Sumitomo Chemicals (SUMCH)

CMP: ₹ 235 Target: ₹ 280 (19%)

Target Period: 12 months

ntns

April 28, 2020

ECC merger to improve group return ratios...

Incorporated in year 2000, Sumitomo Chemical India (SCI) is into agrochemical, animal nutrition and environmental health solutions. The company has been selling proprietary products of its parent in the domestic market. With the recent merger of Excel Crop Care (ECC), we expect the business portfolio of the merged entity to expand across different crops given the former is present in staple crops as against SCI that is in fruits & vegetables. Further, better distribution reach across key geographies in domestic as well as export markets would provide revenue synergies to the group. We also believe ECC's expertise in technical manufacturing should curb RM cost for the group. Hence, this can improve gross margins in the medium to long term. We initiate coverage on the stock with a **BUY** rating.

Strong parental advantage to improve business outlook

SCI's parent Sumitomo Corporation (SCC Japan) spent ~8-9% of sales on R&D activity every year, which helps the Indian unit to launch proprietary products in the domestic market. Going ahead, SCC Japan plans to launch two-fungicide product in the next year or two while planning to expand its presence in next generation herbicide portfolio and plant growth regulators (PGR). The combined opportunity is estimated to be around \$1.5 billion. Further, post integration of ECC, SCI has been planning to launch 11 combination of products (patented + generic molecule) in the domestic market of which five are already in an advanced stage. Further, it is in negotiation to get one or two molecules under CRAMS from parent. All these should translate into a better financial performance, going ahead.

Integration of ECC to provide synergies to group

ECC has a strong product portfolio in rice, soybean, cotton while the same for SCI is in wheat, sugarcane and fruits & vegetables. This should translate into the company offering end-to-end crop solutions to the domestic market. Further, ECC has a strong presence in the north, west market while the same for SCI remains in south, east with a combined distributor size of around 13700. An increase in product offerings across different states and leveraging the expertise of each other's distributor strength is expected to improve revenue per distributor in the medium term.

Valuation and outlook

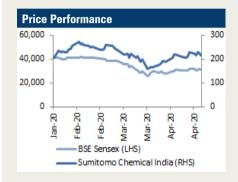
We expect the animal nutrition business along with CRAMS opportunity to change the business mix in the medium to long term. In turn, this could translate into an improvement in the operational performance. Further, ECC's expertise in active manufacturing should benefit SCI given the latter largely depends on imports of key molecules. Thus, a reduction in import and likely improvement in captive consumption should aid gross margins and thereby OPM. Given that no major capex is lined up in the coming future, the company should generate decent FCF in the years to come. We value the company at 40x FY22E PER and arrive at a target price of ₹ 280.



BUY



Particulars	
Particular	Amount
Market cap (₹ Crore)	11,609
FY19 Total Debt (₹ Crore)	20
FY19 Cash & Inv (₹ Crore)	51
EV (₹ Crore)	11,577
52 Week H/L	282/153
Equity Capital (₹ Crore)	494.0
Face Value (₹)	10



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Key Financial Summa	ary					
(₹ Crore)	FY18	FY19	FY20E	FY21E	FY22E	CAGR FY19-22E
Net Revenue	1,912.9	2,211.7	2,411.7	2,668.2	2,989.3	10.6
EBITDA	217.1	263.5	340.0	389.6	451.4	19.6
EBITDA Margins (%)	11.3%	11.9%	14.1%	14.6%	15.1%	
Adj.PAT	145.1	165.8	241.5	292.1	346.0	27.8
Adj. EPS (₹)	2.9	3.4	4.9	5.9	7.0	
EV/EBITDA	29.4x	24.4x	34.0x	29.5x	25.1x	
P/E	80.0x	70.0x	54.8x	39.7x	33.6x	
ROE (%)	15.2	15.8	20.8	21.7	22.0	
ROCE (%) Source: Company, ICICI Dire		24.2	28.1	28.1	28.5	

Company background

Incorporated in year 2000, Sumitomo Chemical India (SCI) is present in the three business verticals of agro solutions (ASD), environmental health (EHD) and animal nutrition business (AND) of which ASD is the largest revenue contributor with 94% while the rest comes from the other two businesses. SCI provides solutions for insecticide, herbicide, fungicide, plant growth regulator (PGR) under agro segment. Under animal nutrition, it manufactures methionine for feed additive use, which is one of the essential amino acids for the development and growth of livestock. SCI's revenue is more tilted towards speciality with revenue contribution of 63% in FY19 and rest from the generic portfolio. Since few crop protection chemicals were off patented in past few years and a few more are expected to be off patent in years to come, it is evident that genetic crop protection chemicals should grow in double digits, going ahead. Given that India is one of the largest generic markets, Sumitomo Chemical Corporation Japan (SCC) acquired a majority stake in Excel Crop Care (ECC) in 2016. This was largely as the latter has 100% generic portfolio in crop protection market along with backward integration of a few technicals. SCC Japan held 44.98% in ECC while ~19.98% was held by SCI before the merger. To simplify the structure of the Indian entity, the company merged ECL recently with SCI and issued 51 shares of SCI for two shares of ECC. This led SCC Japan to hold $\sim\!80.3\%$ stake in the company with the rest held by the public.

The revenue of the merged entity was at ₹ 2200 crore (growth at 11% CAGR in FY11-19). The split between specialty and generic remained at 27:73 against pre-merger level of 63:37 in FY19. The merged entity has a balanced product portfolio with insecticide revenue contribution of ~51% while around 19% is from herbicide and 9% from fungicide. Exports constitute ~22% of the merged revenue in FY19. Among key products of the merged entity are Glyphosate, Profenophos and Dantotsu.

Business snapshot

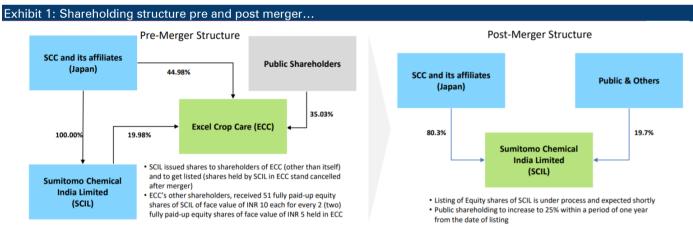
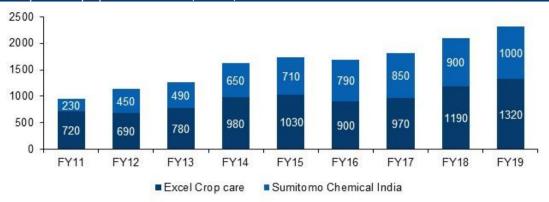
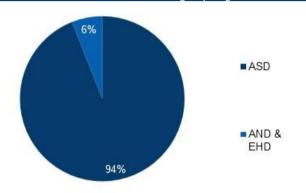


Exhibit 2: Journey of both players in a decade (₹ crore)...



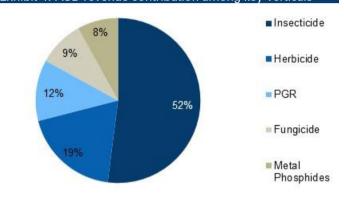
Source: Company, ICICI Direct Research

Exhibit 3: Revenue contribution among key segments



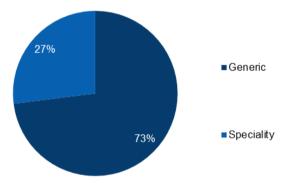
Source: Company, ICICI Direct Research * ASD – agro solutions

Exhibit 4: ASD revenue contribution among key verticals



Source: Company, ICICI Direct Research * ASD - agro solutions

Exhibit 5: ASD revenue break-up among generic & speciality

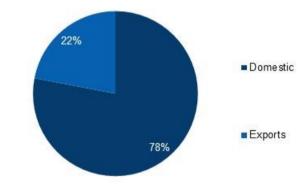


Source: Company, ICICI Direct Research * ASD – agro solutions

Exhibit 7: SCI	cey product portfolio	
Product Name	Product Category	Indicative Use
Glyphosate	Herbicide	Tea Gardens, non-cropped
Profenophos	Insecticide	Cotton, Soya bean
Dantotsu	Insecticide	Vegetables
Tebuconazole	Fungicide	Wheat, Soyabean, Chilli
Progibb	Plant Growth Regulator	C itrus fruits
Aluminum Phosphide	Fumigant	Warehousing of food grains
C hlorpyriphos	Insecticide	Paddy, Beans, Gram
D L - Methionine	Animal Nutrition	Poultry

Source: Company, ICICI Direct Research

Exhibit 6: ASD revenue break up among geographies



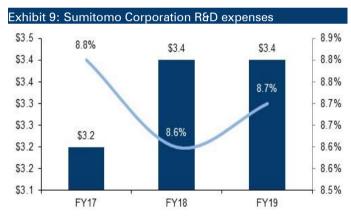
Source: Company, ICICI Direct Research * ASD – agro solutions

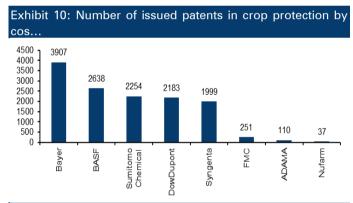
Plant location	Area (acres)	Segment served	Product manufactured		
Bhavnagar	~76	Manufacturing of technical grade pesticides and formulation developments	Chlorpyriphos, Profenophos,		
G ajo d	~120	Production and manufacturing of metal phosphides, sulphur WDG and other WDG formulations	Glyphosate, Tebuconazole Tech, Quinalphos, Imidacloprid, Thiacloprid.		
Tarapur	~5	Production and manufacturing of active ingredients	Acetamiprid, Byspyribac Sodium, Aluminium		
Vapi	~6	Forumulation & Packaging	Phosphide, Zinc Phosphide, Sulphur WDG, Fenpropathrin		
Silvasa	~3	Formulation of Glyphosate amd other speciality products			

Investment Rationale

Strong Japanese parent bodes well for new product development and, hence, revenues

Japanese companies are more aggressive in their R&D activity, which we believe is a key positive for SCI given the parent has been spending 7-8% of sales on research activity every year. This has helped SCC Japan to build a strong patented product portfolio under the crop science segment. Of the overall patents of ~12,600, more than 34% is estimated to be from the health & crop science segment. The parent has 60% revenue coming from both insecticide (37%) and herbicide (23%) while the rest comes from fungicide (12%), biorationals (10%) and others (18%) vs. the merged Indian entity's revenue stream of insecticides (51%), herbicide (19%) and fungicide (9%). Going ahead, the company plans to launch fungicide crop protection such as Indiflin and Pavecto. We expect this to improve its business outlook. However, for the long term, it plans to enter into next generation herbicide and increase the revenue from plant growth regulators (PGR). Both these new portfolios are estimated to provide incremental business opportunities of ¥150-200 billion (~\$1.4-1.9 billion) over the next four to five years against sales of \$3.4 billion in FY19. This translates to CAGR of at least 20%. Further, the company also plans to expand footprints into rice, biorational rhizosphere, botanical insecticides, etc. All these are expected to aid business potential to \$750 million by FY22E from \$390 million in FY19.





Source: Company, ICICI Direct Research

Exhibit 11: Pavecto expected to be launched in 2021 PAVECTO (methyltetraprole)

• Highly effective against major plant diseases such as septoria

• Also effective against strains resistant to existing fungicides

Submitted in Japan and EU in 2018, to be launched in 2021 or later, with other countries also planned.
 Global collaboration with BASF to develop new fungicide.

in June 2017
• Both companies separately develop and sell unique formulations with the new compound

Source: Company, ICICI Direct Research

Collaboration with Bayer

Features

Applications

Exhibit 12: Indiflin expected to be launched in 2020 INDIFLIN (inpyrfluxam)

	INDIFLIN (inpyrfluxam)
Features	 Highly effective against major diseases such as soybean rust
Applications	 Submitted in Japan, Argentina, the U.S., Canada and Brazil in 2017, to be launched in 2020 or later, with other countries also planned.
Collaboration with Bayer	Collaboration with Bayer on new fungicidal mixtures in Brazil in June 2017 Both companies separately develop and sell unique formulations with the new compound

Source: Company, ICICI Direct Research

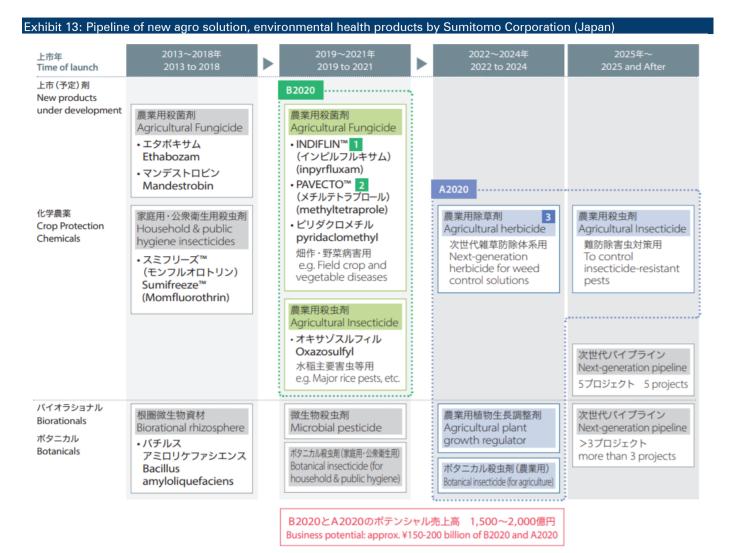
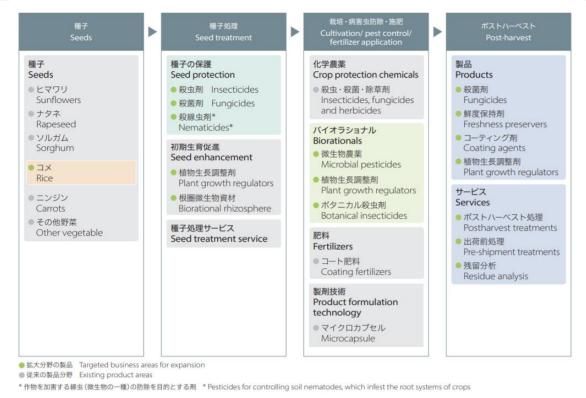


Exhibit 14: Expansion of crop protection business areas



Source: Company, ICICI Direct Research

Benefit to accrue to Sumitomo Chemical India

Since R&D is done at the parent level, new molecule development can provide the Indian entity access to launch formulation in the domestic market. Apart from this, SCC Japan is more aggressive towards plant growth regulators (PGR) due to better yield & quality of crops. Thus, it is developing active molecule for rice portfolio. Any progress towards development should benefit the Indian entity given Excel Crop Care (ECC) has decent penetration in the rice portfolio along with strong penetration in PGR. PGRs currently comprise 12% of SCI's financial performance. We expect this to reach at least 15% in the next four to five years. This should also aid group OPM given PGR is expected to have high teens margins. Apart from this, SCI also plans to launch 11 combination products in India of which five are already in an advanced stage. All these should improve the business outlook of the India entity. Further, since ECC has a strong presence in generic portfolio with backward integration of technical manufacturing, any progress towards increasing CRAMS by the parent is expected to meaningfully improve exports.

Further, SCI is also present in the animal nutrition business, where it manufactures Methionine, used as animal feed. Global demand for Methionine was ~1.4 million tonnes (MT) in FY19. This is expected to grow at 6% CAGR over the next three to four years. SCC Japan has a production capacity of ~250,000 tonnes, resulting in a market share of ~18%. Going ahead, the parent expects an increase in demand for poultry and pork to improve the demand outlook for Methionine. Although there could be a more subdued demand outlook in India for poultry products, decent growth from international markets along with increase in outsourcing from the India unit is expected to expand animal nutrition segmental share in overall revenue of SCI.

Exhibit 15: Methionine manufacturing process

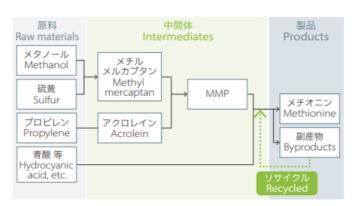
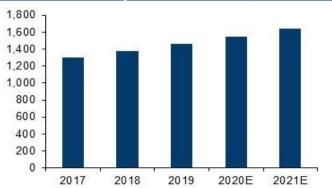


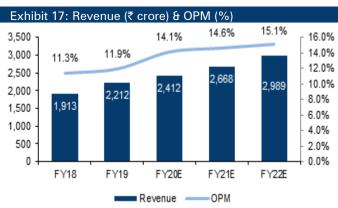
Exhibit 16: Methionine global demand outlook (in '000 tonnes)



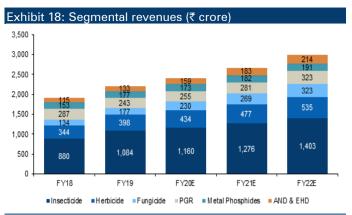
Source: Company, ICICI Direct Research

Source: Company, ICICI Direct Research

We expect fungicide and animal nutrition & environmental health segments to post ~15-20% CAGR in FY19-22E, assisting overall revenue growth of 11% CAGR in the same period. The growth in fungicide could be on the back of launches of two new molecules by the parent. This should help the India entity expand its portfolio in the domestic market. For PGR, we believe a more meaningful performance will come post FY23E, FY24E since the parent plans to launch a few molecules in that period. This should support the revenue performance for the India entity also. Apart from this, we believe CRAMS is still at a nascent stage for SCI. Hence, it may take at least five years to become sizable in the overall performance. (Note: SCI is negotiating for CRAMS of two to three molecules with the parent. We have not factored in any incremental CRAMS opportunity from the parent until FY22E. Any positive development can have upside risks to our earnings estimates).







ECC integration to provide revenue, cost synergy, going ahead

Of the overall active material requirements of ECC, around 6% is estimated to have been procured from outside parties, while the rest was captive consumption. On the other hand, SCI was procuring 35% of actives from third parties mainly from China while the rest was sourced from other countries like Japan, US and domestic market. Since ECC has technical manufacturing capacity, this merger is expected to curb technical purchase from third party and increase captive consumption. In turn, this should provide stability/improvement in gross margins. We expect ~10% reduction in procurement to improve gross margins by at least 100 bps. Apart from this, ECC has a strong product portfolio in rice, soybean, cotton while the corresponding portfolio for SCI is wheat, sugarcane and fruits & vegetables. This should translate into the company offering end-to-end crop solutions in the domestic market. Further, ECC has a strong presence in the north, west market while the same for SCI is the south, east with a combined distributor strength of around 13700. An increase in the product offerings across different states and leveraging the expertise of each other's distributor strength is expected to improve revenue per distributor in medium term.

Revenue from exports for ECC comes from Africa and Europe while SCI's constant efforts to build a distribution chain in North America and LatAm should provide a platform to the merged entity to showcase its product portfolio across global markets. This provides a strong export outlook from a medium to long-term perspective given that both players are competent in different crop portfolios. Moreover, SCI's parental advantage should also help the company win some CRAMS contracts (SCI is already negotiating with Sumitomo Japan for two to three molecules). Hence, this opens up another revenue stream for the company. Although specialty product basket constitutes ~27% of revenues, constant efforts by SCI to launch a new combination/specialty product every year is expected to aid the specialty share in the years to come. We also believe that since the group OPM remained at around mid-teens and there are ample opportunities to increase the scale of volumes for generic portfolio along with increase in share of specialty through effective usage of distribution channel, OPM is likely to expand to high teens in the medium to long term.

Exhibit 19: Excel Crop Care to provide synergies across different platforms **Excel Crop Care** Sumitomo India Merged Entity Parameter Plant in Gujarat (2) and Dadar & Nagar Haveli Manufacturing facility Plant in Maharashtra (1), and Gujarat (1) 5 plants in west India (1)Predominantly a formulation company with Presence in both technical & formulation Manufacturing capability Manufacturing of formulations facilities for both formulation and technical manufacturing Distrution capabilities 4700+ distributors across India 9000+ distrbutors concentrated in few regions Improved depth and breadth of the distrbutors 3 full equipped R&D facilities for synthesis Creating new combination using SCIS's Outsources R&D requirements R&D capability and formulation of chemicals chemistries Insecticide (44%), Herbicide (27%), Insecticide (52%), Herbicide (19%), Insecticide (63%), Herbicide (7%), Fungicide Industry Sub-segments Fungicide (11%), Metal phosphides (13%), Fungicide (9%), Metal phosphides (8%), (8%), Others (22%) Others (12%) Others (5%) Major focus on generics, nascent presence in **Product capability** Major focus on speciality products Presence across complete range of products Biopesticides Presence in ASD, AND and EHD segments ASD focused with presence in AND & EHD **Business segments** Presence only in agrochemical segment Rice, Soybean, Cotton and Fruits & Wheat, Grapes, Groundnut, Sugarcane, Well diversified product range covering Kharif Range of crops serived Vegetables Apple, Vegetables & Rabi crops **Customer Concentration** Top 5 customers contribute to ~12% of sales Top 5 customers contribute to ~15% of sales Top 5 customers contribute to ~12% of sales Strong presence with both the retailers and Strong wide-spread presence with the S&M capabilities High degree of engagement with the farmers distributors/retailers farmers

New product launches to improve specialty share, hence, margins

Product registration approval is estimated to take around three to five years from the application date while the growth stage can commence from around third or fourth year post product commercialisation. Hence, to gauge the impact of registrations approved for both ECC and SCI, we analysed the application approved data since 2017. We found that majority of the products are 9(3). This provides strong visibility of specialty business, going ahead. Apart from this, ECC also filed few registration applications, which are yet to be approved. Out of this, around two are from PGR. We expect all this to result in the specialty business growing faster than generic business. We expect specialty revenue contribution at group level to reach low-mid thirties from around 27% currently and, thus, provides decent OPM improvement visibility in the medium term.

Exhibit 20: ECC product approv	als since 2017	
Name of product	Date of issue	Under section
Fipronil 40 + Imidacloprid 40% WG	Feb'17	9(4)
Azoxystrobin 11% + Tebuconazole 18.3% SC	Feb'17	9(4)
Emamectin Benzonate 5% SG	Mar'18	9(4)
Azoxystrobin 8.3% + Mancozeb 66.7% WG	Feb'18	9(4)
Azoxystrobin 12.5 + Tebuconazole 12.5% SC	May'17	9(3)
Bispyribac sodium technical 95% min	Mar'17	9(3)
Bispyribac sodium 10% SC	Mar'17	9(3)
Fipronil 40 + Acetamiprid 4% SC	June'17	9(4)
Profenofos 40 + Fepropathrin 2.5% EC	Apr'18	9(3)
Thiacloprid technical	Mar'17	9(4)
Fepropathrin 10% EC	Apr'18	9(4)
Gibberelic acid 0.001%	Apr'17	9(4)
Glyphosate 41% + Oxyfluorfen 2.5% SC	Nov'17	9(4)

Exhibit 21: List of EC	C products	where regis	tration pending
Name of product	Application	Application Submission	Crops
ZnP 40% P	Rodenticide	Apr'16	Filed rodent
Paclobutrazole 40% SC	Plant growth regulator	May'16	Pigeonpea
Tribase copper 34.5%, SC	Fungicide	May'18 / Sep'18	Chilli & Cucumber
Pyriproxyfen 10% EC	Insecticide	Jan'18	Cotton & Chilli
Pyridalyl 10% EC	Insecticide	Jan'18	Cotton, Okra & Cabbage
Paclobutrazole 40% SC	Plant growth regulator	Apr'18 / Nov'18	Soybean
Tebuconazole 10 + Sulphur 65% WG	Fungicide	Sep'18	Mango
Profenofos 40 + Fenpyroximate 2.5 EC	Insecticide	May'18 / Sept'18	Brinjal

Source: Company, ICICI Direct Research

Source: Company, ICICI Direct Research

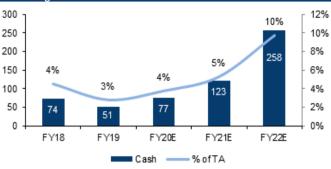
Strong FCF with zero leverage makes it one of the safest bets in this turbulent phase

SCI has higher inventory days compared to ECC given that the former imports majority of inventories, thus, leading to higher working capital. We expect captive consumption to increase, going ahead, largely due to ECC's technical expertise in manufacturing actives. This should lower the working capital requirement and improve cash conversion cycle for the group. Even if the merged entity's cash conversion cycle remains at 35% of sales with around ₹ 40 crore capex every year and 10% CAGR revenue growth with 15% OPM, the group is expected to at least generate FCF to the tune of 2-3% of sales every year. With liquid cash & investment to the tune of ₹ 160 crore as in H1FY20 and almost zero leverage, the company can expand liquid cash by at least by around ₹ 50 crore every year. This should help it to either expand organic capacity or small inorganic acquisition through internal accruals. We believe that since plans are under way to improve the specialty business revenue contribution, one can expect an expansion in operational performance going ahead. All this should help earnings to post higher growth compared to revenue for the medium to long term.



Source: Company, ICICI Direct Research

Exhibit 23: Cash flows likely to improve along with cash as percentage of TA



Key risks and concerns

Ban on Glyphosate use to impact outlook for company

Glyphosate constitutes ~15% of overall revenue. Many governments have been arguing that since glyphosate is carcinogenic, hence it should be banned. Any such action can impact the outlook of the company in the medium term until other products in its portfolio become successful.

Disruption in technical availability from China to impact supply chain

SCI imports around 35% of its raw material requirements from China while the rest is from other countries. The domestic agrochemical industry witnessed challenges in procurement of key inputs in the past, leading to price increase, thereby impacting gross margins. Any such scenario can impact the future performance of the company.

Valuation and outlook

SCC Japan merged ECC with SCI with a view to becoming the largest crop protection chemical company in India. Since both players are competent in different crops along with reach in distribution channel across different geographies, we expect the group to witness revenue synergies, going ahead. Apart from this, a few 9(3) products have been launched since 2017, which should be in a growth phase, going ahead. Hence, this is expected to improve the outlook of the specialty product portfolio. Moreover, we expect the animal nutrition business along with CRAMS opportunity to change the business mix in the medium to long term. In turn, this could translate into an improvement in the operational performance. Further, ECC's expertise in active manufacturing should benefit SCI given the latter largely depends on imports of key molecules. Thus, a reduction in import and likely improvement in captive consumption should aid gross margins and, thereby, OPM. Given that no major capex is lined up in the coming future, the company should like to generate decent FCF in the years to come.

We value the company at 40x FY22E PER and arrive a target price of ₹ 280/share, with a potential upside of 19% from the CMP of ₹ 235.

Exhibit 24: V	'aluatio	on me	etric	(₹ cr	ore)																				
Company	Revenue MCAP				EBI	TDA			Adj	. PAT			RO	E			EV/E	BITDA			P/E				
Company	inpany WCAP	FY19	FY20E	FY21E	FY22E	FY19	FY20E	FY21E	FY22E	FY19	FY20E	FY21E	FY22E	FY19	FY20E	FY21E	FY22E	FY19	FY20E	FY21E	FY22E	FY19	FY20E	FY21E	FY22E
Sumitomo Chemical	11,717	2,212	2,412	2,668	2,989	264	340	390	451	166	242	292	346	15.8%	20.8%	21.7%	22.0%	24.4x	34.0x	29.5x	25.1x	70.0x	54.8x	39.7x	33.6x
Bayer Crop	19,765	2,686	3,416	3,784	4,222	375	628	743	858	238	488	576	680	13.0%	21.8%	22.1%	21.8%	48.6x	30.3x	25.6x	22.1x	62.1x	38.5x	32.7x	27.7x
UPL	27,544	21,837	34,718	37,506	40,697	3,801	7,219	8,182	9,110	1,898	2,478	3,177	3,802	12.2%	14.9%	17.3%	17.9%	11.5x	8.3x	7.4x	6.6x	14.6x	11.3x	9.0x	7.5x
Rallis India	4,064	1,984	2,299	2,594	2,906	244	295	354	421	155	200	236	275	12.5%	14.7%	15.4%	16.2%	15.8x	13.3x	11.1x	9.3x	26.3x	20.5x	17.7x	15.1x
Dhanuka Agri	2,028	1,006	1,118	1,218	1,328	146	168	192	215	113	134	152	172	17.7%	18.2%	18.0%	17.5%	13.3x	11.7x	10.2x	9.1x	17.5x	15.0x	13.3x	11.7x
Insecticides India	830	1,192	1,331	1,469	1,589	186	194	228	253	122	115	139	156	20.3%	15.7%	16.7%	16.0%	5.8x	5.9x	5.0x	4.5x	7.0x	7.4x	6.2x	5.5x

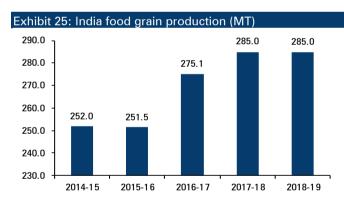
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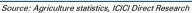
Industry Overview

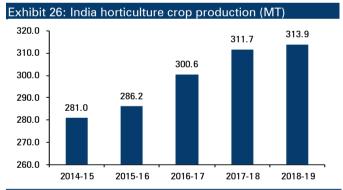
Present situation of agriculture in India and potential risk of food crisis ahead

Since 50% of India's land is arable with \sim 70% of rural households dependent on prospects of agri industry, agriculture in India plays a pivotal role in economic growth. It is estimated that arable land in India is \sim 170 million hectares while overall population of the country is \sim 1.39 billion. This provides per capita arable land of \sim 0.1 hectares. Since India is the second largest country in terms of population, the key challenge for the government is to maintain the food grain balance in the country. India manufactured \sim 285 million tonnes (MT) of food grain in FY19, which translates into per capita food availability of \sim 180-200 kg annually or \sim 500-550 gram/day vs. annual food availability in China and US of \sim 450 kg & \sim 1100 kg, respectively. This clearly signifies that despite India having the largest source of arable land, per capita food availability is lowest compared to major key nations. We believe the key reason for such a difference is low yield/hectare.

The average yield/hectare for wheat and rice in India is at 3.2 MT & 2.6 MT, respectively, against China of 5.4 MT & 4.9 MT and OECD countries of 5.4 MT & 4.9 MT, respectively. We believe since India's population is expected to increase to ~1.5 billion by 2031 and arable land would reduce by ~0.1 million hectares per year, the country has to find a solution to increase yield/hectare to meet incremental food demand from rising population in years to come. We believe usage of agrochemical is one of the solutions to improve yield given that around 20-30% of domestic crop are wasted due to pest affect every year and thus, increasing consumption of agrochemicals should curb pest impact in the country and thereby improve yield/hectare. Further, agrochemical consumption in India is also lowest among large crop producing nations. Hence, even a marginal increase in usage can meaningfully improve the yield of farmland and could assist the government to achieve their milestone of doubling farm income in the years to come.

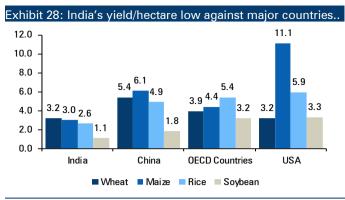






Source: Agriculture statistics, ICICI Direct Research

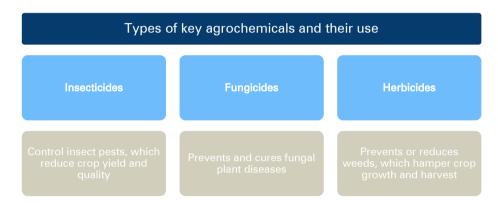
Exhibit 27	xhibit 27: India's position against world in terms of crop production volumes, area and yield/hectare											
		Ir	ndia			C	hina		World			
	Area (mn hectares)	Production (mn MT)	Yield/hectare (kg)	Production Rank	Area (mn hectares)	Production (mn MT)	Yield/hectare (kg)	Production Rank	Area (mn hectares)	Production (mn MT)	Yield/hectare (kg)	
Paddy	43.2	163.7	3,790	2	30.7	211.1	6,866	1	165.2	756.2	4,577	
Wheat	30.4	92.3	3,034	2	24.7	133.3	5,396	1	220.3	749.0	3,401	
Pulses	30.8	18.2	588	1	2.6	4.5	1,732	4	87.2	83.5	958	
Maize	9.9	25.9	2,616	7	44.2	263.6	5,967	2	195.4	1,100.2	5,632	
Groundnut	5.8	7.5	1,287	2	4.4	16.4	3,678	1	28.0	44.9	1,606	
Sugarcane	5.0	348.4	70,394	2	1.4	103.2	73,620	3	26.5	1,861.2	70,135	

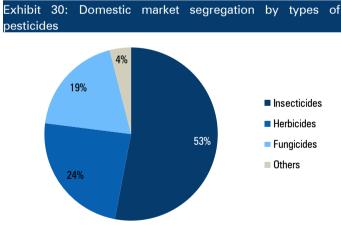


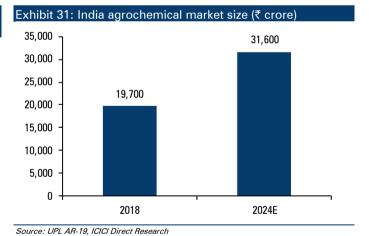
(in Kgs)	Rice	Wheat	Cereals	Pulses	Food grain
1991	80.9	60.0	171.0	15.2	186.2
2001	69.5	49.6	141.0	10.9	151.9
2011	66.3	59.7	149.9	15.7	170.9
2015	67.9	61.3	153.8	16.0	169.8
2016	67.2	72.9	162.0	15.7	177.7
2017	66.8	66.7	158.4	20.0	178.4
2018	69.0	64.4	160.0	20.4	180.3

Types of agrochemicals and India's agrochemical market size

The global agrochemical market size was at \$57.5 billion in 2018 and is expected to reach \$66.7 billion by 2023 (CAGR of 3.1%). On the other hand, India's agrochemical market size was around ₹ 19,700 crore in 2018 and is expected to grow at 8% CAGR in the next three to four years to ₹ 31,600 crore (India's market share in global agrochemicals to expand from ~5% to \sim 7%). We expect growth to be largely driven by horticulture crop production. Further, we also expect that since increase in the food demand can be met through modern farm system and increase in the usage of balance fertiliser & agrochemicals, it is feasible for the country to adopt the latter option given it is more cost effective. Moreover, usage of agrochemical in India is at a mere 0.6 kg/hectare against 7 kg in the US & 13 kg in China. Hence, the balance increase in the consumption of crop protection into key crops, can place India as the world's largest crop producing nation and also assist better farm income through higher exports. In terms of agrochemical market segregation, the agrochemical industry is largely divided among three key segments. (a) insecticide (b) herbicide and (c) fungicide. Since Kharif is the largest agri season (~60% of food grain production) in India, insecticide has major market (~53%) in crop protection followed by herbicide and fungicide.





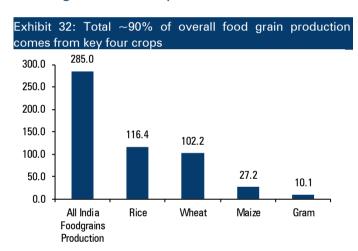


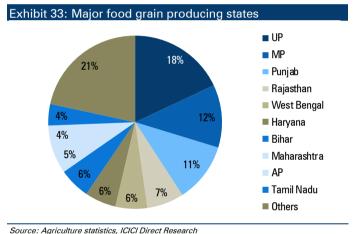
Key crops in Kharif, Rabi season; major agrochemical consuming states

Of the overall food grain production of ~285 MT last year, around 60% contribution came from Kharif crops of which rice, maize, soybean, cotton and sugarcane are prominent crops. The corresponding crops for Rabi are wheat and gram. The above-mentioned key seasonal crops are estimated to constitute ~80% share in the food grain each season. Hence, they remain the targeted crops for the domestic agrochemical market. Since these crops are mostly produced in states like Maharashtra, Uttar Pradesh, Punjab, Gujarat, Madhya Pradesh and West Bengal, among others, these states are key centres for any domestic agrochemical company.

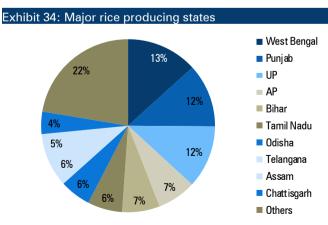
Further, horticulture crops have been outpacing food grain production in recent years owing to a rise in per capita income leading to a change in dietary patterns. Further, since horticulture crops are short cycle crops and farmers can also grow them in small sized arable land, the country witnessed bumper production in the last few years. We expect horticulture crops to maintain the same growth momentum and, thus, provide decent visibility for domestic crop protection chemicals. It is estimated that overall arable land for horticulture crops was at 25.7 million hectares of which fruits & vegetable together have 90% share.

India agriculture story

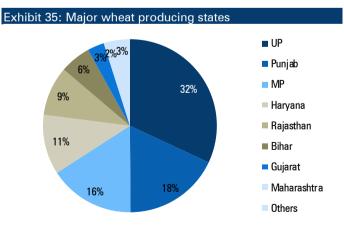




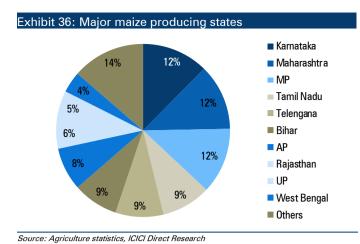
Source: Agriculture Statistics, ICICI Direct Research



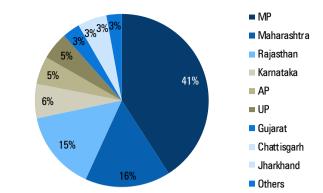
Source: Agriculture statistics, ICICI Direct Research



Source: Agriculture statistics, ICICI Direct Research







Source: Agriculture statistics, ICICI Direct Research

Exhibit 38: Other key crops such as soybean, cotton, sugarcane producing states.. Sovbean Sugarcane % to % to % to Yield/ Yield/ Yield/ Production overall Area (mn Production overall Production overall Area (mn Area (mn hectare hectare hectare (mn MT) (mn MT) hectares) hectares) (mn MT) hectares) crop crop crop (kg) (kg) (kg) production oduction production 1,013 1.556 83.1 92.367 Maharashtra 3.8 3.9 35.4% 4.2 6.6 18.8% 0.9 29.2% UP NM NM NM NM NM NM NM NM 22 177.1 79,399 62.2% NM NM NM NM 0.3 1.3 4,414 3.7% 0.1 8.0 80,200 2.8% Puniab Telangana 0.2 0.3 1,667 2.3% 1.9 4.8 2,500 13.6% 0.0 2.6 64,000 0.9% Harvana NM NM NM NM 0.7 1.6 2,433 4.7% 0.1 9.6 87,545 3.4% West Bengal NM 0.2 0.1 800 1.1% 2.6 12.6 4,824 36.2% 0.2 12.1 66,944 4.2% Gujarat MP 5.0 5.3 1,062 48.5% 0.6 1.9 3,117 5.4% 0.1 5.4 54,300 1.9% NM Rajasthan 0.9 1.1 1,202 9.7% 0.6 1.9 NM NM NM NM NM NM NM 0.6 0.1 8 N 79,500 2.8% AΡ NM NM 2.0 3.188 5.8% Tamil Nadu NM NM NM NM NM NM NM NM 0.2 16.5 91,889 5.8% 100.0% 1,049 100.0% 4.7 376.9 79,683 100.0% All India 10.5 11.0 12.4 34.9 2,807

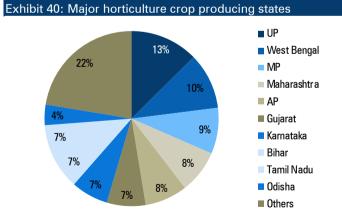
Source: Agriculture statistics, ICICI Direct Research

Exhibit 39: F&V hold 90% share in all India horticulture crops 350.0 313.9 311.7 300.6 286.2 281.0 300.0 250.0 185.9 184.4 200.0 169.1 166.5 162.9 150.0 98.6 92.9 100.0 50.0 0.0 2014-15 2015-16 2016-17 2017-18 2018-19

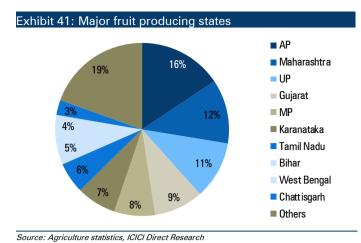
Vegetables

Source: Agriculture statistics, ICICI Direct Research

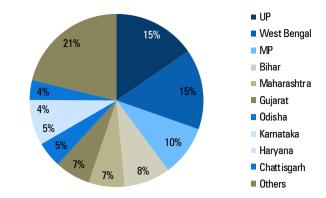
■ All India Horticulture crops ■ Fruits



Source: Agriculture statistics, ICICI Direct Research







Source: Agriculture statistics, ICICI Direct Research

It is estimated that of the overall domestic crop protection consumption, Maharashtra, UP, Punjab, Telangana and Haryana together constitute $\sim\!62\%$ share in tonnage terms. This can also be ascertained from the fact that dealers/distributors in those regions represent more than 40% of overall domestic point of sales (PoS). We believe despite states such as MP being key producers of pulses, they have been consuming less crop protection vs. major states in the country. Since the country is dependent on imports of key pulses, thus increase in usage of pesticides/hectare in MP is expected to play a pivotal role to curb pulses imports and, thereby, improve domestic farm income.

Exhibit 43: Co	nsumptio	n of pesti	cides stat	e wise (in	MT)
States/UTs	2014-15	2015-16	2016-17	2017-18	2018-19
Maharashtra	8663	11665	13496	15568	11746
Uttar Pradesh	9736	10457	10614	10824	11049
Punjab	5689	5743	5843	5835	5543
Telangana	2806	993	3436	4866	4894
Haryana	4070	4100	4050	4025	4015
West Bengal	3060	3712	2624	2982	3190
Rajasthan	2694	2475	2269	2307	2290
Tamil Nadu	2096	2096	2092	1929	1901
Chhattisgarh	1589	1625	1660	1685	1770
Andhra Pradesh	4050	2713	2015	1738	1689
Orissa	1278	994	1050	1633	1609
Gujarat	1730	1980	1713	1692	1608
Karnataka	1793	1434	1288	1502	1524
Madhya Pradesh	696	732	694	502	540
Others	6,318	6,001	5,791	6,318	6,302
All India	56.268	56.720	58.634	63.406	59.670

Source: Industry, ICICI Direct Research

			Distribut	ion Points		
State/UTs	State Deptt. of	Coperatives / Agros	Other Institutions	Private T		Total
	Agriculture	/ Ayrus	IIISUUUUIIS	Distributors	Dealers	
Maharashtra	16	366			34353	34735
Uttar Pradesh	884	219	1829	2055	29575	34562
Gujarat		2821		1173	14968	18962
Rajasthan		1622		214	14615	16451
Madhya Pradesh		4526		11400		15926
West Bengal		1076			13665	14741
Andhra Pradesh		554	3415	8454		12423
Punjab	283	1097	10	390	10003	11783
Haryana		801			10839	11640
Karnataka		142		9436		9578
Tamil Nadu	885			211	7846	8942
Telanagana		635			7878	8513
Chattisgarh		155		4478		4633
Others .	1719	632	5	4144	13342	19842
All India	3787	14646	5259	41955	157084	222731

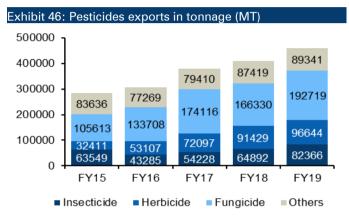
Key technical consumption in country

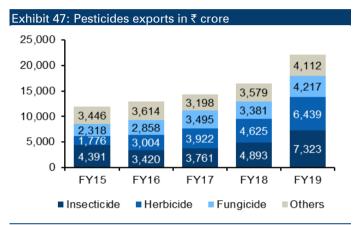
Of the arable land of ~170 million hectares, India consumed around 23,730 MT of chemical pesticides in FY19. This translates into per hectare pesticide consumption of ~0.15 kg. Further, of the overall technical consumption, insecticide remained the key segment with ~42% share followed by fungicide of ~39% and herbicide of ~18%. Further, we tried to envisage the key technicals among each types of agrochemical. We found that top five technicals in insecticide have ~40% share while the same for fungicide and herbicide remained at ~70-80%. The key technicals in insecticides remain as Chlorpyriphos, Phorate, Malathion, Quinalphos to name a few, while the same for herbicide and fungicide was 2, 4-D Di-Chlorophenoxy Acetic Acid, Glyphosate, Butachlor etc. & Mancozeb, Carbendazim, respectively. Above key technicals are used for crops like rice, cotton and a few others. However we believe major use goes into aforementioned crops given that these are key Kharif crops and require more spray of pesticides. It is estimated that in India, both rice and cotton together hold 45-50% share in the domestic pesticide industry.

xhibit 45: All-India pe	sticides corisu	Πρασπ	Daseu OI	rtypes (III IVI I)			% of overall FY19	% of FY19 al
Pesticides	Туре	FY15	FY16	FY17	FY18	FY19	CAGR FY15-19	pesticides consumption	India pesticid
Chlorpyriphos	Insecticides	471	461	1,081	478	1,106	24%	12%	5%
Phorate	Insecticides	443	455	827	480	724	13%	8%	3%
Malathion	Insecticides	520	656	949	103	656	6%	7%	3%
Fipronil	Insecticides	381	398	602	131	548	10%	6%	2%
Quinalphos	Insecticides	499	521	884	242	510	1%	5%	2%
Lamda-cyhalothrin	Insecticides	79	86	162	66	471	56%	5%	2%
Fenvalerate	Insecticides	183	186	493	57	467	26%	5%	2%
Profenophos	Insecticides	239	321	375	300	402	14%	4%	2%
Buprofezin	Insecticides	10	13	70	37	392	150%	4%	2%
Cartap Hydrochloride	Insecticides	293	259	311	208	369	6%	4%	2%
Diclorvos	Insecticides	380	378	613	287	344	-2%	4%	2%
Acephate	Insecticides	290	288	312	169	331	3%	3%	1%
Dimethoate	Insecticides	187	171	369	92	324	15%	3%	1%
midachloprid	Insecticides	256	282	382	135	309	5%	3%	1%
Cypermethrin	Insecticides	194	249	645	176	309	12%	3%	1%
Others	Insecticides	2,316	2,397	3,468	982	2,217	-1%	23%	10%
All India Insecticides		6,740	7,121	11,543	3,945	9,478	9%	100%	42%
Sulphur	Fungicides	1,548	1,608	1,618	3,774	3,222	20%	36%	14%
Mancozeb	Fungicides	2,131	2,565	3,040	3,257	2,793	7%	31%	12%
Carbendazim	Fungicides	556	581	704	278	669	5%	7%	3%
Copper Oxychloride	Fungicides	334	387	501	167	333	0%	4%	1%
Propineb	Fungicides	68	142	181	248	330	48%	4%	1%
Copper Sulphate	Fungicides	247	345	316	208	150	-12%	2%	1%
Zineb	Fungicides	341	383	253	102	142	-20%	2%	1%
Captan	Fungicides	52	62	148	108	141	28%	2%	1%
Hexaconazole	Fungicides	116	147	231	30	128	2%	1%	1%
Ziram	Fungicides	88	117	147	82	115	7%	1%	1%
Dodine	Fungicides	76	87	119	151	114	11%	1%	1%
Thiophanate-Methyl	Fungicides	52	54	66	51	100	18%	1%	0%
Propiconazole	Fungicides	36	95	165	49	91	26%	1%	0%
Thiram	Fungicides	265	259	193	38	84	-25%	1%	0%
Others	Fungicides	413	567	1,107	535	554	8%	6%	2%
All India Fungicides	•	6,323	7,400	8,789	9,079	8,962	9%	100%	40%
2,4-D Di-Chlorophenoxy Acetic Acid	Herbicide	798	796	789		872	2%	22%	4%
Glyphosate	Herbicide	718	529	479	654	680	-1%	17%	3%
Butachlor	Herbicide	994	783	813	343	565	-13%	14%	3%
Atrazine	Herbicide	229	282	251	302	387	14%	10%	2%
Pretilachlor	Herbicide	278	352	360	132	277	0%	7%	1%
soproturon	Herbicide	527	114	293	12	174	-24%	4%	1%
Anilophos	Herbicide	81	92	190	14	160	18%	4%	1%
Pendimethalin	Herbicide	201	140	217	152	138	-9%	3%	1%
Chlodinafop-Propargyl	Herbicide	55	108	174	67	134	25%	3%	1%
Paraquat Dichloride	Herbicide	146	77	66	53	107	-7%	3%	0%
Metribuzin	Herbicide	97	91	153	67	107	3%	3%	0%
Others	Herbicide	352	179	289	1,173	399	3%	10%	2%
All India Herbicide	Herbicide	4,476	3,543	4,075	2,970	3,998	-3%	100%	18%

India pesticide industry gaining export share from China environmental concern

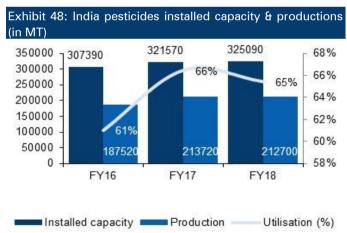
India produced pesticide technicals to the tune of 216,703 MT in FY19 while imports remained at 116,595 MT (₹ ~9300 crore) and exports of 461,070 MT (₹ 22,100 crore) for the same period. Pesticide exports have been growing at 13% CAGR in tonnage terms while the same in value terms remained at 17% CAGR owing to value added technicals. The world has already seen two epidemics in last two decade emerging from China along with environmental concerns in the country recently. Hence, it is evident that global players would try to find a second alternative manufacturing source such as India to de-risk itself from any supply side challenges. We believe since average plant utilisation of technicals in the country remains at ~70%, domestic agrochem players are poised to maintain same growth momentum, going ahead.



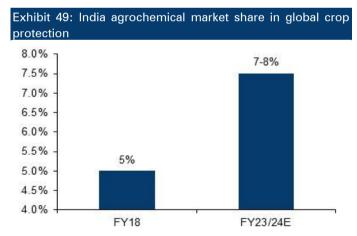


Source: Industry, ICICI Direct Research

Source: Industry, ICICI Direct Research



Source: Industry, ICICI Direct Research



Financial Summary

Exhibit 50: Profit & Loss statement					(₹ crore)		
Year end March	FY18	FY19	FY20E	FY21E	FY22E		
Total Operating Income	1,912.9	2,211.7	2,411.7	2,668.2	2,989.3		
Growth (%)	-	15.6	9.0	10.6	12.0		
Raw Material Expenses	1,238.7	1,459.0	1,606.2	1,771.7	1,972.9		
Employee Cost	147.5	161.5	168.8	181.4	200.3		
Other Expenses	309.6	327.7	296.6	325.5	364.7		
Total Operating Expenditure	1,695.8	1,948.2	2,071.6	2,278.7	2,537.9		
EBITDA	217.1	263.5	340.0	389.6	451.4		
Growth (%)	<u>-</u>	21.4	29.0	14.6	15.9		
Other Income	30.5	27.8	28.8	37.2	47.7		
Depreciation	23.7	27.8	31.3	34.5	37.7		
Net Interest Exp.	2.8	3.7	5.2	2.8	0.0		
Other exceptional items	0.0	0.0	-29.7	0.0	0.0		
PBT	221.0	259.8	302.6	389.5	461.3		
Total Tax	75.8	94.0	90.8	97.4	115.3		
PAT	145.1	165.8	211.8	292.1	346.0		
Adjusted PAT	145.1	165.8	241.5	292.1	346.0		
Growth (%)	-	14.2	45.7	20.9	18.4		
Adjusted EPS (₹)	2.9	3.4	4.9	5.9	7.0		

Source: Company, ICICI Direct Research

Exhibit 51: Cash flow statement (₹ crore)						
Year end March	FY18	FY19	FY20E	FY21E	FY22E	
PBT & Extraordinary	221.0	259.8	302.6	389.5	461.3	
Add: Depreciation	23.7	27.8	31.3	34.5	37.7	
After other adjustments	20.7					
(Inc) / Dec in Working Capital	-100.0	-112.7	-79.1	-115.7	-87.1	
Taxes	-83.1	-88.1	-90.8	-97.4	-115.3	
Others	-14.1	-9.2	5.2	2.8	0.0	
CF from operating activities	47.4	77.7	169.2	213.7	296.6	
Purchase of Fixed Assets	-43.4	-39.7	-40.0	-40.0	-40.0	
Others	3.8	4.4	0.0	0.0	0.0	
CF from investing activities	-39.7	-35.3	-40.0	-40.0	-40.0	
Issue/(Buy back) of Equity	0.0	0.0	0.0	0.0	0.0	
Inc/(dec) in loan funds	10.2	9.6	3.0	-22.7	0.0	
Dividned paid & dividend tax	-0.1	-59.0	-101.7	-102.2	-121.1	
Others	-2.8	-16.1	-5.2	-2.8	0.0	
CF from financing activities	7.2	-65.5	-103.9	-127.7	-121.1	
Net cash flow	15.0	-23.1	25.3	46.0	135.5	
Opening cash	59.4	74.3	51.4	76.6	122.6	
Closing cash	74.3	51.4	76.6	122.6	258.1	

Source: Company, ICICI Direct Research

Exhibit 52: Balance Sheet S	(₹ crore)				
Year end March	FY18	FY19	FY20E	FY21E	FY22E
Liabilities					
Equity Capital	274.6	274.6	494.0	494.0	494.0
Reserves & Surplus	679.4	773.8	664.5	854.4	1,079.3
Total Shareholders Funds	954.0	1,048.4	1,158.5	1,348.4	1,573.3
Minority Interest	0.0	0.0	0.0	0.0	0.0
Long Term Borrowings	0.0	0.0	0.0	0.0	0.0
Net Deferred Tax liability	26.4	26.6	26.6	26.6	26.6
Other long term liabilities	0.0	0.0	0.0	0.0	0.0
Long term provisions	12.7	15.6	17.1	18.9	21.1
Current Liabilities and Provisions					
Short term borrowings	10.1	19.7	22.7	0.0	0.0
Trade Payables	527.3	596.8	660.7	745.6	819.0
Other Current Liabilities	125.6	150.3	165.2	182.8	204.7
Short Term Provisions	2.3	2.6	2.8	3.1	3.5
Total Current Liabilities	665.3	769.4	851.5	931.6	1,027.3
Total Liabilities	1,658.4	1,860.0	2,053.6	2,325.4	2,648.2
Assets					
Net Block	266.7	279.3	291.2	296.7	299.0
Capital Work in Progress	4.5	3.2	0.0	0.0	0.0
Intangible assets under devl.	4.3	4.9	4.9	4.9	4.9
Goodwill on Consolidation	0.0	0.0	0.0	0.0	0.0
Non-current investments	0.1	0.1	0.1	0.1	0.1
Deferred tax assets	24.8	18.8	18.8	18.8	18.8
Long term loans and advances	7.3	7.8	8.6	9.5	10.6
Other Non Current Assets	5.1	4.4	4.8	5.3	5.9
Current Assets, Loans & Advances					
Current Investments	0.0	0.0	0.0	0.0	0.0
Inventories	609.3	680.6	759.8	862.6	941.8
Sundry Debtors	551.8	671.0	740.0	840.7	925.5
Cash and Bank	74.3	51.4	76.6	122.6	258.1
Loans and Advances	3.7	3.3	3.3	3.3	3.3
Other Current assets	106.7	135.1	145.4	160.8	180.2
Current Assets	1.345.7	1.541.4	1.725.2	1.990.1	2.308.9
Current Assets	1,343.7	1,341.4			

Source: Company, ICICI Direct Research

Exhibit 53: Key Ratios					
Year end March	FY18	FY19	FY20E	FY21E	FY22E
Per share data (₹)					
Adj. EPS	2.9	3.4	4.3	5.9	7.0
Adj. Cash EPS	3.8	4.4	4.9	6.6	7.8
BV	34.7	38.2	23.5	27.3	31.8
DPS	0.0	0.0	1.7	2.1	2.5
Operating Ratios (%)					
Gross Margin (%)	35.2	34.0	33.4	33.6	34.0
EBITDA Margin (%)	11.3	11.9	14.1	14.6	15.1
PAT Margin (%)	7.6	7.5	10.0	10.9	11.6
Debtor Days	105	111	112	115	113
Inventory Days	116	112	115	118	115
Creditor Days	101	98	100	102	100
Cash Conversion Cycle	121	125	127	131	128
Return Ratios (%)					
Return on Assets (%)	8.8	8.9	11.8	12.6	13.1
RoCE (%)	22.5	24.2	28.1	28.1	28.5
RoE (%)	15.2	15.8	20.8	21.7	22.0
Solvency					
Total Debt / Equity	0.0	0.0	0.0	0.0	0.0
Interest Coverage	78.9	72.2	65.1	141.0	NM
Current Ratio	2.0	2.0	2.0	2.1	2.2
Quick Ratio	1.1	1.1	1.1	1.2	1.3
Valuation Ratios (x)					
EV/EBITDA	29.4	24.4	34.0	29.5	25.1
P/E	80.0	70.0	54.8	39.7	33.6
P/B	6.8	6.2	10.0	8.6	7.4
EV/Sales	3.3	2.9	4.8	4.3	3.8

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Reduce: -15% to -5%;

Sell: <-15%



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