITDA	**7,870**	**9,380**	**12,910**	**12,400**	**14,470**	**21,020**	**19,040**	**18,320**	**16,670**	**22,020**	**26,510**	**17,740**	**19,310**	**15.8**	**8.9**
Depreciation	1,810	1,820	3,420	5,770	4,760	4,950	5,950	5,220	5,330	5,420	5,760	5,510	5,660		
EBIT	**6,060**	**7,560**	**9,490**	**6,630**	**9,710**	**16,070**	**13,090**	**13,100**	**11,340**	**16,600**	**20,750**	**12,230**	**13,650**	**20.4**	**11.6**
Other Income	320	370	480	390	240	200	210	670	750	670	490	480	470		
Interest cost	1,810	2,020	4,050	3,980	3,810	5,150	1,870	5,510	3,430	7,450	4,210	6,070	3,590	4.7	(40.9)
PBT	**4,570**	**5,910**	**5,920**	**3,040**	**6,140**	**11,120**	**11,430**	**8,260**	**8,660**	**9,820**	**17,030**	**6,640**	**10,530**	**21.6**	**58.6**
Total Tax	1,160	280	20	120	990	1,990	2,110	1,430	1,120	1,090	3,220	(1,520)	2,490	122.3	(263.8)
PAT before Minority Interest	**3,410**	**5,630**	**5,900**	**2,920**	**5,150**	**9,130**	**9,320**	**6,830**	**7,540**	**8,730**	**13,810**	**8,160**	**8,040**	**6.6**	**(1.5)**
PAT before extra	**3,410**	**5,630**	**5,900**	**2,920**	**5,150**	**9,130**	**9,320**	**6,830**	**7,540**	**8,730**	**13,810**	**8,160**	**8,040**	**6.6**	**(1.5)**
Exceptional Items	570	910	2,990	720	3,050	750	1,710	250	2,110	(780)	800	630	400		
Reported PAT	**2,840**	**4,720**	**2,910**	**2,200**	**2,100**	**8,380**	**7,610**	**6,580**	**5,430**	**9,510**	**13,010**	**7,530**	**7,640**	**40.7**	**1.5**
Minority Interest	**60**	**70**	**690**	**380**	**360**	**1,290**	**1,670**	**1,020**	**740**	**1,500**	**2,980**	**720**	**1,400**		
Share of Profit/(loss) from asso.	**(80)**	**(40)**	**280**	**(40)**	**(80)**	**(80)**	**230**	**(50)**	**(60)**	**(70)**	**600**	**(40)**	**100**		
Reported Consolidated PAT	**2,700**	**4,610**	**2,500**	**1,780**	**1,660**	**7,010**	**6,170**	**5,510**	**4,630**	**7,940**	**10,630**	**6,770**	**6,340**	**36.9**	**(6.4)**
Adj. Consolidated PAT	**3,270**	**5,520**	**5,490**	**2,500**	**4,710**	**7,760**	**7,880**	**5,760**	**6,740**	**7,160**	**11,430**	**7,400**	**6,740**	**-**	**(8.9)**
Margins (%)														***bps***	***bps***
EBIDTA	18.5	19.1	15.1	15.7	18.5	23.6	17.1	23.4	18.6	24.1	20.7	20.8	18.3	*(37)*	*(256)*
EBIT	14.2	15.4	11.1	8.4	12.4	18.1	11.7	16.7	12.7	18.2	16.2	14.4	12.9	*23*	*(145)*
PBT	10.7	12.0	6.9	3.8	7.9	12.5	10.3	10.5	9.7	10.8	13.3	7.8	10.0	*28*	*217*
PAT	8.0	11.4	6.9	3.7	6.6	10.3	8.4	8.7	8.4	9.6	10.8	9.6	7.6	*(83)*	*(197)*
Effective Tax rate	25.4	4.7	0.3	3.9	16.1	17.9	18.5	17.3	12.9	11.1	18.9	-22.9	23.6	*1,071*	*4,654*

Source: Company, Emkay Research

UPL – Q2FY22 Earnings call highlights

- **Market and Business Update - Cost hike being passed on, to reflect in Q3/Q4 numbers**
  - NPP (biologicals) - many products launched
  - Q2 gross margins - despite increase in some AIs, able to maintain gross margins thanks to backward integration and end-to-end manufacturing of key products
  - Higher sales in brazil due to strong demand and higher acreage
  - Brazil - Gross margins improving, still lower than overall average
  - Brazil - growth predominantly from 2 products supported by price increases
  - China situation to normalize in early part of 2022; no respite till end-2021
  - Expects very low inventories at the end of the season as cotton/corn pricing is good
  - Not dependent on China for yellow phosphorous; adequately prepared for the next 2 quarters
  - LATAM outlook - Brazil plucking started; farmers happy; Mexico impacted by severe drought in Q1, recovered in Q2
  - Glyphosate pricing and availability - positive impact on some of the UPL's products;, some of the AIs sold out
  - Product launches - Expects to launch few products next month; to keep innovation rate of 20+%; launching unique fungicide formulation
  - Coffee prices historically high; high prices for citrus
  - Pricing - UPL is probably most backward-integrated company in the industry; all the cost increase will be passed on to customers; month-on-month price increases in consultation with the customers, started from mid-August, impact in Q3 and Q4

- **Nurture.farm - Investments to continue, to invest ~USD50mn p.a. for the next couple of years**
  - Digitizing farming operations
  - 90% digital adoption on the platform for all the initiatives
  - USD50mn p.a. investment for the next couple of years
  - 300 people in Bangalore
  - Gross market value (GMV) - Rs6bn+
  - Farmers On-board - 1.4Mn+
  - Retailers On-board - 60K+

- **Q2 Financial Performance - Gross margins maintained, WC up YoY, to taper off by Q4**
  - Overall revenue growth 18% YoY - Volume growth 15%, price increases 3%, currency tailwinds 0%
  - Gross margin - Maintained margin in an inflationary environment; strong margins in Europe and ROW; strong growth of Bio-solutions in North America, India and ROW; QoQ improvement in Brazil margin
  - 13% YoY EBITDA growth - EBITDA margin 19.4%, adjusted for investment in digital platform 20.1% margin and 16% YoY growth
  - Net WC - 114 days (106 days), higher by 8 days
  - Tax rate higher QoQ - higher profits in brazil
  - Higher interest cost - due to MTM impact and NPV impact
  - CF from operations - Rs36.52bn
  - Securitization end-Sep'21 - USD600mn
  - Capex - Rs10.49bn

- **FY22E Guidance maintained, however expects to achieve high end of the guidance**
  - Revenue growth - 7-10%,
  - EBITDA growth - 12-15%
  - Net debt/ EBITDA - <2x
  - Net WC days - 80-90 days by end-FY22
  - Capex - USD300-320mn, 60% for product registration, 40% for fixed assets
  - Effective tax rate - 15-18%, expected to be at the lower end of guidance

…Continued

UPL Snippets from presentation

- **India - Stronger performance vs. market**
  - Higher growth vs. market (~3-4% in Q2FY22), despite rainfall deficit (~9%), reduced Kharif acreage for cotton, soybeans and groundnuts, and Covid-related challenges
  - Favorable commodity prices (~61% for cash crops, ~24% for pulses, ~72% for oilseeds)
  - Better contribution margin in seeds and specialty business

- **Latin America - Strong growth driven by volumes in Brazil**
  - ~27% growth in Brazil; others in the region grew by ~11% YoY
  - Brazil: higher volumes supported by better price realization
  - Vol. driven growth in South Cone and Argentina
  - Mexico: nearly flat YoY, despite severe drought impact, improved price realization

- **Europe - Strong performance, led by robust volume growth**
  - Improved weather conditions leading to accelerated sales in Q2, also helped by favorable price realization
  - France, UK and DACH growth driven by a combination of higher volumes and improved price realization
  - Strong performance driven by fungicides, herbicides and Biosolutions

- **North America - Revenue growth through higher price realization**
  - Improved commodity prices, tight supply for key products, and favorable channel stock provide overall positive outlook
  - Robust increase in price realization, more than offsetting cost increase
  - Significant upside for nonselective herbicides driven by improved price realization

- **ROW - Robust growth despite adverse market conditions**
  - Growth registered despite supply constraint
  - Strong growth in ANZ, driven by volume, and price realization
  - Japan sales comparable to LY, despite JPY depreciation
  - AME has degrown due to unfavorable rains in parts of Africa impacting crops, and supply chain challenges

UPL – Financial Summary

Financial Snapshot

(Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	3,86,940	4,27,313	4,61,071	4,99,483	5,39,295
EBITDA	83,520	96,329	1,06,481	1,18,547	1,30,161
EBITDA Margin (%)	21.6	22.5	23.1	23.7	24.1
APAT	31,090	39,844	46,607	56,075	65,635
EPS (Rs)	40.6	52.1	60.9	73.3	85.8
EPS (% chg)	29.6	28.2	17.0	20.3	17.0
ROE (%)	15.5	17.8	18.1	18.7	18.9
P/E (x)	18.8	14.6	12.5	10.4	8.9
EV/EBITDA (x)	9.2	7.7	6.6	5.5	4.6
P/BV (x)	2.8	2.4	2.1	1.8	1.6

Source: Company, Emkay Global

Income Statement

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	**3,86,940**	**4,27,313**	**4,61,071**	**4,99,483**	**5,39,295**
Expenditure	**3,03,420**	**3,30,984**	**3,54,590**	**3,80,936**	**4,09,134**
EBITDA	**83,520**	**96,329**	**1,06,481**	**1,18,547**	**1,30,161**
Depreciation	21,730	21,462	23,090	24,933	26,961
EBIT	**61,790**	**74,867**	**83,391**	**93,614**	**1,03,200**
Other Income	2,580	1,806	1,264	1,327	1,460
Interest expenses	20,600	17,679	13,014	8,919	4,374
PBT	**43,770**	**58,994**	**71,641**	**86,023**	**1,00,286**
Tax	6,860	9,609	13,628	16,362	19,073
Extraordinary Items	2,380	1,530	0	0	0
Minority Int./Income from Assoc.	6,240	9,616	11,490	13,677	15,678
Reported Net Income	**28,710**	**38,314**	**46,607**	**56,075**	**65,635**
Adjusted PAT	**31,090**	**39,844**	**46,607**	**56,075**	**65,635**

Source: Company, Emkay Global

Balance Sheet

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Equity share capital	1,530	1,530	1,530	1,530	1,530
Reserves & surplus	2,07,340	2,37,991	2,75,276	3,20,136	3,72,644
Net worth	**2,08,870**	**2,39,521**	**2,76,806**	**3,21,666**	**3,74,174**
Minority Interest	**36,930**	**46,546**	**58,036**	**71,713**	**87,391**
Loan Funds	**2,35,600**	**1,90,100**	**1,44,600**	**99,100**	**48,600**
Net deferred tax liability	9,960	9,960	9,960	9,960	9,960
Total Liabilities	**4,91,360**	**4,86,127**	**4,89,402**	**5,02,439**	**5,20,125**
Net block	**3,47,650**	**3,49,438**	**3,50,761**	**3,52,681**	**3,55,259**
Investment	**6,180**	**6,180**	**6,180**	**6,180**	**6,180**
Current Assets	**3,12,650**	**3,15,802**	**3,28,538**	**3,51,925**	**3,79,750**
Cash & bank balance	48,530	28,481	21,994	23,507	28,662
Other Current Assets	31,120	31,120	31,120	31,120	31,120
Current liabilities & Provision	**1,96,290**	**2,06,463**	**2,17,247**	**2,29,517**	**2,42,235**
Net current assets	**1,16,360**	**1,09,339**	**1,11,292**	**1,22,408**	**1,37,516**
Misc. exp	0	0	0	0	0
Total Assets	**4,91,360**	**4,86,127**	**4,89,402**	**5,02,439**	**5,20,125**

Source: Company, Emkay Global

Cashflow

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
PBT (Ex-Other income) (NI+Dep)	**41,190**	**57,188**	**70,377**	**84,695**	**98,826**
Other Non-Cash items	0	0	0	0	0
Chg in working cap	7,720	(13,028)	(8,439)	(9,603)	(9,953)
Operating Cashflow	**72,120**	**73,692**	**84,414**	**92,583**	**1,01,135**
Capital expenditure	(10,860)	(23,250)	(24,413)	(26,854)	(29,539)
Free Cash Flow	**61,260**	**50,442**	**60,002**	**65,729**	**71,596**
Investments	(600)	0	0	0	0
Other Investing Cash Flow	(11,530)	0	0	0	0
Investing Cashflow	**(21,010)**	**(21,444)**	**(23,148)**	**(25,526)**	**(28,079)**
Equity Capital Raised	0	0	0	0	0
Loans Taken / (Repaid)	(51,090)	(45,500)	(45,500)	(45,500)	(50,500)
Dividend paid (incl tax)	(4,580)	(7,663)	(9,321)	(11,215)	(13,127)
Other Financing Cash Flow	9,140	0	0	0	0
Financing Cashflow	**(67,130)**	**(70,842)**	**(67,835)**	**(65,634)**	**(68,001)**
Net chg in cash	**(16,020)**	**(18,594)**	**(6,569)**	**1,422**	**5,055**
Opening cash position	67,240	47,970	27,921	21,434	22,947
Closing cash position	**48,530**	**28,481**	**21,994**	**23,507**	**28,662**

Source: Company, Emkay Global

UPL – Key ratios

Profitability Ratios and Per share data

Profitability (%)	FY21	FY22E	FY23E	FY24E	FY25E
EBITDA Margin	21.6	22.5	23.1	23.7	24.1
EBIT Margin	16.0	17.5	18.1	18.7	19.1
Effective Tax Rate	15.7	16.3	19.0	19.0	19.0
Net Margin	9.5	11.6	12.6	13.9	15.1
ROCE	12.7	15.7	17.4	19.1	20.5
ROE	15.5	17.8	18.1	18.7	18.9
RoIC	14.6	17.7	19.2	21.0	22.5

Per Share Data (Rs)	FY21	FY22E	FY23E	FY24E	FY25E
EPS	40.6	52.1	60.9	73.3	85.8
CEPS	69.0	80.1	91.1	105.9	121.0
BVPS	273.0	313.1	361.8	420.5	489.1
DPS	6.0	10.0	12.2	14.7	17.2

Source: Company, Emkay Global

Valuation Ratios

Valuations (x)	FY21	FY22E	FY23E	FY24E	FY25E
PER	18.8	14.6	12.5	10.4	8.9
P/CEPS	11.0	9.5	8.4	7.2	6.3
P/BV	2.8	2.4	2.1	1.8	1.6
EV / Sales	2.0	1.7	1.5	1.3	1.1
EV / EBITDA	9.2	7.7	6.6	5.5	4.6
Dividend Yield (%)	0.8	1.3	1.6	1.9	2.3

Gearing Ratio (x)	FY21	FY22E	FY23E	FY24E	FY25E
Net Debt/ Equity	0.9	0.7	0.4	0.2	0.0
Net Debt/EBIDTA	2.2	1.7	1.1	0.6	0.1
Working Cap Cycle (days)	64.0	69.1	70.7	72.3	73.7

Source: Company, Emkay Global

Growth ratios

Growth (%)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	8.2	10.4	7.9	8.3	8.0
EBITDA	23.3	15.3	10.5	11.3	9.8
EBIT	29.8	21.2	11.4	12.3	10.2
PAT	61.7	33.5	21.6	20.3	17.0

Source: Company, Emkay Global

Quarterly Trend

Quarterly (Rs mn)	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22	Q2FY22
Revenue	78,330	89,390	91,260	1,27,960	85,150	1,05,670
EBITDA	18320	16670	22020	26510	17740	19310
EBITDA Margin (%)	**23.4**	**18.6**	**24.1**	**20.7**	**20.8**	**18.3**
PAT	5760	6740	7160	11430	7400	6740
EPS (Rs)	**7.5**	**8.8**	**9.4**	**14.9**	**9.7**	**8.8**

Shareholding Pattern (%)	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
Promoters	27.9	27.9	27.9	27.9	27.9	28.0	28.0
FIIs	37.2	37.2	37.2	35.4	37.8	37.9	35.1
DIIs	20.8	20.8	16.2	16.7	16.0	16.2	18.0
Public and Others	14.2	14.2	18.7	20.1	18.4	18.0	18.9

Source: Company, Emkay Global

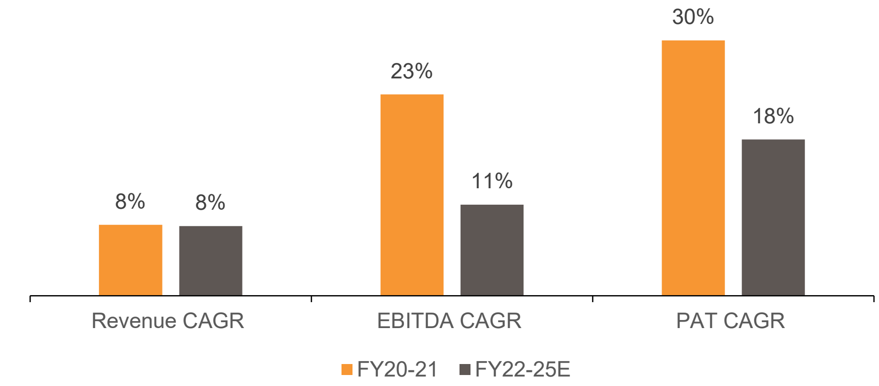
Annexures

Business segments

Business segments/geographies

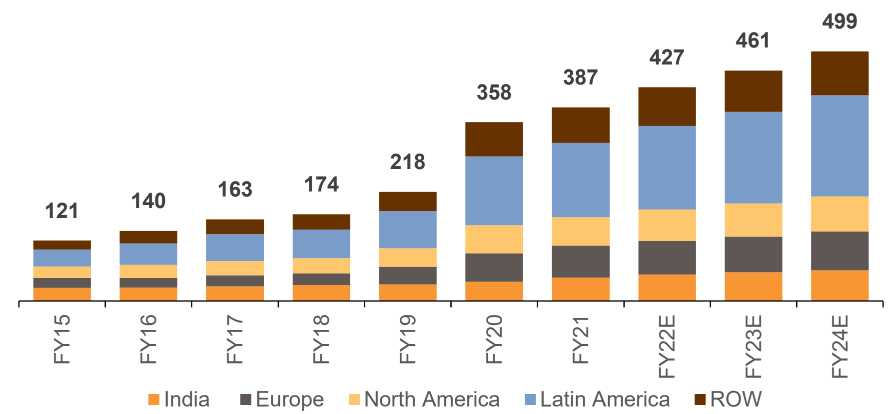
- **UPL is a leading Indian agrochemical company with a strong presence in the domestic and foreign markets. The domestic market contributes ~71% to the topline, while exports constitute ~29% of the business.**
- Revenues have increased at a 21%/22% CAGR over the last 10 years/5 years and we expect a 7% revenue CAGR during FY21-FY24E. Net profit has seen a similar trajectory of a 23%/28% CAGR over the last 5 years/10 years, while it is expected to see a 10% CAGR during FY21-FY24E on the back of an improving product mix.
- Branded generics remain the biggest segment currently with a ~79% share, followed by differentiated and sustainable products at 29%. However, UPL intends to increase the contribution of the D&S portfolio to 50% by FY26.
- Within geographies, Latin America remains the biggest contributor with around 38% of the revenues, followed by Europe and North America at ~17% and ~15%, respectively. India and the rest of the world account for ~12% and ~18%, respectively.

EBITDA and earnings growth through innovative products/ solutions



Source: Company, Emkay Global

LATAM remains key focus geography (Rsbn)



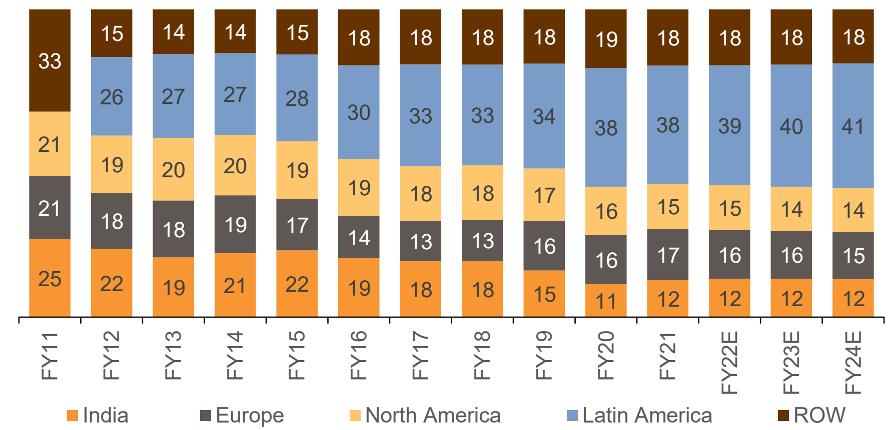
Source: Company, Emkay Global

UPL to outgrow global agrochem market

Industry outlook – Macro tailwinds instil optimism into agrichem industry

- Consumption of agrichemicals in India is the lowest compared to its counterparts in other regions. However, the crop protection market in India posted a healthy growth of 8.8% in FY21, making India the fastest-growing crop protection market among the top 20 markets in 2020. India is the 5th largest market for agrochemicals, with a market size of USD3.12bn. Strong growth is a result of conscious efforts made by the government over the past few years to transform the agricultural landscape with the aim of doubling farm income.
- Several measures taken by the government for the development and support of the sector, like increasing the target for agriculture credit from Rs15trn to Rs16.5trn and increasing the allocation for irrigation schemes, augur well for the agrochemical sector domestically.
- On the global side, favourable macro factors like positive pricing trends and encouraging weather projections indicate that the sector would continue to perform well in the near to medium term.
- The above factors encourage overall optimism for the sector, and we believe UPL, with its extensive global presence and a strong R&D backbone, is well positioned to deliver higher growth than the industry average. The industry saw a 3% CAGR in the last three years, while UPL managed a topline CAGR of 21% and an EBITDA CAGR of 26%. The EBITDA margin witnessed a healthy expansion of 265bps, which is indicative of the rising contribution of value-added products to the overall top-line coupled with cost synergies derived from the merger with Arysta.

Geographic revenue breakup (%) – LatAm key market



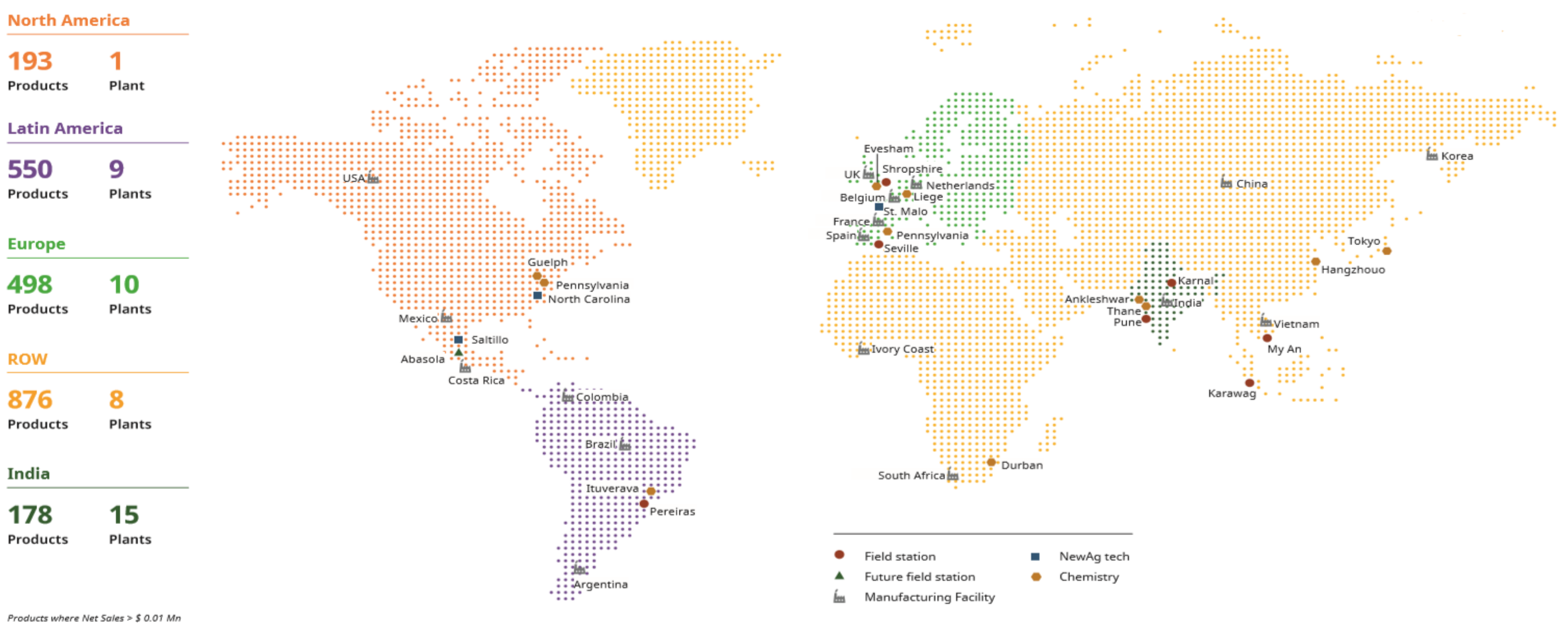
Source: Company, Emkay Global

UPL's global presence

Marketing prowess along with global reach backed by a widespread manufacturing footprint

- ***Extensive reach and ability to cross-pollinate across regions grant UPL great marketing agility.***
- The company is well-positioned to capitalize on high-growth markets, given its extensive global presence, diversified portfolio and superior digital capabilities.
- The OpenAG enables the company to engage with farmers and offer a platform for procuring their supplies. This places the company in good stead as it enables the gathering of insights and the development of personalized solutions for addressing pain points.

Manufacturing and Product Footprint



Source: Company, Emkay Global

Key Products/Core Brands

	India		Latin America		Europe		North America	Rest of the world		
Insecticides, Fungicides, and Herbicides	Ulala	Saaf	Perito	Stam	Devrinol	Fist Gold	Interline	Orthene	Galago	Acramite
	Panama	Avancer Glow	Sperto	Dinamic	Metafol	Cuprofix	Lifeline	Viper	Callomil	Evito-T Manzate
	Phoskill	Delma	Lancer	Orion	BeetUp	Microthiol	SuperWham	Lancer Gold	Ivory	Tarang
	Lancer Gold		Imidagold	Unizeb	Select	Penncozeb	Everest	Callifan	Vondozeb	Fascinate
	Starthene		Acramite	Unizeb Gold	Centurion	Malvin	Batalium	Inspire	Brilliant	Vondozeb
	Saathi		Uniprid	Tridium	Pantox	Zoxis	Select	Crotale	Evito	Quickphos
	Iris		Select		Pantera	Syllit	Manzate	Floramite	Syllit	Eros Gold
	Patela		Glyphotal		Minstrel	Thiopron	Evito	Kalach	Asilan	Omite
	Sweep Power		Lifeline		Bettpham	Vondozeb	Vigilant	Select	Ortran	Baseline
	Ferio		Fascinate		Stam	Cyperkill	Acramite	Rancona	Tokuthion	
	Eros		Strim		Novel	Acramite	Comite II	Vision	Orthocide	
	Cuprofix		Vondozeb		Ovipron	Floramite		Sweep	Dimension	
Bio Solutions and Others	Opteine		Biozyme		Carpovirusine	Langis	Rancona	Biozyme		
	Gainexa		Zeba		Ostrinil	Rancona	Ph-D	BM Start		
	Macarena		Reon		Vacciplant	Vitavax		Banzai		
	Copio		Vacciplant		Iodus	Himalaya		Callifert		
			Kusumin		Plantivax	Fazor		Stimuroot		
					Apetizer	Alar		Quickphos		
					BM start	Argos				
					Muloleo	Vitalus				
					Vivaflor	Signal				
					Zeal					

Key developments/Winds of change

Offerings focused on sustainability

Strong footing and well positioned for rapid growth of D&S portfolio

- Regions, like Europe, are witnessing a trend of increasing regulation around the use of chemicals, placing high emphasis on the use of chemicals with very low toxicity and reducing the impact of agriculture on the environment. This trend has resulted in a lot of products getting banned across the region, and the trend is expected to continue in other geographies as well. Amid environmental challenges and increasing restrictions on the heavy use of pesticides, the bio-solution space has gained prominence as it addresses most of the challenges regarding chemical usage, water shortages and environmental impact of agriculture while improving the farm yield. In the long term, the category is expected to experience a higher growth rate than the industry and is expected to replace conventional agrochems in most geographies.
- Bio-solutions are one of the key focus areas of management, and the company has already emerged as the biggest manufacturer and distributor of bio-solution offerings. Management is committed to consistently expanding and developing the segment and has carved out a new division, NPP, to bring the bio-solution portfolio under one umbrella and make targeted investments in the space through the division for further development of the segment.
- The bio-solution space is expected to be worth USD10bn by CY2025 from USD5bn currently. Considering UPL’s extensive global reach and marketing prowess, along with the ability to cross-pollinate across regions and increase the speed and depth of its market penetration, we expect the company to become a prominent player in the rapidly growing space.

OpenAg

OpenAG philosophy bringing down boundaries and driving strategic collaborations

Collaborations opening up new horizons

- The OpenAG platform of the company is founded on the philosophy that the company, rather than being just an agrichem company, has to serve as a facilitator for sustainable agricultural practices across the food value system
- The key characteristic of this approach is that it enables collaboration between stakeholders across the food value system to address farmers' needs. It aims at collaborating with other players across the food value ecosystem for innovation, technology and R&D capabilities. The recent collaborations with FMC and Meiji are a result of OpenAg in action.
- Such collaborations, apart from helping the end-user, are also mutually beneficial for the partners and unlock sizeable opportunities. The collaboration with FMC grants UPL the opportunity to innovate using the molecule before patent expiry, along with exclusive access to India, while at the same time serving as a post-patent strategy for FMC to retain its market presence after the molecule goes off-patent and to leverage UPL's manufacturing capabilities for toll-manufacturing CTPR for them. The collaborations with FMC and Meiji have collectively opened up an opportunity worth USD7.5bn.
- These collaborations will continue to strengthen UPL's market position further and enable it to consolidate its product portfolio in order to cater to solutions relating to specific crops.

Global food value system

Source: Company, Emkay Global

ESG focus

High emphasis on ESG; ranked first among global agrochem companies in terms of ESG risk management

Focus on increasing contribution from D&S portfolio in the overall revenue mix

UPL is committed to growing sustainably and is at the top of the global rankings in the agrochemical sector in terms of ESG risk management. The company is adopting a low-carbon pathway for agricultural practices and the entire food value ecosystem.

The company has undertaken the following initiatives toward sustainability and environmental consciousness:

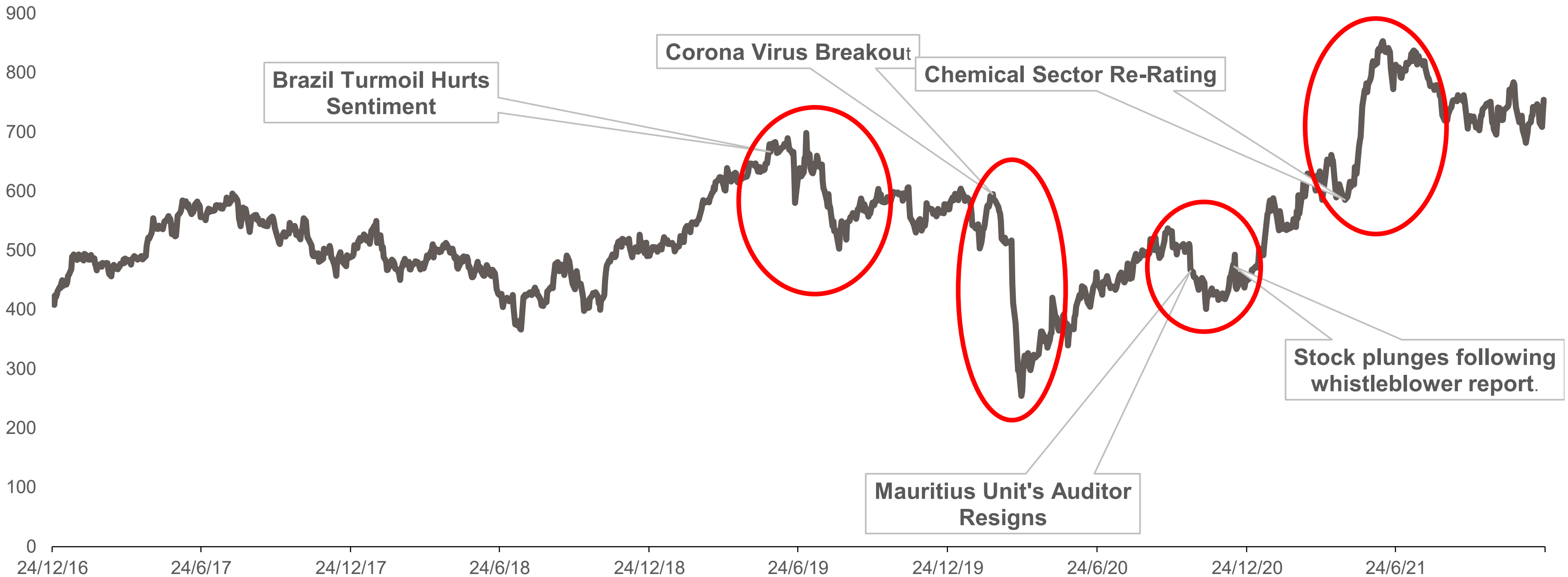
- Drive growth of bio-solution products
  The company has taken several initiatives to increase penetration and growth of bio-solution offerings that have significantly lower toxicity levels and a very minimal impact on soil's health. The company intends to increase the contribution of D&S solutions from the current 29% to 50% in the next five years. The company is already the largest manufacturer and supplier of bio-solutions in the world.
- Focused effort on bio-solutions through NPP
  To accelerate the adoption of bio-solutions and products with a substantially lower environmental cost, UPL has carved out a new division, NPP. The creation of a separate division will allow more focused efforts on the development and penetration of this category, along with making targeted investments for R&D and development of new products.
- Farmer support and education
  The Nurture.farm effort is aimed at engaging with the entire agriculture ecosystem in order to make agriculture viable, economically successful and environmentally sustainable for farmers. The platform tries to address multiple farmer pain points such as farmer education, agri input procurement, economic viability and market linkages while keeping in mind environmental sustainability.
- As of Mar'21, 60% of UPL's manufacturing plants are zero discharge units. The company harvests and reuses 50mn litres of rain water annually.
- UPL has constituted two separate boards for UPL Ltd. and UPL Corporation Ltd. UPL Corporation is a global entity, which has a distinguished board of directors. The independent directors come from various industries with experience spanning over decades.
- Sustainability ranking – UPL is ranked No.1 in sustainability performance among its peers for the second year by Sustainalytics. Stainalytics provides environmental, social and governance (ESG) research, ratings, and data to institutional investors and companies, and produces an annual report about the sustainability performance of companies working in a range of sectors. UPL's ESG risk score of 24.9 reflects the best performance among its peer group of global crop protection companies.

Board of Directors

UPL Ltd		
Name	**Designation**	**Description**
Mr. Rajnikant Shroff	Chairman and Managing Director	A graduate in Chemistry from Bombay University pioneered Red Phosphorus manufacturing in 1969, giving an impetus to the indigenous chemical industry.
Mr. Jai Shroff	Global CEO of the Group	He is a well-recognized global leader in the Chemical & Agri-Inputs industry with over 30 years experience in India and internationally.
Mr. Vikram Shroff	Director	Vikram Shroff is part of the leadership team of UPL, he has been passionately driving continuous organizational improvement with his dynamic leadership, sound strategic insights and outstanding people management skills.
Mr. Arun Ashar	Director - Finance	A highly successful Chartered Accountant with a rich experience of 42 years handling matters of audit, taxation, legal, purchase and business development with the same grace with which he climbs peaks. He is a member of The Institute of Chartered Accountants of India, completed his graduation from the University of Mumbai and obtained his CA degree from The Institute of Chartered Accountants of India.

UPL Corporation Ltd		
Name	Designation	Description
Mrs. Roberta Bromberg Bowman	Independent Director	Roberta was Duke Energy's Chief Sustainability Officer from 2008 until 2012. She joined Duke Energy in 1986 and has over 30 years of experience in energy and environmental issues. She currently serves on the Board of Directors of Blue Cross North Carolina (since 2005), Echo Health Ventures (since 2016) and was an Independent Director of Healthcare Trust of America, Inc. (from 2018 to 2019). She is a former Board member and Board Chair of the Ladies Professional Golf Association ("LPGA") (from 2011 to 2017).
Mr. Davor Pisk	Independent Director	Davor has a Bachelor's in Economics and Politics from Exeter University and a Master's in Political Science from the University of California, Santa Barbara. He has more than thirty years of business leadership experience in agrochemicals, seeds and agricultural biotechnology, including nine years as Chief Operating Officer of Syngenta AG.
Mr. Stephen Gerald Dyer	Independent Director	Stephen is Bachelor of Applied Science in Chemical Engineering from Queen's University, Kingston, Ontario and has 30 years of experience in the Agricultural sector. Stephen spent the majority of his career with Agrium (now Nutrien) developing broad operational, financial and leadership experience base allowing his to progress to increasingly senior positions.
Mr. Paul Walsh	Independent Director	Paul is the current Executive Chairman of luxury automotive, motorsport and technology company McLaren Group after working as a Chairman of Compass Group Plc and various senior roles in Private Equity. He was also previously the Chief Executive Officer of Diageo plc for 13 years. He is also a non-executive director of FedEx Corporation and McDonald's Corporation.

UPL stock price performance impacted by external incidents



Source: Emkay Research, Bloomberg

- The stock plummeted 25% between 21st May 2019 and 13th Aug 2019 due to the turmoil in Brazil, impacting sentiment adversely.
- The resignation of its Mauritius unit's Auditor in Oct'20 and a whistle-blower report in Dec'20 caused the stock to fall by ~7% between 16th October 2020 and 11th December 2020.
- Re-rating of the entire Indian chemical sector due to positive sentiment driven by the China+1 strategy and buoyant chemical prices.

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Your success is our success

Rallis India (Hold, TP Rs265)

Refer to important disclosures at the end of this report

Renewed growth strategy complemented by large capex

This report is solely produced by Emkay Global. The following person(s) are responsible for the production of the recommendation:

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We assume coverage on Rallis India with a Hold rating and a Mar'23E TP of Rs265, based on DCF (downside 3%). Our TP implies a forward P/E multiple of 17.5x Mar'24E EPS, which is 24% below the 10-year historical average of 22.7x for the stock. We forecast a PAT CAGR of ~24% for FY22E-25E, driven by a 12% revenue CAGR, thanks to an uptick in capex (Rs8bn over FY20-24E). However, concerns about challenges in scaling up the seeds business, portfolio gaps for the Kharif season and depressed existing contract manufacturing activity are likely to remain headwinds in the short- to medium term. **Upside risk:** 1) continued higher capex momentum post execution of Rs8bn capex.

Financial Snapshot (Consolidated)

(Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	24,294	26,162	29,091	32,564	36,622
EBITDA	3,229	3,007	3,983	4,809	5,707
EBITDA Margin (%)	13.3	11.5	13.7	14.8	15.6
APAT	2,191	1,827	2,423	2,940	3,541
EPS (Rs)	11.3	9.4	12.5	15.1	18.2
EPS (% chg)	26.4	-16.6	32.6	21.3	20.4
ROE (%)	14.6	11.1	13.7	15.4	17.1
P/E (x)	24.4	29.2	22.0	18.2	15.1
EV/EBITDA (x)	15.6	17.0	12.9	10.6	8.9
P/BV (x)	3.4	3.1	2.9	2.7	2.5

Source: Company, Emkay Research

About Rallis India

Rallis is a subsidiary of Tata Chemicals and a part of over USD106bn Tata Group. It is one of India's leading agro sciences companies, with more than 160 years of experience in servicing rural markets and with the most comprehensive portfolio of products/solutions for Indian farmers. Rallis is known for its deep understanding of Indian agriculture, sustained contact with farmers, quality agrochemicals, branding & marketing expertise and strong product portfolio. Rallis has marketing alliances with several multinational agrochemical companies.

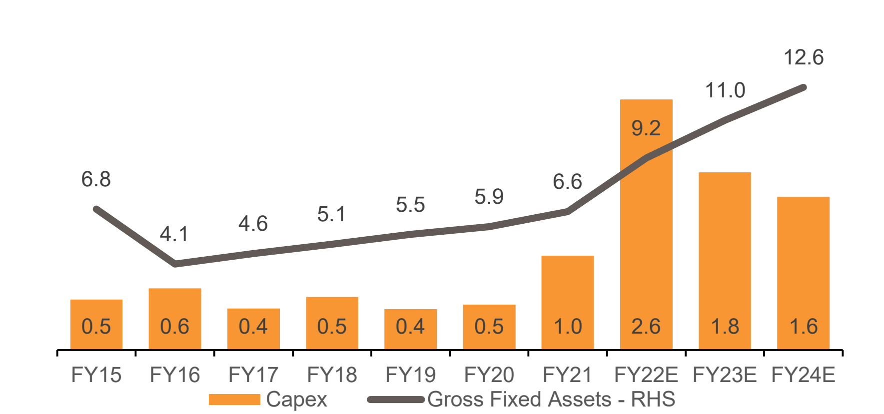
Rallis India (Hold)	
Bloomberg Ticker	RALI IN
Market Cap (Rsbn/USDbn)	53.9/0.7
CMP	274
Target Price	**265**
Upside (%)	-3.4

Price Performance

(%)	1M	3M	6M	12M
Absolute	8	(4)	(15)	(3)
Rel. to Nifty	4	(4)	(25)	(23)

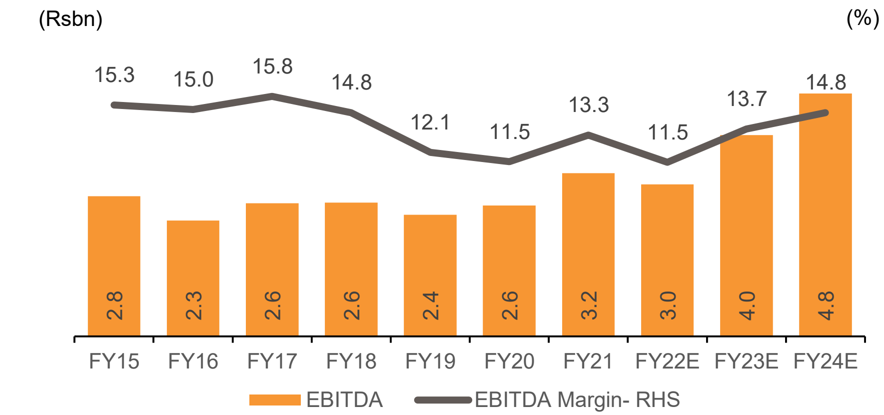
Rallis India – Story in Charts

Increasing capex from FY21 to expand manu. footprint (Rs bn)



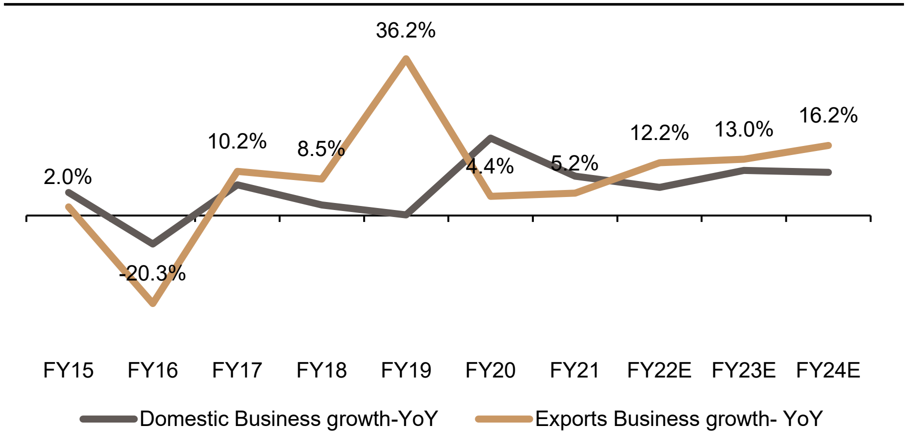
Source: Company, Emkay Global

EBITDA margin expansion from FY22E



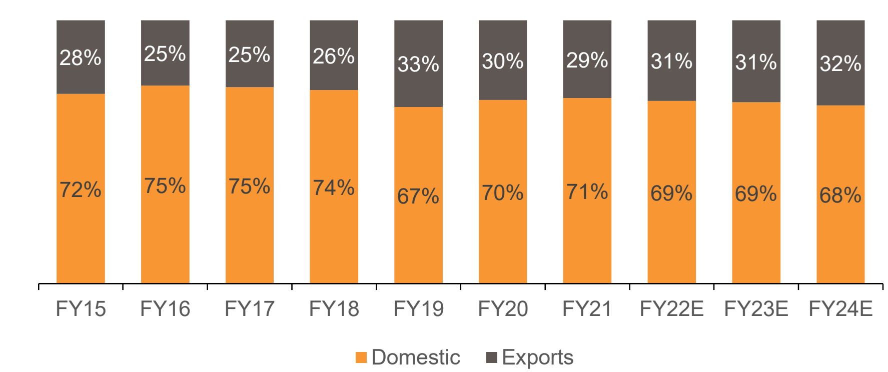
Source: Company, Emkay Global

Export growth higher than domestic growth from FY22E



Source: Company, Emkay Global

Export contribution expected to go up gradually from FY22E



Source: Company, Emkay Global

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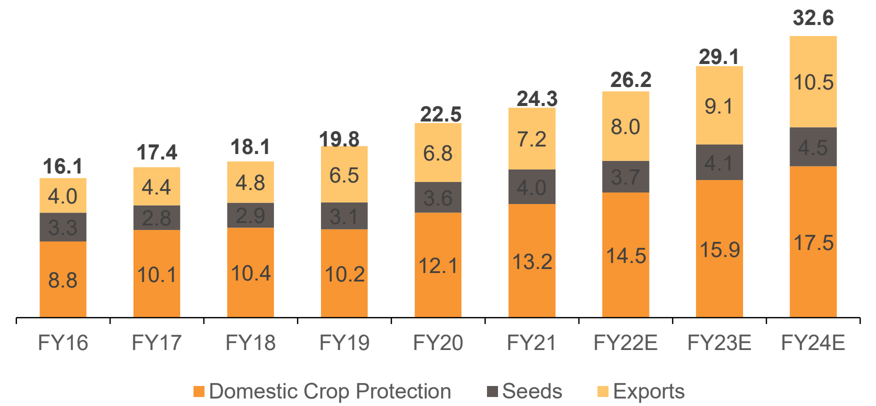
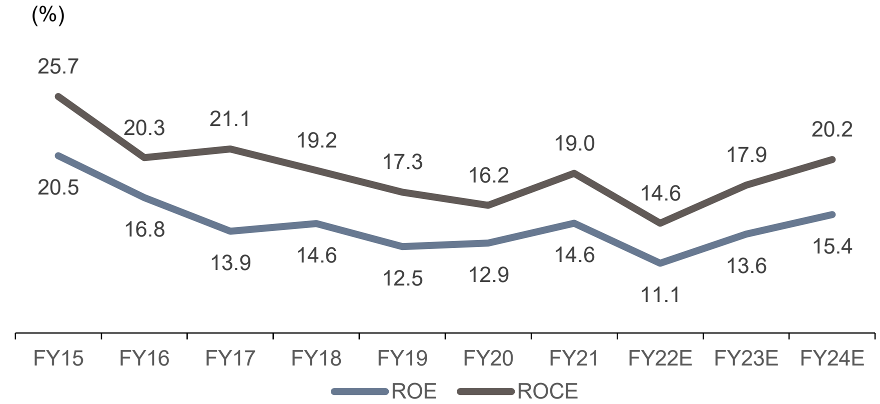
Segment-wise revenue break-up (Rs bn)



Source: Company, Emkay Global

Return ratios to move up from FY22E



Source: Company, Emkay Global

Renewed growth strategy complemented by large capex

We assume coverage on Rallis India with a Hold rating and a Mar'23E TP of Rs265, based on DCF (downside 3%). Our TP implies a forward P/E multiple of 17.5x Mar'24E EPS, which is 24% below the 10-year historical average of 22.7x for the stock. We forecast a PAT CAGR of ~24% for FY22E-25E, driven by a 12% revenue CAGR, thanks to an uptick in capex (Rs8bn over FY20-24E). However, concerns about challenges in scaling up the seeds business, portfolio gaps for the Kharif season, and depressed existing contract manufacturing activity are likely to remain headwinds in the short- to medium term. Upside risk: 1) continued higher capex momentum post execution of Rs8bn capex.

- **Substantial Rs8bn capex (FY20-24E) to drive revenue growth both domestically and internationally:** Of Rs8bn guidance, Rallis has invested ~Rs1.4bn during FY20-21, while currently undergoing capex of Rs4.5bn will be executed over FY22-23E. These investments, spanning across new capacity additions, debottlenecking, R&D unit and a pilot plant, should drive both domestic and export revenues. We, thus, forecast Rs12.4bn in incremental revenues for FY22E-25E.

- **Expanding reach in international markets through own registrations along with capacity expansions:** Rallis has accelerated its pace of international registrations (cumulative registrations of ~50 during FY17-21). Global registrations, coupled with capacity expansions, are expected to increase the company's export contribution from ~31% in FY22E (~Rs8.0bn) to ~33% in FY25E (~Rs12.1bn). Exports are estimated to grow at a higher 14.8% CAGR over FY22E-25E vs. a 10.1% CAGR for the domestic segment, with an overall revenue CAGR of 11.9% in FY22-25E.

- **New contract manufacturing offers potential upside:** Rallis has been supplying Poly Ether Ketone Ketone (PEKK, polymer in aerospace application) and Metconazole under its contract manufacturing activity (~5% of FY21 sales). In the wake of the China+1 strategy, Rallis has renewed its focus on the contract manufacturing segment by appointing a new business head and a dedicated team to identify opportunities in the segment. This business development team will be complemented by a dedicated R&D team, which will focus on core chemistries as well as new chemistries. Although at nascent stages, this segment has good growth potential owing to the company's strong chemistry knowledge, dedicated management team, and 'China+1' tailwind. We are factoring in Rs750mn revenues from this segment in FY25E, which can potentially scale up further.

- **Concerns about seeds segment, muted growth in current contract manufacturing and high domestic exposure remain:** Rallis' seeds segment has portfolio gaps for the Kharif season, which remains a concern. Further, the slowdown in contract manufacturing has affected its business too. Although the share of exports is likely to grow (from ~31% in FY22 to ~33% in FY25E), the domestic business will still remain dominant; the latter is sensitive to monsoon vagaries and product pricing. In our view, these concerns may persist for the medium term, but, if alleviated and reflected in the financial performance, they could drive valuation rerating close to historical averages.

- **Assume coverage with 'Hold' and TP of Rs265:** We believe Rallis's strategy to drive the export business through registrations, supported by an expanded manufacturing footprint and renewed focus on contract manufacturing, is expected to yield better earnings growth of 24.3% (FY22E-25E) vs. a 9.3% CAGR over FY18-21. Key DCF assumptions: 1) 11.5% CoE; 2) 10% PAT CAGR in FY25-35E; and 3) terminal growth of 6% post FY35E. Our TP implies FY24E P/E at 17.4x, which is ~27% below the 1-year forward 5-year average P/E of 23.7x (~23% below 10-yr avg. P/E 22.7x)

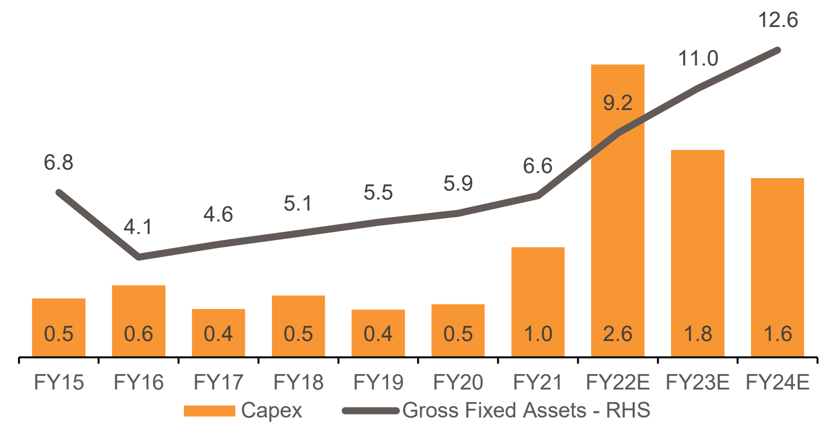
- **Upside risks:** 1) continued higher capex momentum post execution of Rs8bn capex, 2) faster-than-anticipated commercialization of new contract manufacturing segment; **Downside risks:** 1) lower-than-anticipated pace in ramping up capacity utilization in new units, 2) vagaries in monsoon/ climatic conditions that can affect domestic/ international businesses, 3) inability to pass on the input cost pressure to customers.

Substantial capex to drive growth

Substantial capex plan of Rs8bn over a 5-year period (FY20-24E) – already in motion

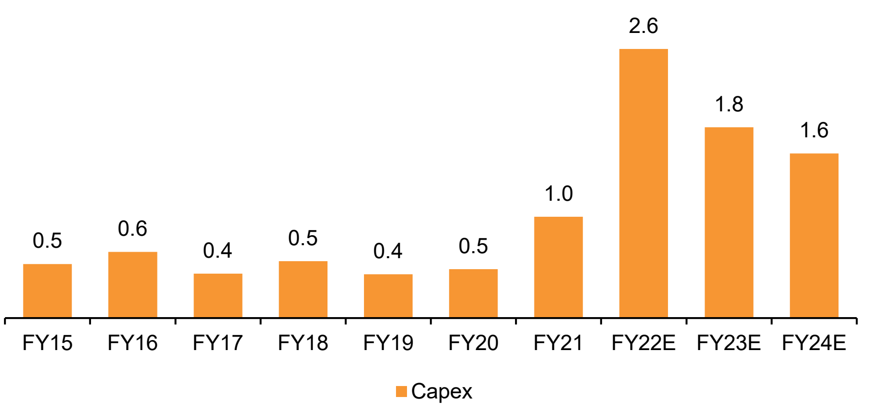
- **Management announced a Rs8bn capex plan for five years starting from FY20, with an earmarked outlay of Rs4.3bn for FY22E-23E. These investments will substantially increase Rallis' manufacturing capabilities for existing products, add capacities for new products, along with the expansion of R&D infrastructure. The investment is expected to increase revenue (~Rs7.8bn incremental revenue from FY22E-FY24E) while improving the product mix (40.0% gross margin in FY24E vs. 39.3% in FY21) and reducing reliance on external RMs due to partial backward integration.**
- The substantial capex plan stems from comprehensive medium to long-term strategic goals, which are aimed at improving the product portfolio and product mix, tapping new opportunities in contract manufacturing, enhancing R&D infrastructure to develop new products, and developing backward integration capabilities to reduce raw material related risks.
- New investments shall provide better revenue visibility for Rallis while partially derisking domestic revenues impacted by monsoon vagaries.

Increase in fixed assets from FY21 led by capex (Rs bn)



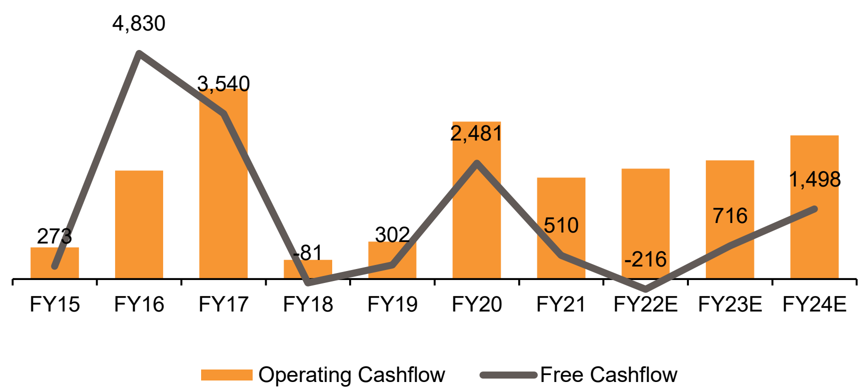
Source: Company, Emkay Global

Expect Rs7bn capex over FY20-24E vs. mgmt. guidance of Rs8bn



Source: Company, Emkay Global

Strong operating cash-flows to support investments (Rs mn)



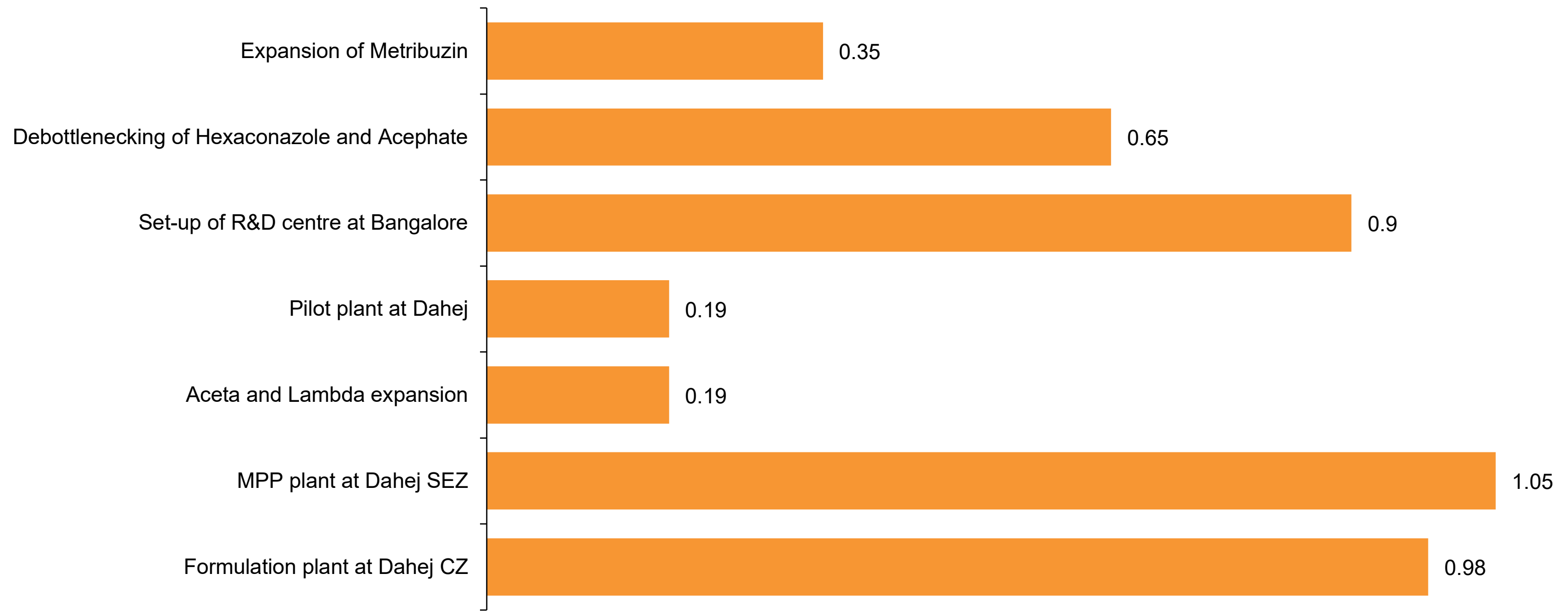
Source: Company, Emkay Global

Firmed up capex plan of ~Rs4.3bn, FY22E capex at ~Rs2.5bn

Investments across greenfield, brownfield expansions, R&D centre, pilot plant

- **FY22E overall capex was delayed by 2-3 months due to the second wave of Covid – ongoing projects of ~Rs4.3bn**
- Ankleshwar debottlenecking project for 2 AIs completed in Q2FY22
- MPP project progressing well, to be commissioned by H1FY23E
- Formulation plant at Dahej, CZ – Phase 1 completed by Q2FY22, awaiting regulatory approvals
- Metribuzin plant recommissioned in Jul'21
- All other projects progressing well but affected by the second wave of Covid

Ongoing investments across products/ segments (Rsbn)



Source: Company, Emkay Global

Focus on new product launches across crop protection, nutrition, and seeds

New product launches – Momentum accelerated in FY20-21, 9 products launched in H1FY22

- Rallis maintained the momentum in new product launches even in pandemic-affected FY21, and with a robust pipeline, the momentum is expected to continue in the future too.
- The company launched 9 new products across segments in H1FY22

Rallis' new product launches

FY17 – 4	FY18 – 5	FY19 – 1	FY20 – 6	FY21 – 4
Epic – Versatile broad spectrum fungicide for effective management of large number of fungal diseases of multiple crops Summit – Broad spectrum insecticide for the management of caterpillar pests, thrips, and serpentine leaf miners on cotton and chillies Neonix - Novel seed treatment product, pre-mix of insecticide and fungicide for the management of both soil insect pests and fungus diseases which attack at the early stage of groundnut and wheat crops Surplus - Multi micro nutrient, nano technology based liquid fertilizer	Pulito - Leading fungicide used for specialty crops for the control of a wide spectrum of diseases Cenator - New age fungicide for Paddy Sheath Blight Odis – Insecticide for effective control of sucking pests of rice and cotton Riceup – Broad spectrum systemic herbicide for seeded rice and transplanted rice Jashn Super – Introduced for the control of key lepidopteron pest, which causes significant losses to commercial crops	OLIVER – Systemic post-emergent herbicide effective against all major grassy weeds in Soybean	Zygant – Granular insecticide formulation for paddy Ayaan – Novel fungicide combination formulation, introduced first time in India for paddy Sarthak – Fungicidal combination formulation, for potato and chilli Co-marketing (3) Cameo – Strong paddy pesticide Trimbo – Post-emergence maize herbicide Impeder – Wheat herbicide	Kriman – Fungicidal combination formulation for grapes and tomato Eevee – Insecticide and fungicide combination formulation for rice and tomato Trot – Seed treatment insecticide for Cotton, Soybean, Chilli, Sorghum, Wheat, Okra, Maize, Sunflower, and Groundnut Biopesticides – Ralli-Neem and Ralli-Neem+ Co-marketing (1) Enzip– Herbicie for Soybean AquaFert Foliar and AquaFert Fertigation Water soluble fertilisers Flowbor – Boron ethanolamine, Micro-nutrient GroSmart – Plant growth regulator

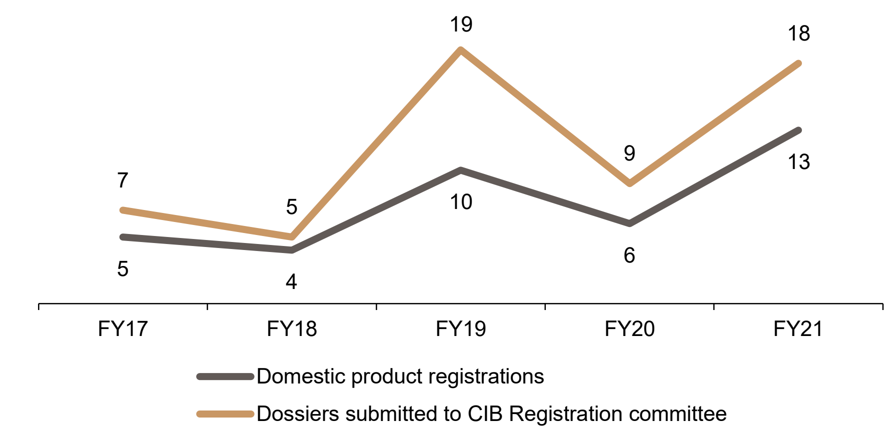
Source: Company, Emkay Global

Domestic Business – Expanding geographical reach, identifying portfolio gaps

Domestic Business – Bridging portfolio gaps

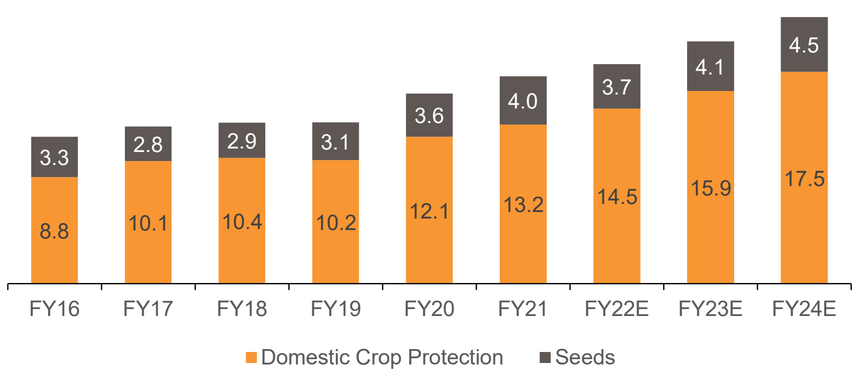
- **Focused on delivering growth by**
  - Strengthening product portfolio
  - Augmenting distribution network
  - Strengthening and leveraging brand power
- **Identified products and location gaps to bolster portfolio mix –** To build presence in Wheat and Soybean crops, cultivated predominantly in Madhya Pradesh, Rajasthan, Uttar Pradesh, Punjab and Haryana
- **Deeper market penetration by expanding distribution network (FY22E target)**
  - Crop Protection – 4,000 distributors and 65,000+ retailers
  - Seeds – 2,700 distributors and 35,000+ retailers
- **Optimize cash flows –** By improving collection efficiency and improving working capital cycle.

Number of registrations



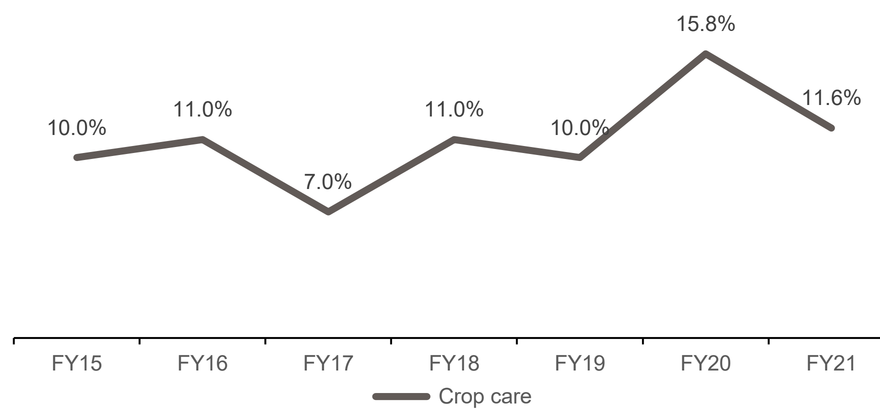
Source: Company, Emkay Global

Domestic crop protection revenues growing faster than seeds (Rs bn)



Source: Company, Emkay Global

Innovation Turnover Index (%) risen in past two years



Source: Company, Emkay Global

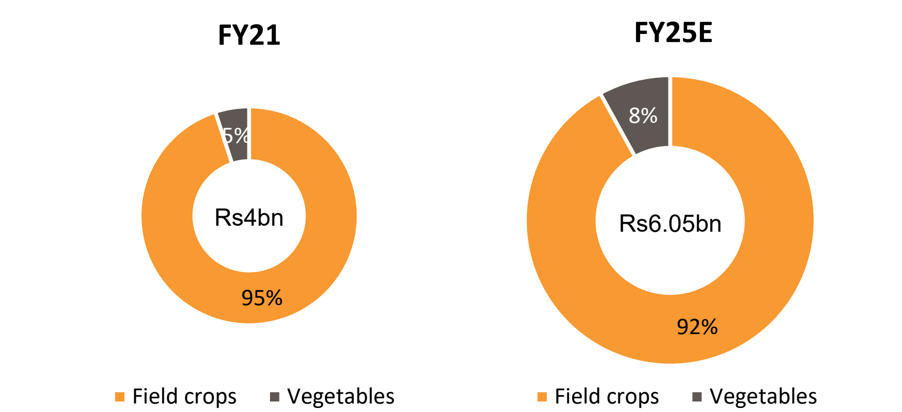
Note: ITI impacted due to restrictions on physical movement leading to lower scale up of new launches.

Seeds – Focus on Rabi crops and vegetables

Seeds Business – Diversifying from Kharif to Rabi

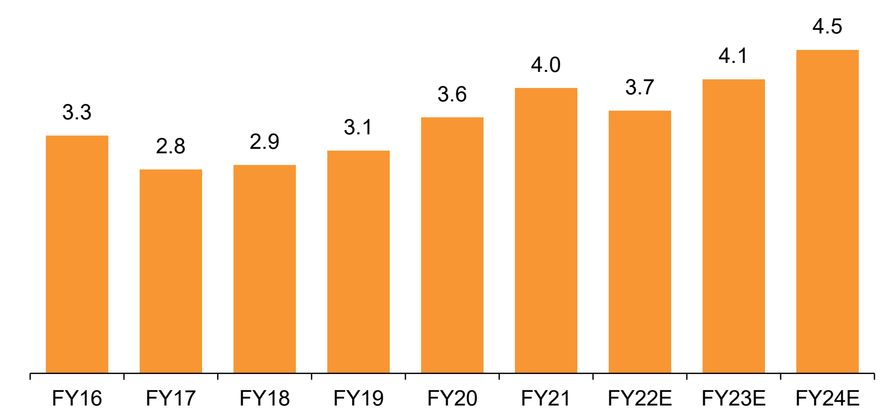
- Rallis' seeds portfolio is concentrated on Kharif, and the company is now focusing on addressing the seasonality aspect of the current portfolio (seeds segment CAGR from FY16-21 – 4%, expected to grow at a CAGR of 6% from FY21-26E).
- The company aims to build a comprehensive portfolio by targeting Rabi crops and expanding the portfolio in the vegetable segment.
- In FY21, Rallis introduced Rabi Maize (MM-9440, MM-9555), Bajra, and Chilli as part of the new strategy.
- **Mustard** – Building presence with in-licensed products initially; own product expected to be commercialized in a couple of years.
- **Vegetables** – Rejuvenation by partnering with crop segment leaders.
- Building strong R&D pipeline for strategic crops – Cotton, Rabi, Spring Maize, Mustard, and vegetables.
- The company's strategic initiatives under its seeds segment are expected to derisk the Kharif-concentrated portfolio. They are also expected to increase margins due to a better product mix, incremental products with higher margins, and operating leverage.
- ***Q2FY22 concall commentary** – Rethinking seeds portfolio; synergies from combining sales and marketing assets for seeds and domestic Crop protection*

Seeds – Contribution from vegetables expected to go up



Source: Company, Emkay Global

Diversification, addressing portfolio gaps to support seeds rev. growth (Rsbn)



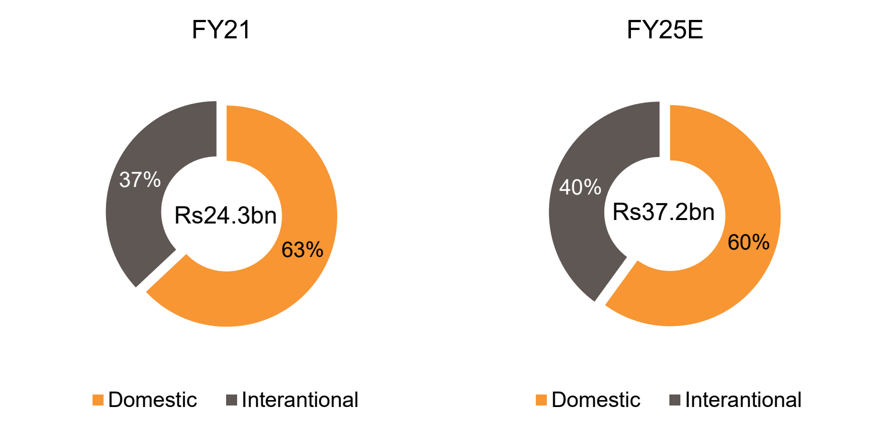
Source: Company, Emkay Global

International Business – Expanding reach through own registrations

Received product registration for Metribuzin AI and formulation in the US and Brazil, respectively

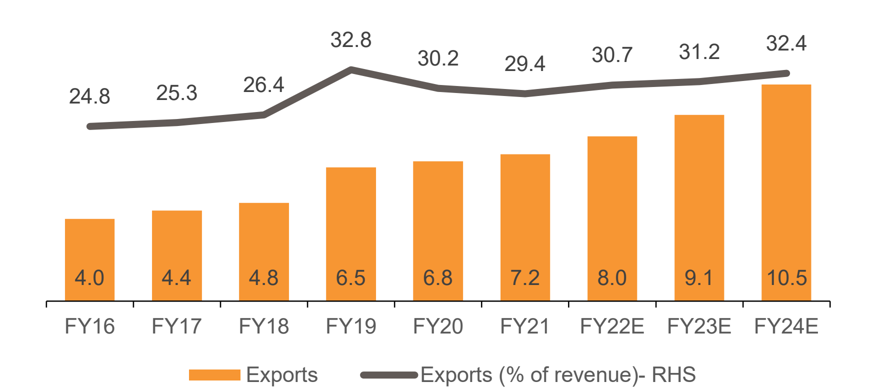
- Currently, Rallis is serving the international market with five AIs i.e. Pendimethalin, Acephate, Hexaconazole, Metribuzin and Metalaxyl.
- Based on the demand environment, the company has scaled up its manufacturing capacities in the past few years. Simultaneously, Rallis has been increasing its registrations in the international market, with a total of ~50 registrations in the past five years.
- **Scaled up/Debottlenecked capacities of select key molecules**
    - Doubled manufacturing capacities of Metribuzin (~20% global market share)
    - Hexaconazole (~50% global market share)
    - Pendimethalin (~18% global market share)
- Expected to add one new product in FY22 to complement the existing five Ais.
- Reducing dependency on China – Backward integration of two key AIs to de-risk from supply disruptions.

Break-up of crop protection revenue



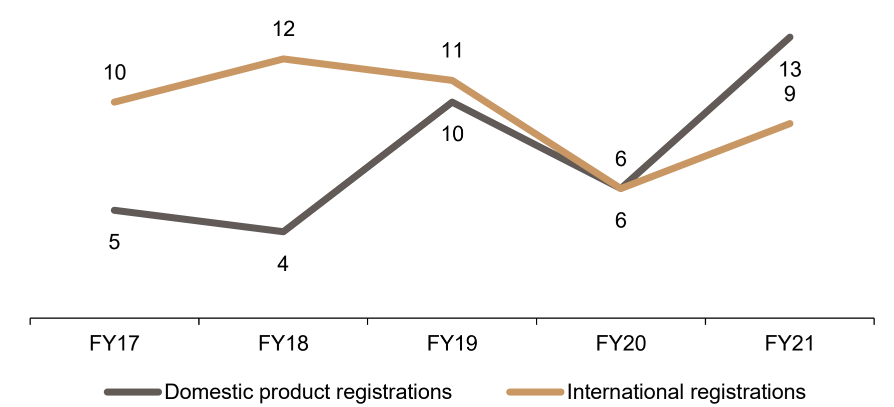
Source: Company, Emkay Global

Increasing contribution of exports in overall revenues (Rs bn)



Source: Company, Emkay Global

International Registrations to rise further



Source: Company, Emkay Global

Strong emphasis on improving processes, building flow chemistry

Focusing on continuous processes through flow chemistry

- In the last couple of years, Rallis is focused on building expertise in flow chemistry.
- Simultaneously, it is aggressive in product registrations in both domestic as well as international markets.

Technology development at Rallis

	FY17	FY18	FY19	FY20	FY21
New Chemistries		Special focus given for the development of innovative formulations for ease of handling and to enhance efficacy		Focussing on building expertise in flow chemistry in order to transform from batch processes to continuous process	Efforts have been made to identify critical steps for synthesis using flow chemistry
Process development	New process development will benefit potential contract manufacturing projects		Processes developed to achieve high purity of two active ingredients	Process development of four AIs completed achieving the cost target and specifications	
Technology Transfer				Technology transfer of one AI process from laboratory phase to piloting phase was supported	Technology transfer of one AI process from laboratory phase in advanced stage
Domestic product registrations	5	4	10	6	13
International registrations	10	12	11	6	9
Dossiers submitted to CIB Registration committee	7	5	19	9	18
Other developments	Special focus given for the development of safer formulations	New product NPI-II was developed by R&D and commercialized in the Dahej Unit	New type of formulation with two different AIs developed, where the skin irritant AI encapsulated in the formulation to reduce exposure to humans	Backward integration of one key RM for import substitution completed successfully	Mustard hybrids from internal pipeline and a tomato hybrid have been tested at pre-commercial stage

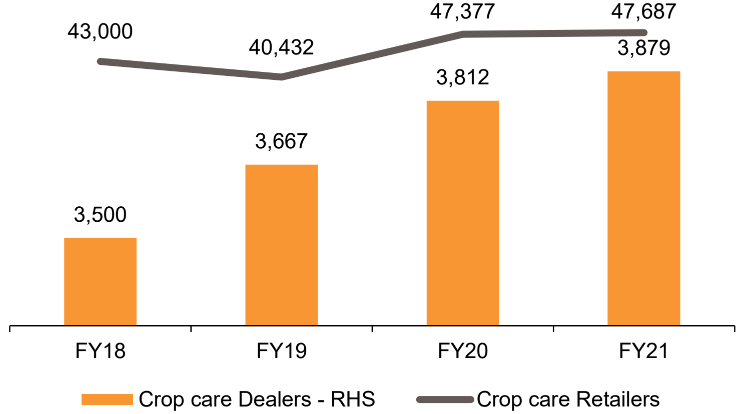
Source: Company, Emkay Global

Rebranding, renewed trade policy to complement Rallis' legacy

Changes in management and business policy support growth – Revitalising the channels and extending dealership networks

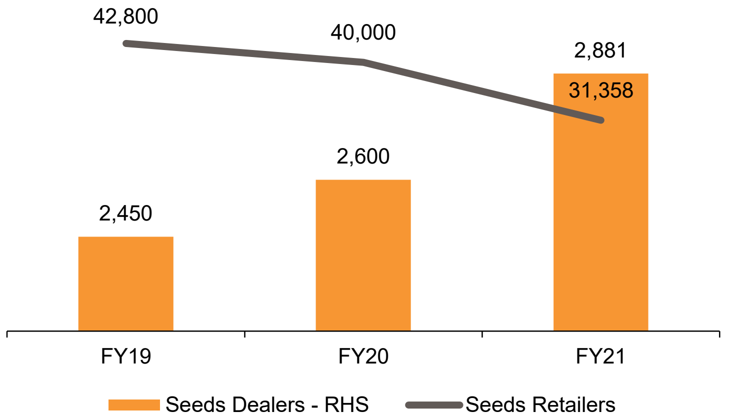
- **After the induction of new management in 2019, Rallis initiated a revision in trade policies in order to make them more aligned with market peers. Previously, the credit period extended by Rallis to its channel partners was lower than that of its peers. The realignment of credit norms has energized the sales channels and aided sales growth.**
- Increasing engagement with the dealers has been one of the key focus areas of the new management. Since FY18, Rallis has added ~380 dealers (simultaneously terminating the inefficient ones), taking the total network to ~3,880, reaching 80% of districts in India. Expanding the dealership network grants Rallis enhanced visibility and agility in terms of driving sales of new products through end-customer engagement.
- Strengthening the dealership network and revitalising credit norms have started to bear fruit with an improvement in cashflows. The initiatives should also aid higher growth momentum and drive new product sales in the future.
- Rallis boasts a wide and extensive supply chain network of 3,879 dealers and 47,687 retailers. The company is focusing on further expanding its dealership network and is consistently adding dealers to extend its reach in the market.
- Management in the Q2FY22 call highlighted Rallis' plan for the integration of sales & marketing teams of seeds and crop care under One Rallis architecture in western India to derive synergies in marketing and selling costs, as well as, capitalize on cross-selling opportunities.

Rationalization and growth in dealership network



Source: Company, Emkay Global

Rationalization in seeds dealership network



Source: Company, Emkay Global

Contract Manufacturing – New avenue for future growth

Future avenue for growth – Renewed interest in contract manufacturing

- **Management has been very keen on reinvigorating the contract manufacturing segment, which offers great potential given the opportunities in the space amid the China+1 strategy. To spearhead this initiative, Rallis has carved out a separate vertical and appointed a new business head. Although at a nascent stage, Rallis is well positioned to make headways in the space, backed by its strong R&D skills, deep chemistry knowledge and upcoming fungible new capacities.**
- *In addition, management has indicated its intention to make business acquisitions in the space and has accordingly put in place necessary resources to undertake the same. However, this endeavour may take some time to mature, and currently there is no indication of when the company will foray into the space at a material scale.*
- **Targeting off-patent agrochemical segment with addressable market size of USD2.9bn –** Management has said that it is going to focus on agrochemical products that are going off patent under its contract manufacturing umbrella.
- We believe that the massive increase in manufacturing capacities and R&D capabilities from the ongoing capex paves the way for Rallis to make further inroads into the global contract manufacturing space. At present, the segment is relatively smaller for Rallis, but with renewed management impetus and favourable macro trends, the segment can materially add to the overall business of the company in the medium to long term.
- ***Q2FY22 concall commentary** – We continue to explore contract manufacturing opportunities with potential partners, and discussions are progressing satisfactorily.*

Currently, Rallis has two products under its contract manufacturing portfolio

Poly Ether Ketone (PEKK)

- PEKK is high-performance, engineering thermoplastic characterized by an unusual combination of properties - resistance to chemicals, wear, fatigue
- PEKK and its composites are widely used in automotive, high-temperature electrical, aerospace, structural, and biomedical applications
- Major supplier of PEKK for Solvay
- ***Q2FY22 concall commentary** – We see this part of the polymer business reviving only toward the middle of the next financial year*

Metconazole

- Fungicide supplied to Kureha Chemicals, a leader in speciality chemicals

Contract manufacturing – Key focus areas

- Expansion of product and customer portfolio in contract manufacturing
- Building new contract manufacturing partnerships and maintaining the existing ones
- Maximizing business development potential through dedicated techno-commercial team
- Leveraging on chemical strength and investments in flexible manufacturing capacities

Rallis Growth Strategy – Rerating depends on execution

Clearly defined short, medium, and long-term strategy

Well articulated growth strategy by Rallis

	Domestic Business	International Business	Seed Business	Contract Manufacturing
Short term	New product Introductions	Maximizing revenue from current AIs through scaling up and debottlenecking manufacturing units.	Strengthening Kharif portfolio	Sustaining current contracts
	Enhancing Brand visibility and distribution reach		Undertaking steps to address seasonality in portfolio and production challenges in hybrid seeds	Dedicated team for focused development of the segment through developing partnerships
	Rebuilding Institutional Business			
Medium Term	Widening portfolio with value-added innovative formulations	Expanding B2B partnerships and B2C play in select products and geographies for revenue maximization.	Filling portfolio gaps in cotton, rabi/maize portfolio	Adding to the current customer base through appropriate investment in flexible manufacturing
	Building partnerships for niche AIs	Resuming few discontinued AIs	Building mustard portfolio	
	Expanding portfolio and market reach in Crop Nutrition	Investment in MPP	Strengthen vegetable portfolio with own products and in-licenced products from strategic partnerships.	
Long Term	Building a strong and innovative product portfolio through research led new AIs and formulations	Widening portfolio with new AIs and new innovative formulations	Leveraging emerging technologies for value added portfolio, including GM traits	Building long-term partnerships by showcasing manufacturing and research capabilities and investment commitments.
		Investments in registration		

Source: Company, Emkay Global

Valuation based on two-stage growth model

Valuation drivers

- We assume coverage on Rallis India with a Hold rating and a Mar'23 TP of Rs265, based on DCF.
- We estimate a 24% earnings CAGR in FY22-FY25E, supported by 410bps EBITDA margin expansion from FY22E to FY25E.
- Our TP implies a forward P/E multiple of 17x Mar'24E EPS, which is 23% below the 10-year historical average of 22.7x for the stock and 27% below the 5-year historical average of 23.7x.
- ***Key assumptions in our two-stage growth model:***
  - *Revenue/ EPS CAGR (FY22E-FY25E) – 12%/24%*
  - *FY25E-35E EPS CAGR: 10%*
  - *Terminal EPS growth – 6%*
  - *Sustainable ROE – 20%*
  - *CoE: 11.5%*

Healthy growth picks up pace from FY23E

YoY Growth (%)	FY22E	FY23E	FY24E	FY25E
Revenue	7.7	11.2	11.9	12.5
EBITDA	-6.9	32.5	20.7	18.7
EBIT	-14.9	37.9	22.8	20.8
EPS	-16.6	32.6	21.3	20.4
ROE (%)	11.1	13.7	15.4	17.1
ROIC (%)	17.7	21.6	24.1	27.0

Source: Company, Emkay Global

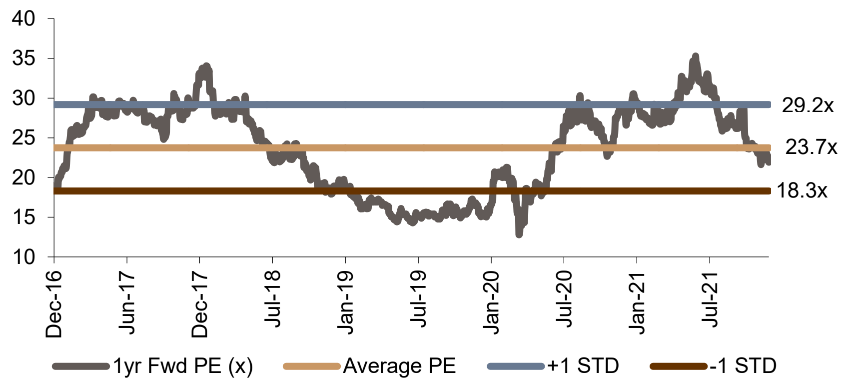
Rallis India Valuation: Summary of two-stage growth model

Revenue CAGR [FY22E-25E] (%)	12
EBITDA CAGR [FY22E-25E] (%)	24
EBIT CAGR [FY22E-25E] (%)	27
EPS CAGR [FY22E-25E] (%)	25
Stage-1: FY25E-35E	
EPS in Yr-0 [FY25E]	18
EPS in Yr-1 (Rs)	20
EPS CAGR (%)	10.0
Years of growth [n]	10.0
Incremental RoE (%)	**20.0**
CoE (%)	11.50
Implied DPR (%)	50
Terminal stage: >FY35E	
EPS growth (%)	**6.0**
Incremental RoE (%)	20.0
Implied DPR (%)	70
Fair value P/E in Mar'25E (x)	**14.9**
Fair value in Mar'25E (Rs/share)	**299**
Fair value in Mar'23E (Rs/share)	**241**
NPV of dividends in FY22E-25E (Rs/share)	23
Overall fair value in Mar'23E (Rs/share)	**264**
Mar'24E EPS (Rs)	15.1
Implied fair value P/E in Mar'23E (x)	**17.5**
Premium applied to fair value (%)	0.0
Target P/E in Mar'23E (x)	**17.5**
Target m-cap (Rs bn)	**51**
Target price in Mar'23E (Rs/share)	**265**
CMP (Rs/share)	274
Revenue CAGR [FY22E-25E] (%)	***(3)***

Source: Company, Emkay Global

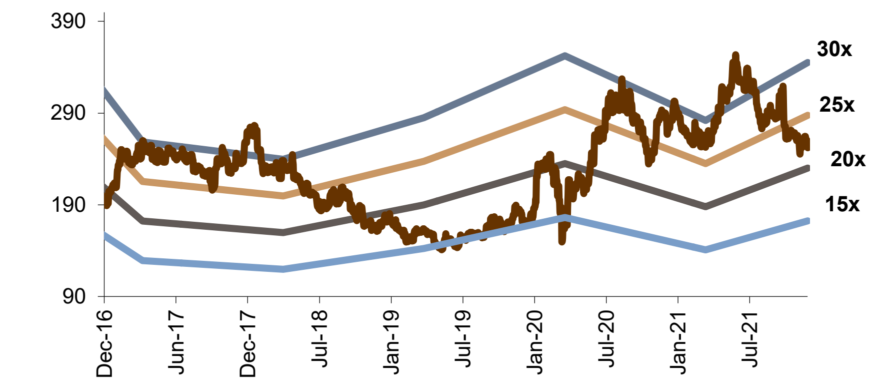
Rallis India – Valuation Charts

Rallis's implied fwd P/E multiple at a discount to 5-yr historical avg.



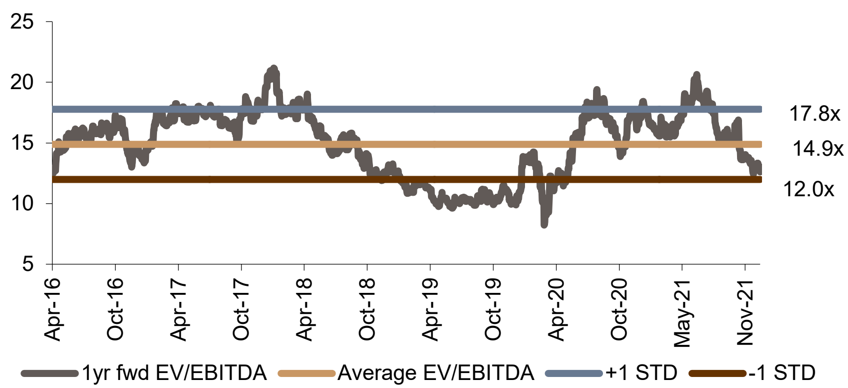
Source: Company, Emkay Global

Rallis's P/E largely ranged between 20x to 30x in past 1.5 years



Source: Company, Emkay Global

Rallis trading at a 19% discount to 5-yr historical avg. EV/EBITDA



Source: Company, Emkay Global

Rallis India – Q2FY22 results and key observations

- Delay in monsoon (lower sprays), unavailability of inputs from China, proliferation of illegal/spurious seeds affected revenues for the quarter.
- Gross margins declined due to input cost pressure and the company's inability to pass on the costs immediately.
- Input cost pressure, coupled with higher opex due to an increase in power/fuel/logistic costs, led to 400bps YoY/430bps QoQ EBITDA margin contraction.
- Management indicated that there are no demand-side challenges as such; however, supply-side issues may be a concern. Overall, Rabi looks good with good water reservoir levels and inventories in the channel, said management.

Rallis India (Cons.)

Y/E March (Rs mn)	Q2FY22	Q2FY21	YoY (%)	Q1FY22	QoQ (%)	1HFY22	1HFY21	% chg.
Net sales	**7,278**	**7,250**	**0.4**	**7,405**	**(1.7)**	**14,683**	**13,877**	**5.8**
Cost of Goods	4,641	4,488	3.4	4,529	2.5	9,170	8,484	8.1
% of sales	*63.8*	*61.9*		*61.2*		*62.5*	*61.1*	
Employee benefit expenses	618	544	13.8	598	3.4	1,217	1,035	17.5
% of sales	*8.5*	*7.5*		*8.1*		*8.3*	*7.5*	
Other expenditure	1,139	1,051	8.4	1,063	7.2	2,201	1,908	15.4
% of sales	*15.6*	*14.5*		*14.3*		*15.0*	*13.7*	
Operating profit	**880**	**1,168**	**(24.6)**	**1,215**	**(27.6)**	**2,095**	**2,451**	**(14.5)**
OPM (%)	*12.1*	*16.1*		*16.4*		*14.3*	*17.7*	
Dep. and amor.	177	203	(12.7)	185	(4.1)	362	382	(5.2)
EBIT	**702**	**965**	**(27.2)**	**1,030**	**(31.8)**	**1,733**	**2,068**	**(16.2)**
Interest	12	14	(12.1)	9	32.3	22	34	(35.9)
Other income	75	131	(42.6)	70	7.2	145	248	(41.6)
Excp. Item	0	-17		0		0	-17	
PBT	**765**	**1,065**	**(28.1)**	**1,091**	**(29.9)**	**1,856**	**2,266**	**(18.1)**
Provision for tax	201	268	(25.2)	268	(25.0)	468	551	(15.0)
eff. tax rate	*26.2*	*25.2*		*24.5*		*25.2*	*24.3*	
PAT (rep.)	**564**	**797**	**(29.1)**	**823**	**(31.4)**	**1,388**	**1,715**	**(19.1)**
Minority Interest	0	0		0		0	0	
PAT (adj.)	**564**	**797**	**(29.1)**	**823**	**(31.4)**	**1,388**	**1,715**	**(19.1)**
NPM (%)	*7.7*	*10.8*		*11.0*		*9.4*	*12.1*	

Source: Company, Emkay Research

Rallis India – Quarterly Trend

Rs. Mn	Q1FY19	Q2FY19	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22	Q2FY22	*YoY%*	*QoQ%*
Sales	**5,731**	**6,538**	**4,174**	**3,397**	**6,232**	**7,487**	**5,336**	**3,463**	**6,627**	**7,250**	**5,705**	**4,713**	**7,405**	**7,278**	***0.4***	***(1.7)***
Cost of Raw Material	3,462	3,797	2,526	1,930	3,901	4,785	3,302	1,956	3,996	4,488	3,507	2,761	4,529	4,641	*3.4*	*2.5*
as % of sales	*60.41*	*58.07*	*60.52*	*56.82*	*62.60*	*63.91*	*61.89*	*56.48*	*60.29*	*61.91*	*61.48*	*58.59*	*61.16*	*63.77*		
Employee expenses	446	435	444	481	488	506	504	503	492	544	538	587	598	618	*13.8*	*3.4*
as % of sales	*7.78*	*6.66*	*10.64*	*14.16*	*7.84*	*6.75*	*9.45*	*14.52*	*7.42*	*7.50*	*9.44*	*12.45*	*8.08*	*8.50*		
Other Expenses	992	1,072	927	918	895	1,010	972	1,102	857	1,051	1,058	1,188	1,063	1,139	*8.4*	*7.2*
as % of sales	*17.30*	*16.40*	*22.21*	*27.02*	*14.36*	*13.48*	*18.22*	*31.83*	*12.93*	*14.49*	*18.55*	*25.20*	*14.35*	*15.64*		
Total Expenditure	**4,900**	**5,304**	**3,897**	**3,329**	**5,285**	**6,300**	**4,779**	**3,561**	**5,344**	**6,083**	**5,104**	**4,535**	**6,190**	**6,398**	***5.2***	***3.4***
EBITDA	**831**	**1,234**	**276**	**68**	**948**	**1,187**	**557**	**(98)**	**1,283**	**1,168**	**601**	**177**	**1,215**	**880**	***(24.6)***	***(27.6)***
Depreciation	115	120	121	105	143	186	160	127	179	203	110	148	185	177		
EBIT	**716**	**1,114**	**156**	**(37)**	**805**	**1,000**	**398**	**(225)**	**1,104**	**965**	**491**	**29**	**1,030**	**702**	***(27.2)***	***(31.8)***
Other Income	49	89	59	110	80	68	101	95	118	131	76	80	70	75		
Interest cost	9	9	18	17	16	19	16	11	20	14	8	11	9	12	*(12.1)*	*32.3*
PBT	**756**	**1,194**	**196**	**56**	**869**	**1,049**	**483**	**(141)**	**1,202**	**1,081**	**559**	**99**	**1,091**	**765**	***(29.2)***	***(29.9)***
Total Tax	210	343	59	42	267	203	103	(33)	283	268	164	34	268	201	***(25.2)***	***(25.0)***
PAT before Minority Interest	**546**	**851**	**138**	**14**	**602**	**846**	**380**	**(107)**	**919**	**813**	**395**	**64**	**823**	**564**	***(30.6)***	***(31.4)***
PAT before extra	**546**	**851**	**138**	**14**	**602**	**846**	**380**	**(107)**	**919**	**813**	**395**	**64**	**823**	**564**	***(30.6)***	***(31.4)***
Exceptional Items	-	-	-	-	-	-	-	20	-	(17)	(61)	(17)	-	-		
Reported PAT	**546**	**851**	**138**	**14**	**602**	**846**	**380**	**(128)**	**919**	**830**	**456**	**81**	**823**	**564**	***(31.9)***	***(31.4)***
Minority Interest	**(2)**	**(1)**	**(1)**	**(2)**	**(2)**	**(9)**	**(1)**	**0**	**-**	**-**	**-**	**-**	**-**	**-**		
Share of Profit/(loss) from asso.	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**		
Reported Consolidated PAT	**547**	**852**	**139**	**15**	**604**	**855**	**381**	**(128)**	**919**	**830**	**456**	**81**	**823**	**564**	***(31.9)***	***(31.4)***
Adj. Consolidated PAT	**547**	**852**	**139**	**15**	**604**	**855**	**381**	**(108)**	**919**	**813**	**395**	**64**	**823**	**564**	***(30.6)***	***(31.4)***
Margins (%)															***bps***	***bps***
EBIDTA	14.5	18.9	6.6	2.0	15.2	15.8	10.4	-2.8	19.4	16.1	10.5	3.8	16.4	12.1	*(402)*	*(432)*
EBIT	12.5	17.0	3.7	-1.1	12.9	13.4	7.5	-6.5	16.7	13.3	8.6	0.6	13.9	9.7	*(365)*	*(426)*
PBT	13.2	18.3	4.7	1.6	13.9	14.0	9.1	-4.1	18.1	14.9	9.8	2.1	14.7	10.5	*(440)*	*(422)*
PAT	9.5	13.0	3.3	0.4	9.7	11.3	7.1	-3.1	13.9	11.2	6.9	1.4	11.1	7.8	*(346)*	*(336)*
Effective Tax rate	27.8	28.8	29.9	75.8	30.7	19.4	21.4	23.7	23.5	24.8	29.3	34.8	24.5	26.2	*142*	*169*

Source: Company, Emkay Research

Rallis India – Q2FY22 earnings call highlights

- **Financial Performance/Business developments – Input prices, unavailability, erratic monsoon, spurious seeds affected overall performance**
  - Challenging environment in Q2 due to high input prices and erratic monsoon
  - Lower sprays particularly in herbicides due to lower rains in Jul-Aug'21 impacted crop care segment
  - Unavailability of inputs from China
  - Exports continued to perform well despite challenges
  - One Rallis introduced in east India; to be replicated in other geographies
  - International pricing - will be able to pass on price increases
  - Most of international revenues come from Americas, some from Europe, hexaconazole for southeast Asia
  - Supply-side and cost increase challenges rather than demand side
  - To take a call on new herbicide plant in Q1FY23
  - Targeting Brazil, Asia for new formulations

- **New product launches – 3 crop protection, 3 crop nutrition**
  - 3 crop protection, 3 crop nutrition products launched in the quarter
  - Introduced medium duration paddy, cotton hybrids

- **Domestic Crop Care business – Volume growth in domestic; international growth continues**
  - Revenue growth - overall 7.8% YoY, domestic volume growth 2.4% YoY
  - EBITDA margins - 15.4% (16.4% YoY)
  - International business - Up 22% YoY, adding new customers
  - Metribuzin volumes subdued, better pendimethalin and hexaconazole volumes
  - Looking to increase contribution of formulation in international business
  - 43 products under new brand architecture (domestic market)
  - Pendimethalin, hexaconazole capacities enhanced
  - Plans to add one new AI in FY23
  - Metribuzin under one block, to be utilized optimally from Q4

- **Seeds – Rethinking strategy**
  - Revenue growth - 66% YoY degrowth
  - EBITDA margins - EBITDA loss of Rs200mn
  - Impacted by proliferation of illegal HT cotton seeds, crop shifts due to favourable commodity prices, erratic weather patterns
  - Millets affected by erratic monsoon and commodity prices
  - Sales return in all the crops of ~39-40% (~35% last year)
  - Revenue contribution from cotton in H1 - 12-13%, paddy - 43%
  - Working on seed level strategy due to HT cotton issues, crop shifts etc.
  - Expanding Rabi portfolio - Looking at in-licensing opportunities in vegetables; will be a mix of own developed products and inlicensing
  - Strategic rethink - Moderate growth aspiration in cotton, introduce more number of hybrids across other crop categories
  - Higher inventories in paddy, maize

- **International Business - PEKK still under stress, to recover only in H2FY23**

- **Capex – On track, Rs4.5bn firmed up plan**
  - Formulation plant Phase 1 ready for commissioning
  - New technical plant commissioned and commercial production started at Ankleshwar
  - Pilot Plant at Dahej - Overall project is progressing satisfactorily. Expected Phase-I completion by Nov'21
  - MPP at Dahej - Good progress on engineering and construction
  - Capex FY22E - Rs2.5bn

- **Outlook - High water reservoir levels; expects good Rabi season**
  - Good channel inventories for Rabi season for crop protection, no issues
  - Expecting good Rabi season
  - Fertilizer unavailability not a major problem for the Rabi crop acreage

Rallis India – Financial Summary

Financial Snapshot

(Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	24,294	26,162	29,091	32,564	36,622
EBITDA	3,229	3,007	3,983	4,809	5,707
EBITDA Margin (%)	13.3	11.5	13.7	14.8	15.6
APAT	2,191	1,827	2,423	2,940	3,541
EPS (Rs)	11.3	9.4	12.5	15.1	18.2
EPS (% chg)	26.4	-16.6	32.6	21.3	20.4
ROE (%)	14.6	11.1	13.7	15.4	17.1
P/E (x)	24.4	29.2	22.0	18.2	15.1
EV/EBITDA (x)	15.6	17.0	12.9	10.6	8.9
P/BV (x)	3.4	3.1	2.9	2.7	2.5

Source: Company, Emkay Global

Income Statement

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	**24,294**	**26,162**	**29,091**	**32,564**	**36,622**
Expenditure	**21,066**	**23,155**	**25,108**	**27,756**	**30,915**
EBITDA	**3,229**	**3,007**	**3,983**	**4,809**	**5,707**
Depreciation	641	804	961	1,098	1,234
EBIT	**2,588**	**2,203**	**3,022**	**3,711**	**4,472**
Other Income	405	292	263	263	276
Interest expenses	52	53	61	61	61
PBT	**2,941**	**2,442**	**3,224**	**3,913**	**4,688**
Tax	749	615	812	986	1,181
Extraordinary Items	(94)	0	0	0	0
Minority Int./Income from Assoc.	0	0	0	0	0
Reported Net Income	**2,286**	**1,827**	**2,412**	**2,927**	**3,507**
Adjusted PAT	**2,191**	**1,827**	**2,412**	**2,927**	**3,507**

Source: Company, Emkay Global

Balance Sheet

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Equity share capital	194	194	194	194	194
Reserves & surplus	15,714	16,810	18,136	19,599	21,353
Net worth	**15,908**	**17,004**	**18,330**	**19,794**	**21,547**
Minority Interest	**7**	**7**	**7**	**7**	**7**
Loan Funds	**378**	**378**	**378**	**378**	**378**
Net deferred tax liability	264	264	264	264	264
Total Liabilities	**16,557**	**17,653**	**18,979**	**20,443**	**22,196**
Net block	**6,309**	**8,080**	**8,944**	**9,421**	**9,762**
Investment	**2,836**	**2,836**	**2,836**	**2,836**	**2,836**
Current Assets	**15,097**	**15,705**	**16,810**	**18,594**	**21,023**
Cash & bank balance	551	(156)	(323)	(87)	441
Other Current Assets	1,505	1,505	1,505	1,505	1,505
Current liabilities & Provision	**9,329**	**10,612**	**11,255**	**12,052**	**13,069**
Net current assets	**5,768**	**5,092**	**5,555**	**6,541**	**7,954**
Misc. exp	0	0	0	0	0
Total Assets	**16,557**	**17,653**	**18,979**	**20,443**	**22,196**

Source: Company, Emkay Global

Cashflow

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
PBT (Ex-Other income) (NI+Dep)	**2,536**	**2,150**	**2,961**	**3,650**	**4,412**
Other Non-Cash items	0	0	0	0	0
Chg in working cap	(428)	(32)	(630)	(750)	(884)
Operating Cashflow	**2,168**	**2,359**	**2,541**	**3,073**	**3,641**
Capital expenditure	(1,658)	(2,575)	(1,825)	(1,575)	(1,575)
Free Cash Flow	**510**	**(216)**	**716**	**1,498**	**2,066**
Investments	190	0	0	0	0
Other Investing Cash Flow	(742)	0	0	0	0
Investing Cashflow	**(1,615)**	**(2,283)**	**(1,562)**	**(1,312)**	**(1,299)**
Equity Capital Raised	0	0	0	0	0
Loans Taken / (Repaid)	(242)	0	0	0	0
Dividend paid (incl tax)	(486)	(731)	(1,085)	(1,464)	(1,753)
Other Financing Cash Flow	106	0	0	0	0
Financing Cashflow	**(674)**	**(784)**	**(1,146)**	**(1,524)**	**(1,814)**
Net chg in cash	**(122)**	**(707)**	**(167)**	**236**	**528**
Opening cash position	224	103	(156)	(323)	(87)
Closing cash position	**551**	**(156)**	**(323)**	**(87)**	**441**

Source: Company, Emkay Global

Rallis India – Key ratios

Profitability Ratios and Per share data

Profitability (%)	FY21	FY22E	FY23E	FY24E	FY25E
EBITDA Margin	13.3	11.5	13.7	14.8	15.6
EBIT Margin	10.7	8.4	10.4	11.4	12.2
Effective Tax Rate	25.5	25.2	25.2	25.2	25.2
Net Margin	9.0	7.0	8.3	9.0	9.6
ROCE	19.0	14.6	17.9	20.2	22.3
ROE	14.6	11.1	13.6	15.4	17.0
RoIC	23.3	17.7	21.5	24.0	26.8

Per Share Data (Rs)	FY21	FY22E	FY23E	FY24E	FY25E
EPS	11.3	9.4	12.4	15.1	18.0
CEPS	14.6	13.5	17.3	20.7	24.4
BVPS	81.8	87.4	94.3	101.8	110.8
DPS	2.5	3.8	5.6	7.5	9.0

Source: Company, Emkay Global

Valuation Ratios

Valuations (x)	FY21	FY22E	FY23E	FY24E	FY25E
PER	24.4	29.2	22.0	18.2	15.1
P/CEPS	18.8	20.3	15.8	13.3	11.3
P/BV	3.4	3.1	2.9	2.7	2.5
EV / Sales	2.1	2.0	1.8	1.6	1.4
EV / EBITDA	15.6	17.0	12.9	10.6	8.9
Dividend Yield (%)	0.9	1.4	2.0	2.8	3.3

Gearing Ratio (x)	FY21	FY22E	FY23E	FY24E	FY25E
Net Debt/ Equity	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)
Net Debt/EBIDTA	(0.9)	(0.8)	(0.5)	(0.5)	(0.5)
Working Cap Cycle (days)	78.4	73.2	73.8	74.3	74.9

Source: Company, Emkay Global

Growth ratios

Growth (%)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	7.9	7.7	11.2	11.9	12.5
EBITDA	24.5	(6.9)	32.5	20.7	18.7
EBIT	30.8	(14.9)	37.1	22.8	20.5
PAT	23.7	(20.1)	32.0	21.4	19.8

Source: Company, Emkay Global

Quarterly Trend

Quarterly (Rs mn)	Q2FY21	Q3FY21	Q4FY21	Q1Y22	Q2Y22
Revenue	7,250	5,705	4,713	7,405	7,278
EBITDA	1,168	601	177	1,215	880
EBITDA Margin (%)	**16.1**	**10.5**	**3.8**	**16.4**	**12.1**
PAT	813	395	64	823	564
EPS (Rs)	**4.2**	**2.0**	**0.3**	**4.2**	**2.9**

Shareholding Pattern (%)	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
Promoters	50.1	50.1	50.1	50.1	50.1
FIIs	6.6	8.2	7.6	7.1	6.6
DIIs	17.1	16.0	15.9	17.3	16.2
Public and Others	26.3	25.7	26.4	25.5	27.2

Source: Company, Emkay Global

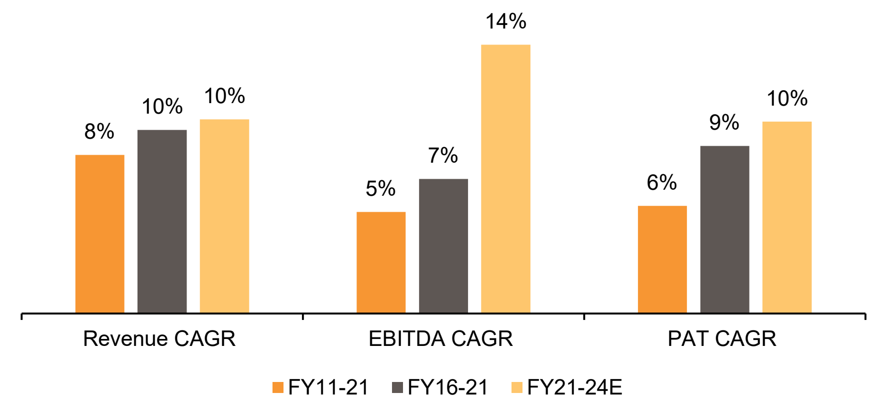
Annexures

Business model

Present across agri-input value chain in domestic market; exports focused on technicals and contract manufacturing

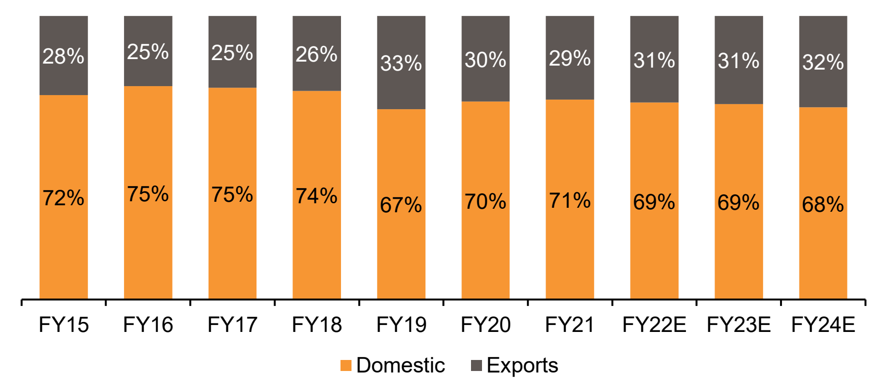
- **Rallis is a leading Indian agrochemical company with a strong presence in the domestic and foreign markets. In FY21, the domestic market contributed ~71% of total revenues and exports contributed ~29%.**
- Despite monsoon-related headwinds in the domestic market, the company recorded a revenue CAGR of 8%/10% in the last 10 years/5 years. However, due to margin contraction, the net profit growth was lower than revenue growth at a CAGR of 6%/9% in the last 10 years/5 years.
- With the ongoing capex, a wider distribution reach and a foray into contract manufacturing, we expect the company to report a revenue CAGR of 9.6% over FY21-FY24E with a PAT CAGR of 8.8%.
- Domestic segment
  - Present across the agri-input value chain – Seeds, soil conditioners, crop protection chemicals, and crop nutrition
  - ~6% market share in crop-protection, plant growth nutrients
  - ~3% market share in seeds
  - Revenue break-up of CP – Insecticides 51%, herbicides 25%, fungicides 24%
- International segment
  - Involved in manufacturing technicals for global agri-chemical players
  - Key products – Pendimethalin, Acephate, Hexaconazole, Metribuzin, and Metalaxyl

Financial Snapshot



Source: Company, Emkay Global

Domestic and Exports break-up



Source: Company, Emkay Global

Business segments

Present in crop protection, crop nutrition, and seeds

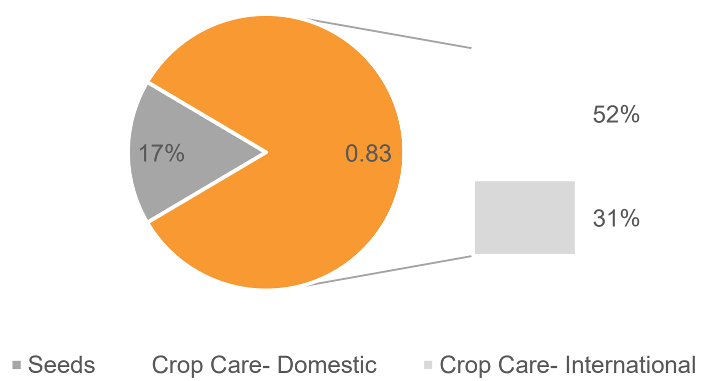
- The company has two major business divisions
  - Crop Care – Crop Protection, Crop Nutrition
  - Seeds
- In FY21, crop care contributed 83% (63% domestic, 37% international) to total revenues, while seeds contributed 17%.
- Crop protection consists of branded formulations and institutional business of pesticides in the domestic market and supply of active ingredients, formulations and contract manufacturing on the international side.
- The crop nutrition business is involved in manufacturing and sale of organic fertilizers, bio stimulants, bio-fertilisers, and secondary and micro nutrients.
- The seeds business is involved in the development and sale of hybrid seeds among a wide variety of field and vegetable crops with paddy, maize, cotton, chilli, okra, and tomato being some of the key crops.

Business Divisions

Crop Care		Seeds
Crop Protection	**Crop Nutrition**	
• Domestic branded formulations and Institutional business (Fungicides, Insecticides, Herbicides) • International business (Active Ingredients, Formulation and Contract Manufacturing)	• Organic fertilisers • Biostimulants • Biofertilisers • Water soluble fertilisers • Secondary and Micronutrients	• **Field Crops –** Paddy, Maize, Pearl Millet, Cotton and Mustard • **Vegetables –** Chilli, Okra, Tomato, Gourds, Cucumber, Cauliflower, Cabbage, and Watermelon among others

Source: Company, Emkay Global

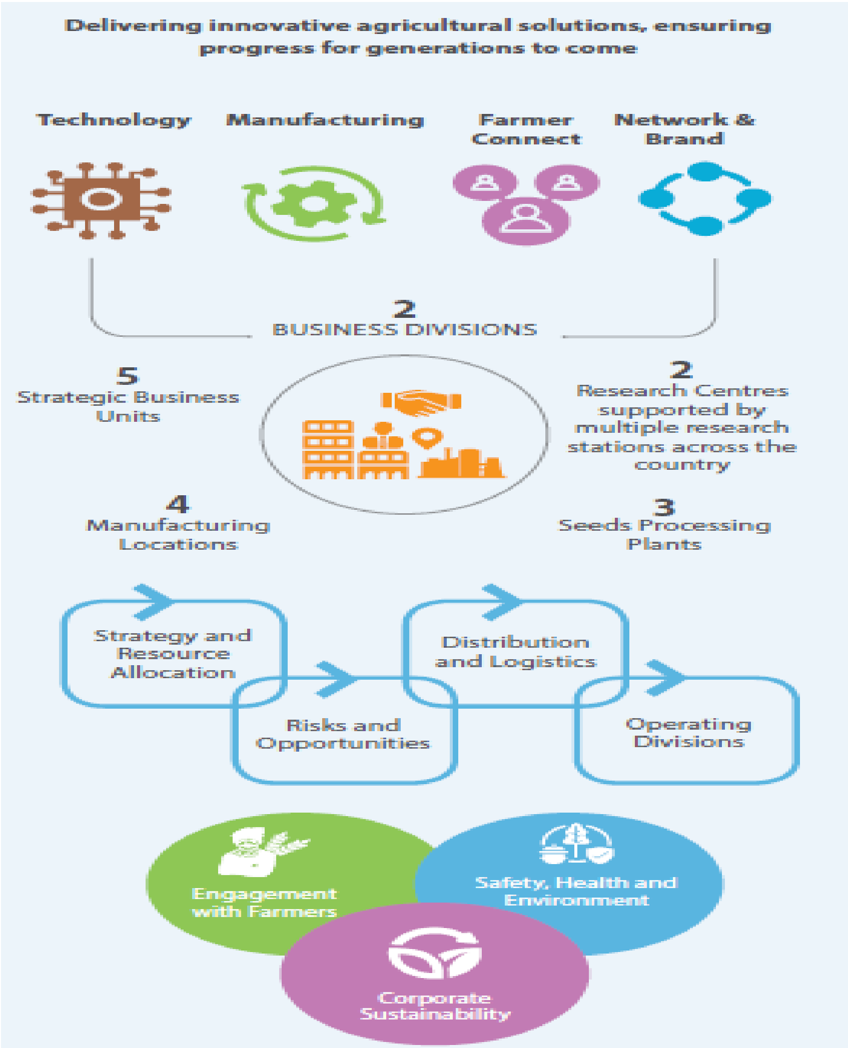
Segment Breakup FY21



Source: Company, Emkay Global

Value chain

Business model



Business value chain

BUSINESS VALUE CHAIN

CROP CARE

Research and development
Leveraging expertise in science and knowledge of customers and the market to develop superior, viable and environmentally sustainable products.

Raw material sourcing, processing and manufacturing
Procuring quality raw materials from long-term suppliers.

Packaging
Making available products in multiple pack sizes to meet diverse customer requirements.

Marketing and farmer education
Enabling demand generation through on-field product demonstration, campaigns, and brand promotion activities.

Distribution and logistics
Reaching 80% of India's districts through our strong network of dealers and retailers to take innovative offerings to farmers.

Farmer support services
Initiating services using digital technology to enable farmers to access timely information on weather, market prices and crop environment.

SEEDS

Research and development
Developing hybrid seeds in crops like paddy, maize, millet, cotton, and vegetables through conventional breeding. Research team also engaged in development of Genetically Modified traits in select crops.

Seed production, processing and packaging
Parent seeds to be used as input in production of hybrid seeds by engaging farmers in multiple agriculture seasons under varying agro-climatic conditions. Hybrid seeds are processed and packed at Company-owned facilities and through exclusive third-party arrangements.

Distribution and logistics
The 'Dhaanya' brand seeds reach farmers through depots, distributors and retailers. Surplus inventory of parent seeds and hybrid seeds are stored in leased cold storage facilities in and around the processing units.

Marketing and farmer education
Demand generation initiatives focus on on-field Pre-Season Activities (PSA) and Product Differentiation Activities (PDA). Brand promotion activities undertaken through digital and conventional media.

Farmer support services
Besides knowledge sharing and addressing queries through face-to-face contacts, farmers are connected through telephonic conversation, including toll-free customer care platforms.

Source: Company

Manufacturing footprint

- **Well-spread out manufacturing and R&D footprint, along with a global reach, backed by a robust R&D infrastructure**.

Manufacturing Facilities

- Ankleshwar, Gujarat
- Dahej, Gujarat
- Lote, Maharashtra
- Akola, Maharashtra

Processing and Drying Plants

- Malkajgiri district, Telangana
- Medak district, Telangana
- Durg district, Chhattisgarh

Innovation Centres

- Rallis Innovation Chemistry Hub (RICH), Bengaluru
- Agri-Biotech R&D facility, Bengaluru

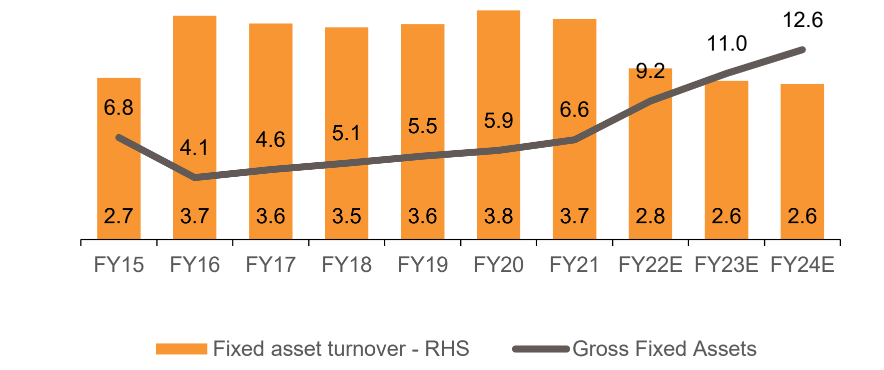
Source: Company

Rallis – Strategic Focus

Massive yet prudent capex across key focus areas

- The substantial capex allocation indicates the company's commitment to taking things to the next level. Prudently planned investments in manufacturing and R&D will ensure not just growth but quality growth going ahead.
- Management plans a judicious allocation of capex with three focus areas: 1) strengthening domestic and international businesses, 2) building new product pipelines, and 3) streamlining supply chain.
- The upcoming capacities will provide great visibility for incremental revenue on top of organic growth from existing capacities/businesses. Additionally, Rallis will derive cost advantages from backward integration.
- The investments include setting up an R&D facility in Bangalore to assist in commercializing new AIs and an investment of Rs1.4bn for the development of backward integration capabilities for few key technical products.
- Rallis reported a healthy revenue CAGR of 9.7% in FY16-21 despite Covid-related challenges in FY21. We expect a higher CAGR of 11.9% during FY22E-FY25E on the back of capacity expansion and product/ geography mix improvement.
- We believe the capex drive will be the biggest driver for growth for the company in the medium term.

Fixed assets (Rs bn) and fixed asset turnover (x)



Source: Company, Emkay Global

International Business – Key molecules, geographies, registrations

International Business

Key Products	Application	Market Size
Pendimethalin	Used as a pre-emergence herbicide to control annual grasses and certain broad leaved weeds.	USD413Mn
Acephate	An organophosphate foliar and soil insecticide used primarily for control of aphids, leaf miners, caterpillars, sawflies, thrips, and spider mites.	USD510Mn
Hexaconazole	A broad-spectrum systemic triazole fungicide used for the control of many fungi particularly Ascomycetes and Basidiomycetes, used chiefly for the control of rice sheath blight in China, India, Vietnam and parts of East Asia.	USD149Mn
Metribuzin	Herbicide used both pre and post emergence in crops including soybean, potatoes, tomatoes and sugarcane.	USD196Mn
Metalaxyl	An acylalanine fungicide used to control Pythium in a number of vegetable crops, and Phytophthora in peas.	USD89Mn

Source: Company

Key Geographies:

- Latin America
- South East Asia
- Europe
- African markets

Digital Initiatives

Initiatives for Digital Innovation

Rallis introduced a range of digital technologies to connect and collaborate with its stakeholders and make available timely information and insights. These technologies have helped improve process cycle time, employee engagement and productivity, and the availability of data.

- **Manufacturing Plants**

  i. Rallis is creating new technologies at production sites to pursue stabilization in operations through automation, safety and quality. It is maintaining the competitiveness of its plants by boosting the existing production base through Industrial Internet of Things (IIoT) Sensor Deployment to measure critical parameters, and integration of plant equipment with ERP, dashboards and digital log sheets.

- **Research & Development**

  i. Rallis is accelerating R&D investments by promoting efficiency in research operations. It is implementing the Lab Information Management System (LIMS), Agriculture Research Management System (ARMS), Seeds Research Management System and digitization of Hybrid Seed Advancement Trials.

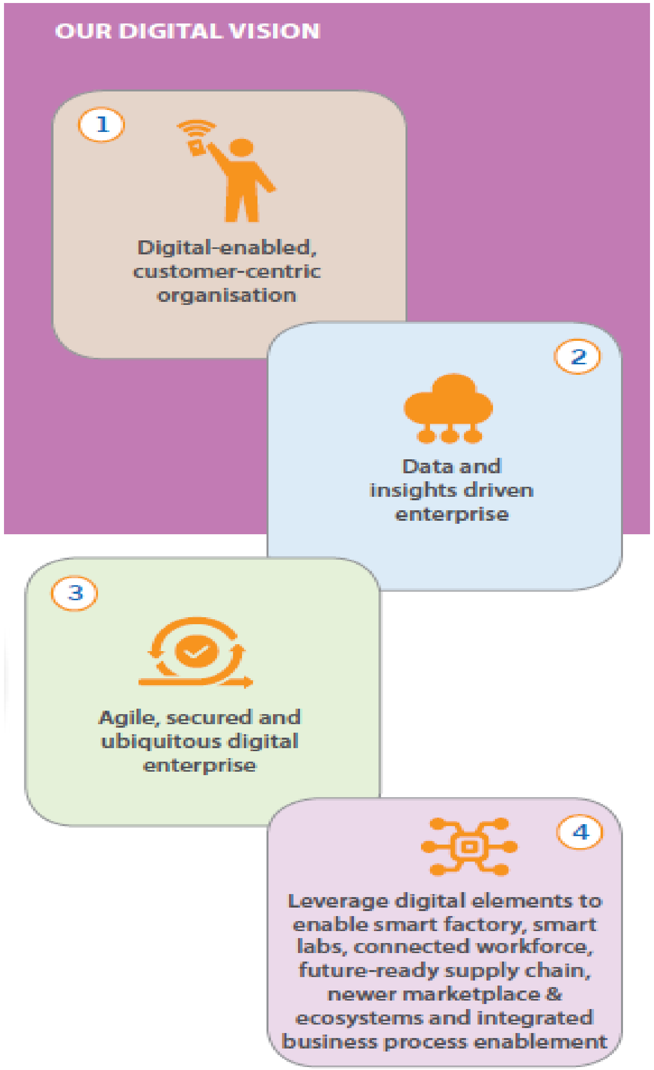
- **Human Capital Management**

  i. Rallis is capitalizing on digitalization to enhance the employee experience, reduce cycle time and increase learning & development capabilities. Key steps to ensure human capital management are digital enablement from Hire to Retire Cycle digital performance management system, employee self-service platform, implementation of an e-learning platform and integration with external e-learning providers.

- ***Supply Chain Management***

  i. Rallis is following global supply chain management systems, aiming at better customer satisfaction and increased sales. It is also developing peripheral systems, including procurement and trade management, Transport Management System and digitally signed e-Invoicing.

Digital Vision

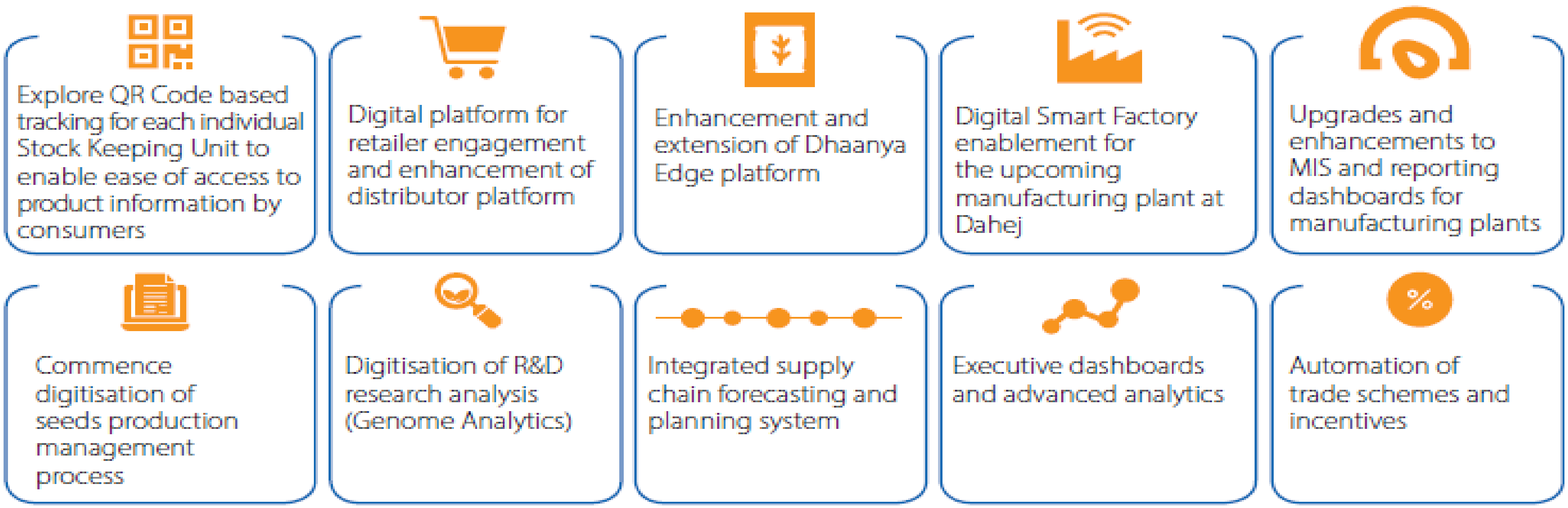


Source: Company

Digital Initiatives

- ***Sales & Distribution***
  It is deepening connection with farmers and strengthening relationships with the distribution channel through the following platforms:
  - Sampark, a mobile-based platform for extended sales team to service farmers
  - Rallis Krishi Samadhan, a mobile-based platform for farmers to access product information and farming practices
  - e-Sparsh and e-Bandhan, digital platforms to connect sales teams and distribution
  - Dr. Vishwas, a digital platform for farmer helpline management
  - Dhaanya Edge, a digital platform to engage with retailers in Seeds Division
  - Drishti, a remote-sensing based crop monitoring system

Initiatives planned for FY22



Source: Company

Dhanuka Agritech (Buy, TP Rs1,000)

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Refer to important disclosures at the end of this report

Capex-led export foray to tap 'China+1' opportunity

This report is solely produced by Emkay Global. The following person(s) are responsible for the production of the recommendation:

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We assume coverage on Dhanuka Agritech with a Buy rating and a Mar'23E TP of Rs1,000 (upside 32%). Our fair value estimate implies a target P/E multiple of 19x Mar'24E EPS. Our high-conviction Buy on Dhanuka is based on: 1) substantial capex of Rs3bn over FY22E-24E to tap export opportunities; 2) ~13% revenue CAGR in FY22E-25E vs. ~7% in FY15-20; 3) debt-free balance sheet with cumulative FCFF generation of ~Rs3.7bn over FY22E-25E. Dhanuka's foray into export markets through technicals manufacturing is supported by offtake visibility from its strong and long-lasting relationships with global agrochem players, along with the 'China+1' strategy. The export foray is expected to derisk its current 100% reliance on the domestic market, which is subjected to the vagaries of the monsoons. **Downside risks:** 1) Since India is a monsoon-dependent agrarian market, the key risk stems from the vagaries of the monsoons; 2) For the first time, the company is undergoing significant capex, and any delays in operationalizing/stabilizing these new capacities can materially impact our export revenue assumptions.

About Dhanuka Agritech

Dhanuka manufactures a wide range of farm input products. It has pan-India presence through marketing offices in all major states across India. The company has three manufacturing units, 39 warehouses and a network of over eight branch offices across India. It cater to 10mn+ farmers through 6500 distributors and around 75,000 dealers. Dhanuka has technical tie-ups with four American and four Japanese companies.

Financial Snapshot (Consolidated)

(Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	13,875	14,310	15,728	18,296	20,756
EBITDA	2,691	2,488	2,674	3,184	3,632
EBITDA Margin (%)	19.4	17.4	17.0	17.4	17.5
APAT	2,106	1,964	2,074	2,426	2,747
EPS (Rs)	45.2	42.2	44.5	52.1	59.0
EPS (% chg)	52.2	-6.7	5.6	17.0	13.2
ROE (%)	28.0	22.6	20.4	20.8	20.6
P/E (x)	16.8	18.0	17.1	14.6	12.9
EV/EBITDA (x)	12.1	13.0	12.0	10.0	8.5
P/BV (x)	4.4	3.8	3.3	2.8	2.5

Source: Company, Emkay Research

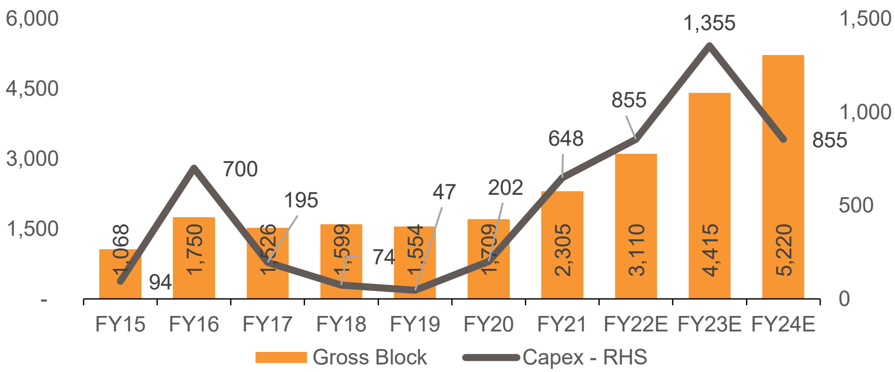
Dhanuka Agritech (Buy)	
Bloomberg Ticker	DAGRI IN
Market Cap (Rsbn/USDbn)	36.4/0.5
CMP	760
Target Price	**1,000**
Upside (%)	31.6

Price Performance

(%)	1M	3M	6M	12M
Absolute	3	(6)	(23)	(2)
Rel. to Nifty	(1)	(7)	(32)	(23)

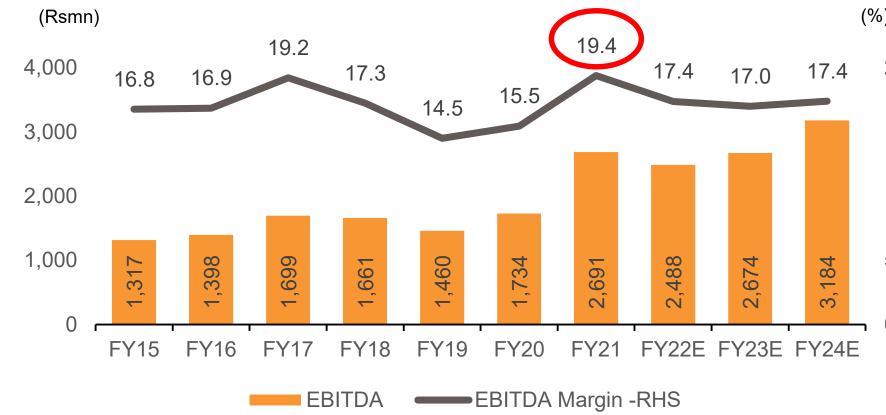
Dhanuka Agritech – Story in Charts

Increasing capex (Rs mn) from FY22E to tap export markets



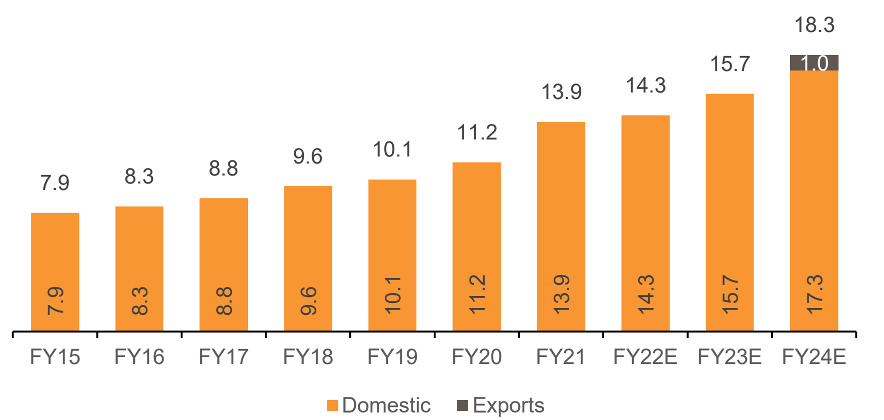
Source: Company, Emkay Global

Incremental EBITDA margins to remain stable at ~17.5%



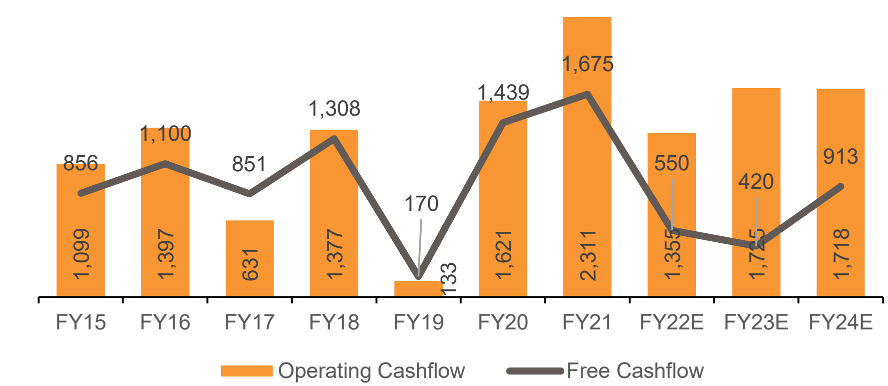
Source: Company, Emkay Global; Note: FY21 was an outlier with higher EBITDA margins

Exports contribution to start from FY24E (Rs bn)



Source: Company, Emkay Global

FCF can be utilized for higher capex/inorganic initiatives (Rs mn)



Source: Company, Emkay Global

Capex-led Export Foray to Tap 'China+1'

We assume coverage on Dhanuka Agritech with a Buy rating and a Mar'23E TP of Rs1,000 (upside 32%). Our fair value estimate implies a target P/E multiple of 19x Mar'24E EPS. Our high-conviction Buy on Dhanuka is based on: 1) substantial capex of Rs3bn over FY22E-24E to tap export opportunities; 2) ~13% revenue CAGR in FY22E-25E vs. ~7% in FY15-20; 3) debt-free balance sheet with cumulative FCFF generation of ~Rs3.7bn over FY22E-25E. Dhanuka's foray into export markets through technicals manufacturing is supported by offtake visibility from its strong and long-lasting relationships with global agrochem players, along with the 'China+1' strategy. The export foray is expected to derisk its current 100% reliance on the domestic market, which is subjected to the vagaries of the monsoons. Downside risks: 1) Since India is a monsoon-dependent agrarian market, the key risk stems from the vagaries of the monsoons; 2) For the first time, the company is undergoing significant capex, and any delays in operationalising/stabilizing these new capacities can materially impact our export revenue assumptions.

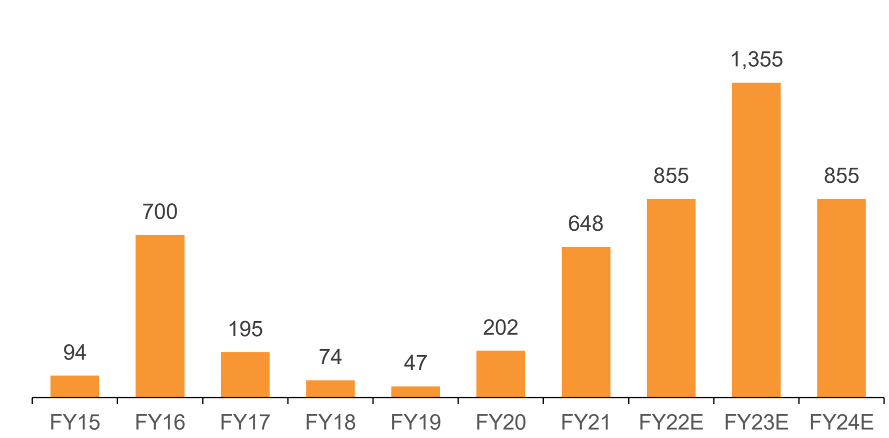
- **Substantial Rs3bn capex to tap export opportunities:** Dhanuka, a 100% domestic agrochemical player, is tapping export opportunities with a substantial capex of Rs3bn over FY22E-24E. Traditionally, being an asset-light company (FY14-21 asset turns of 6.4x), Dhanuka invested a mere ~Rs2bn in capex over FY14-21. Investments in a new technicals manufacturing plant will enable the company to foray into exports and will open up contract manufacturing opportunities (FY22E-25E asset turns expected to moderate to 3.9x). Dhanuka has in-licensing arrangements with global agrochem majors (~40% of current revenues), and these relationships can be leveraged for technicals outsourcing once the asset base is operational.
- **Capex drive to move revenue trajectory into double digits from historical single-digit average:** Dhanuka posted a revenue CAGR of 7.4% during FY15-20. FY21, affected by Covid, was an outlier with strong ~24% YoY revenue growth. With the ongoing capex, we expect a higher ~13% revenue CAGR during FY22E-25E, of which ~10% growth will come from the domestic market and the rest through exports. Our assumption of 10% domestic growth for Dhanuka is based on sector growth of ~8% and market share gain with new product launches (6 new products launched in FY21, total of 30 in past five years). From 100% domestic sales till FY23E, we estimate exports' contribution to rise from ~5% in FY24E to ~8% in FY25E. With technicals exports garnering similar margins as domestic sales, we expect EBITDA margins to remain at 17.5% from FY25E, higher than the FY15-20 average of 16.7%.
- **Healthy cash flows, debt-free, robust return ratios:** Dhanuka's debt-free balance sheet and healthy cash flow generation (OCF ~Rs6.8bn, FCFF ~Rs3.7bn over FY22E-25E) leave room for additional capex. We believe this is a structural change in the business model of Dhanuka, with capex being an integral part of future growth. Additionally, any inorganic initiative cannot be ruled out. With high cashflow generation, we expect a marginally higher dividend payout at 35% from FY24E onward (avg. ~30% during FY14-20; Rs1bn buyback in FY21).
- **Assume coverage with Buy and TP of Rs1,000:** We believe the change in Dhanuka's strategy to focus on export markets bodes well due to 1) global agrochem companies' focus on diversifying sourcing through the China+1 strategy, 2) Dhanuka's long-standing relationships with global agrochem players (specifically Japanese), and 3) robust balance sheet to undertake significant capex. We arrive at a Mar'23 TP of Rs1,000, using the DCF methodology. Our key assumptions are 1) 10.75% cost of equity, 2) 10% PAT CAGR in FY25-35E, and 3) terminal growth rate of 5% starting in FY35E. Our TP implies FY24E P/E at 19x, which is comparable to the 1-year forward 5-year average P/E of 19.4x (10-yr avg. P/E 16.5x), signifying no re-rating for the stock.
- **Downside risks:** 1) Since India is a monsoon dependent agrarian market, the key risk stems from vagaries of monsoons; 2) For the first time, the company is undergoing significant capex, and any delays operationalizing/stabilizing these new capacities can materially impact our export revenue assumptions; 3) Delays in introducing new products can impact domestic revenue growth. **Upside risk:** 1) firm export orders in contract manufacturing.

Increasing manufacturing footprint

Moving from an asset-light to asset-heavy model – Rs3bn capex for future growth

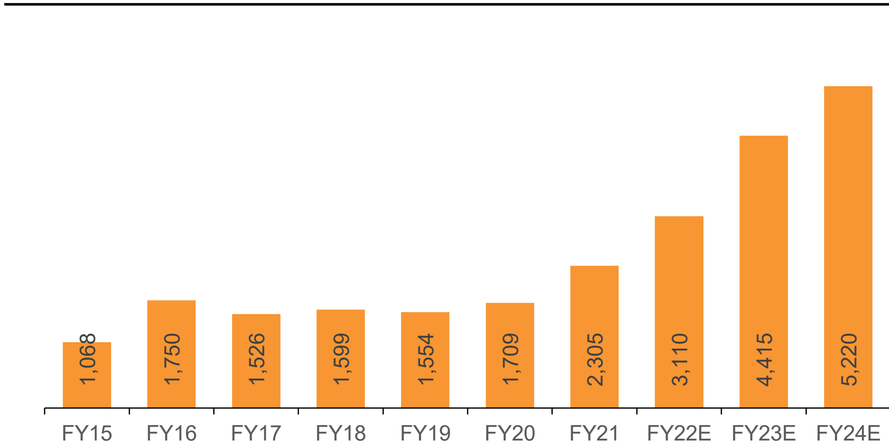
- Historically, Dhanuka had an asset-light business model, leveraging strong formulations capabilities, branding and distribution. Consequently, Dhanuka enjoyed higher asset turnover (average fixed asset turnover of ~6.3x during FY17-21) and higher ROEs compared to its peers. This lean asset model has helped the company maintain a very robust balance sheet without any reliance on debt.
- However, in order to drive the next leg of growth, management announced a substantial greenfield capex plan of Rs3bn at Dahej, to be implemented over the next three years.
- The total investment outlay will be made in phases over three years from FY22E to FY24E, with a planned capex of ~Rs0.8-0.9bn in FY22E, ~Rs1.3bn in FY23E and the remaining in FY24E. New facilities include a formulations plant, an MPP for herbicide, and another one for insecticide. The formulations facility is expected to be ready by FY23E, and technicals production is expected to commence in FY24E.
- The investment planned to set up a technicals manufacturing plant as a backward integration initiative, will reduce Dhanuka's reliance on imports and secure supplies of RMs through a barter system. With strong manufacturing capabilities, Dhanuka can also benefit from export opportunities in the medium to long term. Dhanuka has strong and long-standing relationships with Japanese agrochem companies and can capitalize on these relationships for their third-party manufacturing requirements.
- Dhanuka witnessed ~8%/7% revenue CAGRs during FY17-20/FY15-20. We excluded FY21 as it was an outlier year with supernormal ~24% YoY growth. We anticipate that the new capex will enable the company to maintain its revenue growth trajectory at a ~13% CAGR during FY22E-FY25E (on higher base of FY21), along with the likelihood of a gradual improvement in gross margins.

Prominent pick-up in capex from FY21 (Rs mn)…



Source: Company, Emkay Global

… consequently increasing the gross block (Rs mn)



Source: Company, Emkay Global

New product launches drive growth momentum

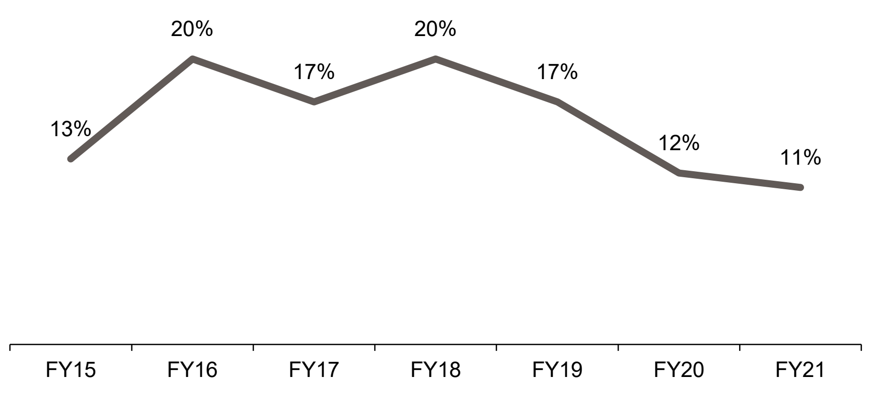
Focus on new product launches and improving ITI

- **New product launches helped domestic business growth**
- Historically, Dhanuka's growth has been propelled by consistent new product launches. In the past five years, the company has launched ~30 products, including six new products in FY21. Its strong product development pipeline suggests that the momentum will continue in the future.
- Despite consistent new product launches, Dhanuka's ITI has slowed down in the last two years due to substantial growth of generics across segments and relatively fewer launches in FY19 and FY20. However, with a robust pipeline of the 9(3) portfolio intended to be launched in the next two years and renewed focus on farmer development and education, the ITI is expected to improve compared to the last two years.
- A high innovation index will drive a better product mix toward high-value products, which may not significantly improve gross margins, but is expected to result in better operating margins from improving operating leverages. We expect operating margins to gradually improve from 15.5% in FY20 (FY21 was an exceptional year with very high operating margins) to 17.5% in FY25E.

Balance sheet strength provides support to tap growth opportunities

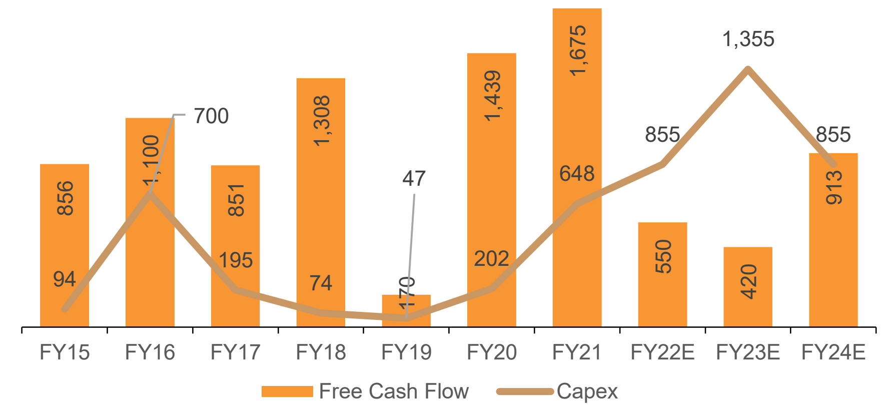
- **Zero debt, Rs1bn buyback in FY21, capex financing through internal accruals**
- The company boasts a very robust balance sheet without any long-term debt and no material short-term debt, as it historically operated on an asset-light model.
- Due to excess cash on the balance sheet, during FY21, Dhanuka rewarded shareholders by exercising a Rs1bn buyback (extinguished ~2.1% equity).
- The Net-cash Balance sheet, and consistent cash flows provide comfort despite the company's substantial capex plan. Moreover, optimization of inventories and debtors further strengthened cash flow positions in the past few years.
- Dhanuka plans to fund the entire capex through internal accruals, leaving scope for leveraging in case of any organic/inorganic opportunities.

Innovation turnover declined in FY20-21 due to Covid-related issues



Source: Company, Emkay Global

Good FCF generation despite capex momentum (Rs mn)



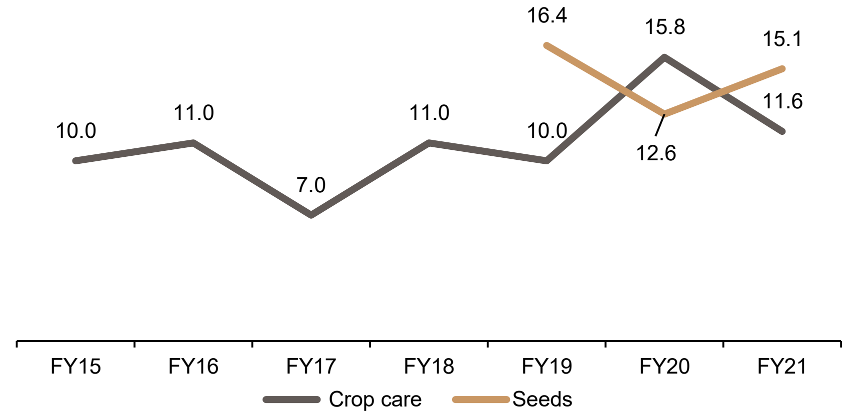
Source: Company, Emkay Global

Dhanuka to accelerate innovation drive

New product introductions/R&D investments – Focusing on improving the product mix

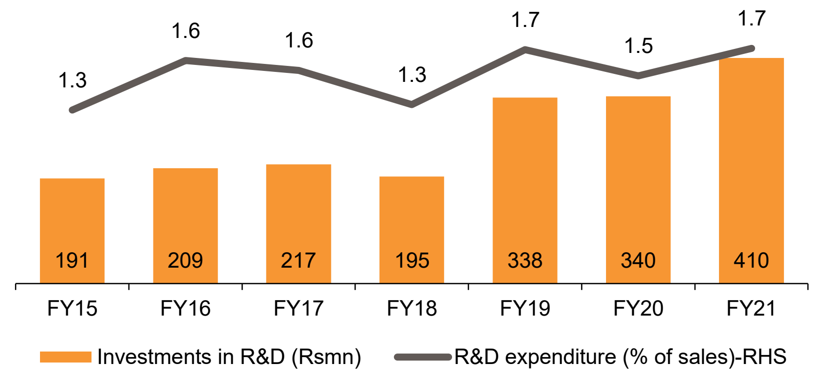
- **Improving the product mix has been a key focus area of the company's management. Keeping in line with this goal, Rallis has been launching ~3-4 new products every year. This trend is expected to continue going forward, with a healthy new product pipeline and ongoing investments in the R&D center and a pilot plant.**
- The focus on new product launches is reflected in the innovation turnover index (ITI) for crop protection, which rose to ~16% in FY20 vs. ~10% in FY19. Due to Covid-related issues in FY21, the momentum slowed down, with ITI moderating to ~12%.
- ITI for seeds, however, soared to ~15% YoY in FY21 from ~13%. Rallis is enhancing its seeds segment by bridging portfolio gaps. However, the segment is also marred by spurious cotton seeds, which have been an industry concern. New product introductions in the seeds portfolio are expected to aid growth in this segment, going ahead.
- The strong innovation drive backed by robust R&D capabilities is expected to improve the product mix, which will also help improve the margin profile going ahead. Gross/EBITDA margins are expected to improve from 30.9%/13.3% in FY21 to 40.0%/14.6% in FY24E.
- New product launches in H1FY22 – 9 new products in H1FY22, 6 in Crop Protection (Rice Herbicide, fungicide for fruits and vegetables) and 3 in Crop Nutrition.
- Management also highlighted that they have identified opportunities for improvement and are undertaking steps to plug gaps in the portfolio.

Innovation Turnover Index (ITI) to improve going ahead (%)



Source: Company, Emkay Global

Consistent investments in R&D



Source: Company, Emkay Global

New Product Launches

	FY17 -7	FY18- 8	FY19-3	FY20-4	FY21-6
Insecticide	**AASHITO**- dual killing action against sucking pests through contact and ingestion later kills by systematic action with translaminar activity **BULLON**- insect growth regulator (IGR) used to control all stages of Whitefly effectively	**Markar Super** - effectively controls termites through contact, stomach and repellent action **D-One** - new class of insecticides for 3 major problems of cotton (Jassid, aphids and Mealybug) **Domar** - highly soluble and very effective for a variety of sucking insects	**APPLY** - systemic and translaminar insecticide, which paralyse the hoppers, stops egg-laying and kills the insects by starvation **LARGO** - Spinosyn class of insect management tools, which is naturalists in origin; Provides broad-spectrum insect control with excellent residual activity on variety of crops	**ZAPAC** - systemic and contact insecticide formulated by mixing two most trusted molecules. Used for more branches and flower initiation. **PRODHAN** - broad spectrum insecticide used to control bollworms, jassids, aphid, thrips and white flies in cotton. **PRO-RIN** - broad spectrum insecticide used to control bollworms of cotton and Kills insects on lower and upper surface of leaves due to penetrating action.	**Ripple** - broad spectrum, systemic insecticide contains active ingredient Thiamethoxam. Recommended for groundnut, sugarcane, rice and cotton crop.
Fungicide	**CONIKA** - Fungicide and bactericide **FUJITA**- systemic fungicide for the control of blast disease in rice crop. **DELIGHT**- mixture of triazole fungicides recommended for the control of sheath blight and dirty panicle disease in paddy.	**Godiwa** - a broad spectrum and systemic fungicide belonging to strobilurin group having excellent preventive and curative action. **Godiwa Super** - provides highly effective protection against target diseases by moving throughout the leaf protecting areas of the plant.			**Kirari** - Downy Mildew expert which effectively controls different stages of Oomycetes fungi. It is a contact and locally systemic fungicide with preventive, curative action and inhibits the mitochondrial respiration of the fungi. **Nissodium** - Its five action formula not only controls all the disease causing stages of fungus but also gives longer duration effective control.
Herbicide	**MAXX-SOY** - offers a complete weed management solution for the Soybean crop.	**Dumil** - selective, post-emergence herbicide used in Soybean and Groundnut which acts as ALS Inhibitor. **Fenox** - 1000 - Effective solution for management of grassy weeds in wheat.	**CHEMPA** - broad spectrum herbicide for paddy, which controls major broadleaf Weeds, Sedges and Grassy Weeds.		**Craze-D-** safe non-phytotoxic and selective pre-emergence herbicide with excellent action against annual grasses, sedges and weeds. **Dozo Maxx-** selective herbicide for cotton crop having advance ME formulation which is thermodynamically stable. Controls major broad and narrow leaf weeds. **Dabooch-** a member of Triazolopyrimidine Sulfonamide family, is a pre-emergence herbicide applied in Soybean crop within 3 days after sowing.
Others	**HiDice Super** - advanced and unique copper hydroxide formula that enhances performance through improved Bio availability of copper.	**Suelo** - Soil Health Enhancer formulated using patented OROWET technology, improves the quality of soils, fatigued by continues use of fertilizers, agro chemicals and intensive farming.		**MYCORE** - Arbuscular Mycorrhizal Fungi (AMF) having endo mycorrhizal spores in granular formulation. Has huge opportunity in multiple crops, including cereal crops and vegetables.	

Strategic collaborations with global agrochem majors

Long-standing partnerships with global agrochem players

- **Ability to tap export markets post expansion**
- Dhanuka has strong collaborations with several global agrochem companies across the US, Japan, and Europe through in-licensed molecules. These collaborations are crucial as in-licensed molecules constitute ~40% of Dhanuka's revenues. Additionally, these collaborations are the source of new product launches, ultimately improving the product mix and margin profile over time.
- Through collaborations with global innovators, Dhanuka has gained access to the latest technologies, which it effectively introduced to the domestic market. This helped Dhanuka expand its product basket, and the expansion is expected to continue going ahead.
- The company has long-standing relationships with Japanese innovators, which should provide a fillip to the innovation pace for Dhanuka. The company plans to add eight more value-added products to the portfolio.
- The company forayed into grape fungicides in FY21 with a number of Japanese offerings. Although a nascent entrant in the fungicide segment, Dhanuka has considerable headroom for growth in the category.

Dhanuka's tie-up with global agrochemical players

Source: Company, Emkay Global

Extensive reach with deep penetration

Deep roots in the hinterlands

- Dhanuka has a pan-India presence through its marketing teams and warehouses in all major states across India. The sales network includes 40 warehouses and about 6,500 distributors and dealers with around 80,000 retailers across India. Through this extensive network, the company offers its products and services to ~10mn Indian farmers.
- The company is collaborating with large, organized retail players, online digital startups and online marketplaces to further expand its reach. Management has indicated increasing the presence of its sales channel geographically.
- Traditionally, the company leveraged its extensive market presence to improve engagement with the farmer community through seminars and physical meetings. However, due to the pandemic, Dhanuka has adapted to social media and virtual meetings. Through these initiatives, the company educates farmers not only about its value-added products but also about farming practices. Over the years, this exercise has helped Dhanuka deepen its market reach and has also led to a gradual improvement in the overall product mix.
- During FY21, Dhanuka witnessed higher-than-industry growth due to favorable demand dynamics, product availability, branding, and regular engagements with farmers. It also benefited partially from the shift from unorganized to organized players induced by the pandemic situation.
- Going ahead, the company's extensive distribution network, robust supply chain, aggressive marketing efforts and digital initiatives should ensure higher-than-industry growth.

Investments in drones and R&D tie-up

- Dhanuka will invest Rs300mn in a drone manufacturing company, IoTech. IoTech manufactures drones for use in agriculture, survey, and surveillance.
- The mode of investment is through the subscription of compulsory convertible preference shares (CCPS).
- Dhanuka will be able to leverage its wide presence to offer agri services like renting drones and other farm equipment for the application of pesticides.
- Dhanuka's expected stake in IoTech after the conversion of CCPS will be around 15%-24%, depending on the valuation of IoTech at the time of conversion.
- Dhanuka has signed an MoU with Govind Ballabh Pant University of Agriculture and Technology to conduct joint research activities in crop protection chemicals by demonstrations and adaptive trials of new molecules/ products of Dhanuka at the university's farm as well as farmers' fields, considering inclusion of findings (active ingredients only) into the package of practices.
- Under the MoU, Dhanuka will sponsor conferences and grant scholarships to meritorious post-graduate students involved in research work.

Valuation based on two-stage growth model

Valuation drivers

- We assume coverage on Dhanuka Agritech with a Buy rating and a Mar'23 TP of Rs1,000 based on DCF.
- We estimate a 13% earnings CAGR during FY22E-FY25E.
- Our TP implies a forward P/E multiple of 19x Mar'24E EPS, which is 16% above the 10-year historical average of 16.5x for the stock and 2% below the 5-year historical average of 19.4x.
- ***Key assumptions in our two-stage growth model:***
  - *Revenue/EPS CAGR (FY22E-FY25E): 13%/12%*
  - *FY25E-35E EPS CAGR: 10%*
  - *Terminal EPS growth: 5%*
  - *Sustainable ROE: 25%*
  - *CoE: 10.75%*

Steady pick up in Earnings growth from FY23E

YoY Growth (%)	FY22E	FY23E	FY24E	FY25E
Revenue	3.1	9.9	16.3	13.4
EBITDA	-7.6	7.5	19.1	14.1
EBIT	-9.4	5.6	18.7	14.3
EPS	-6.7	5.6	17.0	13.2
ROE (%)	22.6	20.4	20.8	20.6
ROIC (%)	39.6	34.7	35.0	35.5

Source: Company, Emkay Global

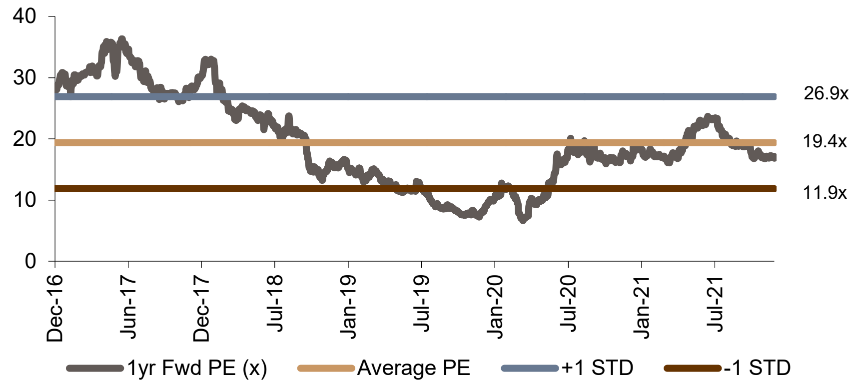
Dhanuka Agritech Ltd: Summary of two-stage growth model

Revenue CAGR [FY22E-25E] (%)	13
EBITDA CAGR [FY22E-25E] (%)	13
EBIT CAGR [FY22E-25E] (%)	13
EPS CAGR [FY22E-25E] (%)	12
Stage-1: FY25E-35E	
EPS in Yr-0 [FY25E] (Rs)	59
EPS in Yr-1 (Rs)	65
EPS CAGR (%)	10.0
Years of growth [n]	10.0
Incremental RoE (%)	25.0
CoE (%)	10.75
Implied DPR (%)	60
Terminal stage: >FY35E	
EPS growth (%)	5.0
Incremental RoE (%)	25.0
Implied DPR (%)	80
Fair value P/E in Mar'25E (x)	**17.7**
Fair value in Mar'25E (Rs/share)	**1,146**
Fair value in Mar'23E (Rs/share)	**934**
NPV of dividends in FY22E-25E (Rs/share)	58
Overall fair value in Mar'23E (Rs/share)	**993**
Mar'24E EPS (Rs)	52
Implied fair value P/E in Mar'23E (x)	**19.1**
Premium applied to fair value (%)	0.0
Target P/E in Mar'23E (x)	**19.1**
Target m-cap (Rs bn)	**46**
Target price in Mar'23E (Rs/share)	**1,000**
CMP (Rs/share)	760
Upside/(downside) (%)	***32***

Source: Company, Emkay Global

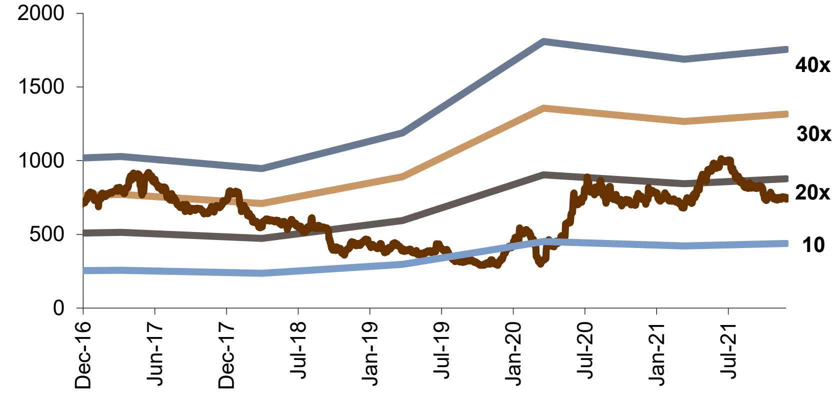
Dhanuka Agritech – Valuation charts

•Dhanuka's implied fwd P/E multiple closer to 5-yr historical avg.



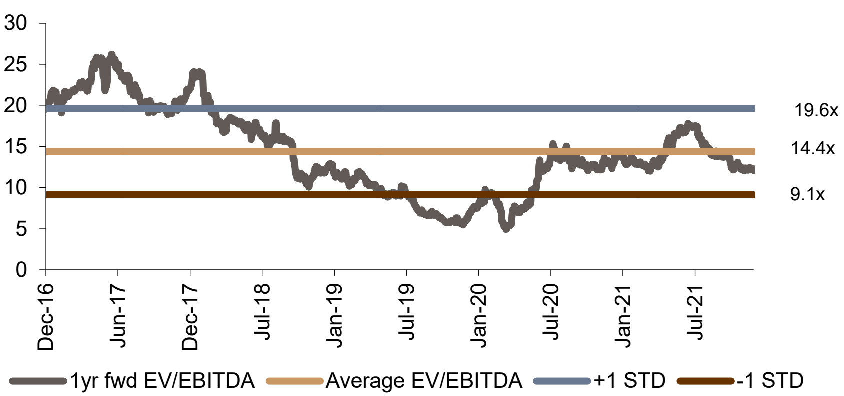
Source: Company, Emkay Global

Dhanuka's P/E ranged between 10x and 20x for the past 2.5 years



Source: Company, Emkay Global

Dhanuka trading at 19% discount to 5-yr historical avg. EV/EBITDA



Source: Company, Emkay Global

Q2FY22 results and key observations

- Imports of Chinese formulations and technicals were affected by higher demand and low availability.
- Gross margins declined due to input cost inflation.
- The gross margin contraction trickled down to EBITDA margins, which contracted 140bps YoY.
- Management does not expect any gross margin impact in Q3.
- The Greenfield project at Dahej is progressing well without any material delays.

Dhanuka Agritech (Cons.)

Y/E March (₹ mn)	Q2FY22	Q2FY21	YoY (%)	Q1FY22	QoQ (%)	1HFY22	1HFY21	% chg.
Net sales	**4,388**	**4,424**	***(0.8)***	**3,638**	***20.6***	**8,026**	**8,162**	***(1.7)***
Cost of Goods	2,770	2,743	*1.0*	2,411	*14.9*	5,181	5,200	*(0.4)*
% of sales	*63.1*	*62.0*		*66.3*		*64.5*	*63.7*	
Employee benefit expenses	338	339	*(0.2)*	293	*15.3*	632	653	*(3.2)*
% of sales	*7.7*	*7.7*		*8.1*		*7.9*	*8.0*	
Other expenditure	458	452	*1.3*	323	*41.9*	781	767	*1.8*
% of sales	*10.4*	*10.2*		*8.9*		*9.7*	*9.4*	
Operating profit	**822**	**890**	***(7.7)***	**611**	***34.4***	**1,433**	**1,543**	***(7.1)***
OPM (%)	*18.7*	*20.1*		*16.8*		*17.9*	*18.9*	
Dep. and amor.	41	32	*26.2*	38	*6.9*	79	64	*23.5*
EBIT	**781**	**858**	***(8.9)***	**573**	***36.3***	**1,354**	**1,479**	***(8.4)***
Interest	7	3	*144.2*	9	*(23.0)*	16	6	*184.0*
Other income	69	82	*(15.8)*	77	*(10.6)*	147	156	*(5.8)*
Excp. Item	0	0	-	0	-	0	0	-
PBT	**843**	**937**	***(10.0)***	**642**	***31.4***	**1,485**	**1,629**	***(8.9)***
Provision for tax	210	236	*(11.3)*	156	*34.7*	365	410	*(11.0)*
eff. tax rate	*24.9*	*25.2*		*24.3*		*24.6*	*25.2*	
PAT (rep.)	**634**	**701**	***(9.6)***	**486**	***30.4***	**1,120**	**1,219**	***(8.1)***
NPM (%)	*14.2*	*15.6*		*13.1*		*13.7*	*14.7*	

Source: Company, Emkay Research

Dhanuka Agritech – Quarterly Trend

Rs mn	Q2FY19	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22	Q2FY22	YoY%	QoQ%
Sales	**3,834**	**2,168**	**1,927**	**2,190**	**4,020**	**2,715**	**2,276**	**3,738**	**4,424**	**2,957**	**2,756**	**3,638**	**4,388**	***(0.8)***	***20.6***
Cost of Raw Material	2,294	1,374	1,118	1,443	2,612	1,761	1,301	2,457	2,743	1,859	1,574	2,411	2,770	*1.0*	*14.9*
as % of sales	*59.84*	*63.40*	*58.00*	*65.91*	*64.97*	*64.86*	*57.16*	*65.72*	*62.00*	*62.87*	*57.13*	*66.26*	*63.13*		
Employee expenses	319	235	237	236	311	264	242	314	339	267	263	293	338	*(0.2)*	*15.3*
as % of sales	*8.31*	*10.83*	*12.32*	*10.75*	*7.74*	*9.73*	*10.62*	*8.39*	*7.66*	*9.03*	*9.54*	*8.07*	*7.71*		
Other Expenses	465	344	242	312	364	346	276	315	452	329	272	323	458	*1.3*	*41.9*
as % of sales	*12.12*	*15.85*	*12.55*	*14.27*	*9.04*	*12.76*	*12.11*	*8.42*	*10.22*	*11.12*	*9.88*	*8.87*	*10.44*		
Total Expenditure	**3,077**	**1,953**	**1,597**	**1,991**	**3,286**	**2,371**	**1,818**	**3,086**	**3,534**	**2,454**	**2,109**	**3,027**	**3,567**	***0.9***	***17.8***
EBITDA	**756**	**215**	**330**	**199**	**734**	**343**	**458**	**653**	**890**	**502**	**646**	**611**	**822**	***(7.7)***	***34.4***
Depreciation	32	30	30	27	57	42	37	32	32	41	47	38	41		
EBIT	**724**	**185**	**300**	**172**	**676**	**301**	**420**	**621**	**858**	**461**	**599**	**573**	**781**	***(8.9)***	***36.3***
Other Income	24	38	64	38	48	78	87	74	82	94	87	77	69		
Interest cost	2	1	3	2	6	4	4	3	3	10	11	9	7	*144.2*	*(23.0)*
PBT	**746**	**221**	**361**	**207**	**719**	**376**	**503**	**692**	**937**	**545**	**676**	**642**	**843**	***(10.0)***	***31.4***
Total Tax	258	75	112	60	119	100	113	174	236	144	189	156	210	*(11.3)*	*34.7*
PAT before Minority Interest	**488**	**146**	**249**	**147**	**600**	**277**	**390**	**518**	**701**	**400**	**486**	**486**	**634**	***(9.6)***	***30.4***
PAT before extra	**488**	**146**	**249**	**147**	**600**	**277**	**390**	**518**	**701**	**400**	**486**	**486**	**634**	***(9.6)***	***30.4***
Exceptional Items	-	-	-	-	-	-	-	-	-	-	-	-	-		
Reported PAT	**488**	**146**	**249**	**147**	**600**	**277**	**390**	**518**	**701**	**400**	**486**	**486**	**634**	***(9.6)***	***30.4***
Minority Interest	-	-	-	-	-	-	-	-	-	-	-	-	-		
Share of Profit/(loss) from asso.	-	-	-	-	-	-	-	-	-	-	-	-	-		
Reported Consolidated PAT	**488**	**146**	**249**	**147**	**600**	**277**	**390**	**518**	**701**	**400**	**486**	**486**	**634**	***(9.6)***	***30.4***
Adj. Consolidated PAT	**488**	**146**	**249**	**147**	**600**	**277**	**390**	**518**	**701**	**400**	**486**	**486**	**634**	***(9.6)***	***30.4***
Margins (%)														***bps***	***bps***
EBIDTA	19.7	9.9	17.1	9.1	18.3	12.6	20.1	17.5	20.1	17.0	23.5	16.8	18.7	*(139)*	*192*
EBIT	18.9	8.5	15.6	7.8	16.8	11.1	18.5	16.6	19.4	15.6	21.8	15.8	17.8	*(159)*	*204*
PBT	19.5	10.2	18.7	9.5	17.9	13.9	22.1	18.5	21.2	18.4	24.5	17.6	19.2	*(196)*	*158*
PAT	12.7	6.7	12.9	6.7	14.9	10.2	17.1	13.9	15.8	13.5	17.7	13.4	14.4	*(140)*	*108*
Effective Tax rate	34.5	34.1	31.0	29.2	16.5	26.5	22.5	25.2	25.2	26.5	28.0	24.3	24.9	*(35)*	*60*

Source: Company, Emkay Research

Dhanuka Agritech – Q2FY22 Earnings call Highlights

- **Business Highlights – Rabi looking good**
  - Received first patent for formulation of Synergistic Herbicidal Formulation comprising a combination of Halosulfuron Methyl and Metribuzin for control of sedges, narrow and broadleaf weeds in sugarcane; currently under registration process; expected to be launched in 2024; sugarcane, tomato, and some other crops, from Nissan
  - 1H ITI – 10% (FY21 – 11%)
  - Started work on new R&D facility at Palwal, Haryana
  - Entered into a shareholders' agreement with IoTechWorld Avigation Pvt Ltd ('IoTech"), a drone manufacturing company, on 11" August, 2021, to invest Rs300mn; already invested the Rs200mn
  - Imports of Chinese formulations and technicals impacted due to higher demand and low availability, low availability of yellow phosphorus, increase in freight costs, shutdown of pesticide facilities in the wake of Winter Olympics
  - Inventories for Nov-Dec'21, after that need to procure RMs at higher prices
  - Rabi looking upbeat
  - Micor – Gaining huge traction, with DAP shortage to further aid for the product; no constraint on production, although imported product
  - Synthetic pyrethroids – Production in and exports from India going up; producing 4 versions cypermethrin; 2-3 versions bifenthrin, few versions of lambda cyhalothrin
  - Financial Performance – Don't expect gross margin impact in Q3
  - Volume – 3% decline YoY
  - NWC – 105 days from 89 days, last year was exceptional
- **Q2 Region-wise Sales Breakup**
  - North – 22% (26%)
  - West – 36% (34%)
  - East – 12% (10%)
  - South – 30% (30%)
- **Q2 Segment-wise Break-up**
  - Insecticides – 43% (47)%
  - Fungicides – 23% (20%)
  - Herbicides – 23% (21%)
  - Others (PGN) – 11% (12%)
- **New Product Launches – Two products launched**
  - Tornado – Co-marketing product, formulation of Quizalofop Ethyl + Imazethapyr, to control broad leaf as well as narrow leave weeds in soybean, oilseeds, and other crops
  - ONEKIL – New 9 (3) product, launched on 29 July, combination herbicide for the control of all types of weeds in onion crop
  - Cornex from Nissan in Q4
  - Maize herbicide from Nissan; herbicide for sugarcane, paddy, horticulture
  - To launch two new 9 (3) molecules every year
- **Greenfield capex – Backward integration for technicals/ generics at Dahej, not material delays**
  - Overall capex – ~Rs3bn
  - Invested Rs100-200mn till H1 – Phase I to come up by Mar'22 (Rs800mn capex) and phase II by Mar'23 (~Rs1.30bn capex); rest capex in FY24
  - Commissioning – Formulation unit by Mar'22, one insecticide MPP plant for synthetic pyrethroids by Mar'23 and an MPP weedicide plant
  - 142,000sq. meters land available at Dahej
  - Incremental land will be utilized for exports, third-party manufacturing, Japanese customers
  - Revenue potential FY24E – Rs2bn, FY25/FY26E – Rs3.5bn
  - EBITDA margins – 12-15%
- **Outlook and Guidance – Expects single-digit growth in FY22, 16.0-17.5% margins**
  - Q3 price increase impact – 5-6%, price increase effected only in Oct'21, expect better results for Q3
  - Dahej phase I to be completed by Mar'22
  - FY22E – single-digit growth, EBITDA margin – 16.0-17.5%
  - Biologicals – gaining significant traction in India, particularly for fruits and vegetables, export-oriented crops

Dhanuka Agritech – Financial Summary

Financial Snapshot

(Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	13,875	14,310	15,728	18,296	20,756
EBITDA	2,691	2,488	2,674	3,184	3,632
EBITDA Margin (%)	19.4	17.4	17.0	17.4	17.5
APAT	2,106	1,964	2,074	2,426	2,747
EPS (Rs)	45.2	42.2	44.5	52.1	59.0
EPS (% chg)	52.2	-6.7	5.6	17.0	13.2
ROE (%)	28.0	22.6	20.4	20.8	20.6
P/E (x)	16.8	18.0	17.1	14.6	12.9
EV/EBITDA (x)	12.1	13.0	12.0	10.0	8.5
P/BV (x)	4.4	3.8	3.3	2.8	2.5

Source: Company, Emkay Global

Income Statement

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	**13,875**	**14,310**	**15,728**	**18,296**	**20,756**
Expenditure	**11,184**	**11,822**	**13,054**	**15,112**	**17,124**
EBITDA	**2,691**	**2,488**	**2,674**	**3,184**	**3,632**
Depreciation	152	187	244	301	337
EBIT	**2,539**	**2,300**	**2,430**	**2,884**	**3,295**
Other Income	337	354	372	390	410
Interest expenses	27	28	29	30	31
PBT	**2,849**	**2,626**	**2,773**	**3,244**	**3,673**
Tax	744	662	699	817	926
Extraordinary Items	0	0	0	0	0
Minority Int./Income from Assoc.	0	0	0	0	0
Reported Net Income	**2,106**	**1,964**	**2,074**	**2,426**	**2,747**
Adjusted PAT	**2,106**	**1,964**	**2,074**	**2,426**	**2,747**

Source: Company, Emkay Global

Balance Sheet

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
Equity share capital	93	93	93	93	93
Reserves & surplus	7,869	9,342	10,794	12,371	14,157
Net worth	**7,962**	**9,435**	**10,887**	**12,464**	**14,250**
Minority Interest	**0**	**0**	**0**	**0**	**0**
Loan Funds	**84**	**84**	**84**	**84**	**84**
Net deferred tax liability	83	83	83	83	83
Total Liabilities	**8,128**	**9,602**	**11,053**	**12,630**	**14,416**
Net block	**1,669**	**2,287**	**3,348**	**3,852**	**4,020**
Investment	**2,780**	**2,780**	**2,780**	**2,780**	**2,780**
Current Assets	**6,785**	**7,765**	**8,280**	**9,573**	**11,403**
Cash & bank balance	15	399	540	964	1,828
Other Current Assets	907	907	907	907	907
Current liabilities & Provision	**3,182**	**3,306**	**3,430**	**3,650**	**3,862**
Net current assets	**3,603**	**4,459**	**4,850**	**5,922**	**7,541**
Misc. exp	0	0	0	0	0
Total Assets	**8,128**	**9,602**	**11,053**	**12,630**	**14,416**

Source: Company, Emkay Global

Cashflow

Y/E Apr (Rs mn)	FY21	FY22E	FY23E	FY24E	FY25E
PBT (Ex-Other income) (NI+Dep)	**2,512**	**2,272**	**2,401**	**2,854**	**3,263**
Other Non-Cash items	0	0	0	0	0
Chg in working cap	587	(471)	(250)	(649)	(754)
Operating Cashflow	**2,311**	**1,355**	**1,725**	**1,718**	**1,953**
Capital expenditure	(636)	(805)	(1,305)	(805)	(505)
Free Cash Flow	**1,675**	**550**	**420**	**913**	**1,448**
Investments	(1,191)	0	0	0	0
Other Investing Cash Flow	0	0	0	0	0
Investing Cashflow	**(1,266)**	**(451)**	**(933)**	**(415)**	**(95)**
Equity Capital Raised	(2)	0	0	0	0
Loans Taken / (Repaid)	4	0	0	0	0
Dividend paid (incl tax)	0	(491)	(622)	(849)	(962)
Other Financing Cash Flow	(553)	0	0	0	0
Financing Cashflow	**(1,291)**	**(519)**	**(651)**	**(879)**	**(993)**
Net chg in cash	**(246)**	**384**	**140**	**424**	**864**
Opening cash position	252	6	391	531	955
Closing cash position	**15**	**399**	**540**	**964**	**1,828**

Source: Company, Emkay Global

Dhanuka Agritech – Key ratios

Profitability Ratios and Per share data

Profitability (%)	FY21	FY22E	FY23E	FY24E	FY25E
EBITDA Margin	19.4	17.4	17.0	17.4	17.5
EBIT Margin	18.3	16.1	15.5	15.8	15.9
Effective Tax Rate	26.1	25.2	25.2	25.2	25.2
Net Margin	15.2	13.7	13.2	13.3	13.2
ROCE	37.5	29.9	27.1	27.6	27.4
ROE	28.0	22.6	20.4	20.8	20.6
RoIC	48.0	39.6	34.7	35.0	35.5
Per Share Data (Rs)	**FY21**	**FY22E**	**FY23E**	**FY24E**	**FY25E**
EPS	45.2	42.2	44.5	52.1	59.0
CEPS	48.5	46.2	49.8	58.5	66.2
BVPS	170.9	202.6	233.7	267.6	305.9
DPS	0.0	10.5	13.4	18.2	20.6

Source: Company, Emkay Global

Valuation Ratios

Valuations (x)	FY21	FY22E	FY23E	FY24E	FY25E
PER	16.8	18.0	17.1	14.6	12.9
P/CEPS	15.7	16.5	15.3	13.0	11.5
P/BV	4.4	3.8	3.3	2.8	2.5
EV / Sales	2.4	2.3	2.0	1.7	1.5
EV / EBITDA	12.1	13.0	12.0	10.0	8.5
Dividend Yield (%)	0.0	1.4	1.8	2.4	2.7

Gearing Ratio (x)	FY21	FY22E	FY23E	FY24E	FY25E
Net Debt/ Equity	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
Net Debt/EBIDTA	(1.0)	(1.2)	(1.2)	(1.1)	(1.2)
Working Cap Cycle (days)	94.4	103.6	100.0	98.9	100.5

Source: Company, Emkay Global

Growth ratios

Growth (%)	FY21	FY22E	FY23E	FY24E	FY25E
Revenue	23.9	3.1	9.9	16.3	13.4
EBITDA	55.2	(7.6)	7.5	19.1	14.1
EBIT	61.7	(9.4)	5.6	18.7	14.3
PAT	49.0	(6.7)	5.6	17.0	13.2

Source: Company, Emkay Global

Quarterly Trend

Quarterly (Rs mn)	Q1FY21	Q2FY21	Q3FY21	Q4FY21	Q1FY22	Q2FY22
Revenue	3,738	4,424	2,957	2,756	3,638	4,388
EBITDA	653	890	502	646	611	822
EBITDA Margin (%)	**17.5**	**20.1**	**17.0**	**23.5**	**16.8**	**18.7**
PAT	518	701	400	486	486	634
EPS (Rs)	**10.9**	**14.7**	**8.4**	**10.2**	**10.4**	**13.6**

Shareholding Pattern (%)	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
Promoters	75.0	75.2	75.0	70.0	70.0
FIIs	0.0	0.0	0.0	0.0	4.7
DIIs	12.0	12.0	13.2	14.3	14.9
Public and Others	13.0	12.8	11.8	15.7	10.5

Source: Company, Emkay Global

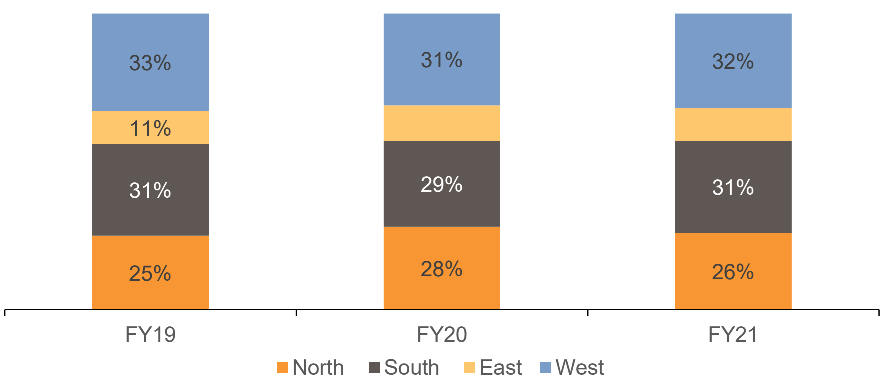
Annexures

Business profile

Business Snapshot

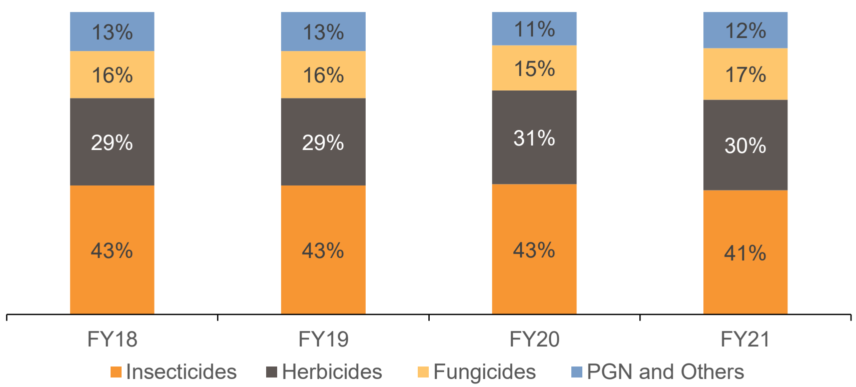
- Dhanuka is a leading domestic agrochem company with strength in formulations and in-licensing. The company leverages its long-standing partnerships with leading agrochem companies from Europe, Japan and the US for the supply of key inputs and technicals.
- Insecticides account for the biggest share of revenues in the overall product basket. In FY21, insecticides accounted for a ~41% share, followed by herbicides (30%) and fungicides (17%), with the balance of 12% coming from the crop nutrition portfolio.
- Dhanuka has a pan-India presence through its marketing teams and warehouses in all major states across India. The sales network includes 40 warehouses, about 6,500 distributors and dealers, and around 80,000 retailers, covering ~10mn farmers across India.

Geographical Breakup



Source: Company, Emkay Global

Segment Breakup



Source: Company, Emkay Global

Novel Marketing Initiatives

New domains/Marketing campaigns

- **Kashmir apple orchards –** Dhanuka has a good presence in the apple-growing states of Himachal and Jammu & Kashmir. The company has been growing its business in the region with the help of its premium products such as Sixer, M-45, Dhanulux, Cursur, Lustre, Omite, etc. The company is planning to initiate R&D trials in the region to address key problems for apple growers in the region, along with initiating marketing drives and retailer engagement meets to facilitate growth in the region.
- **Media Campaigns –** Due to the pandemic, Dhanuka undertook digital media campaigns across the country through various social media platforms and in multiple languages for major crops in the country. The company also undertook promotional campaigns through TV commercials. Later, the company initiated certain awareness and visibility drives through retail displays and van brandings.
- **Stakeholder engagement –** The company undertook various digital initiatives in the past year, like annual digital conference, Annual Krishi meets, distributor meets, and live streaming sessions on various social media and messaging platforms, to keep customer and dealer engagement high for the effective execution of marketing strategies even during a time when physical movement was largely restricted. The company has also engaged with farmers in each territory through E-DKM to educate them about the products and their advantages.
- **Alternate channel expansion –** The company is engaging with large organized retail partners, digital startups and online marketplaces to improve its market reach and to drive innovation and entrepreneurship in agriculture, which shall aid overall growth for the agrochem industry too.
- **Shop adoption –** Among various campaigns to build brand equity and increase visibility, Dhanuka has come up with the concept of Dhanuka Branded shops. Currently, the company has two branded shops, and management has indicated that the company will come up with similar shops in key geographies.

Emkay Rating Distribution

Ratings	Expected Return within the next 12-18 months.
BUY	Over 15%
HOLD	Between -5% to 15%
SELL	Below -5%

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