The Churn - Accelerated

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A Deep Slowdown

YOY Growth	F18	F19	F19 Q1	F19 Q2	F19 Q3	F19 Q4	F20 Apr-July	M&M Growth
PV	7.9%	2.7%	19.9%	-3.6%	-0.8%	-2.0%	-21.6%	- 5.0%
CV Total	20.0%	17.6%	51.6%	27.5%	6.7%	0.7%	-13.6%	- 11.4%
3W	24.2%	10.3%	54.0%	24.6%	-6.8%	-8.7%	-7.4%	- 7.1%
2W	14.8%	4.9%	15.9%	4.9%	8.4%	-9.0%	-12.9%	-
Tractors	21.7%	8.0%	23.9%	- 2.6%	19.2%	- 8.4%	- 14.2%	- 14.2%



Reasons for the Slowdown

General Sentiment	Financing	Transaction Cost
 Economic slowdown Poor cash flow in economy Govt. rural spending Rural income Weak Monsoon Sensex fall 	 Tight credit conditions arising from stress in NBFC sector, which has a significant share in wholesale, retail financing Rate cuts not passed on 	 Commodity prices Regulatory impact on cost Road tax, registration, insurance, TCS

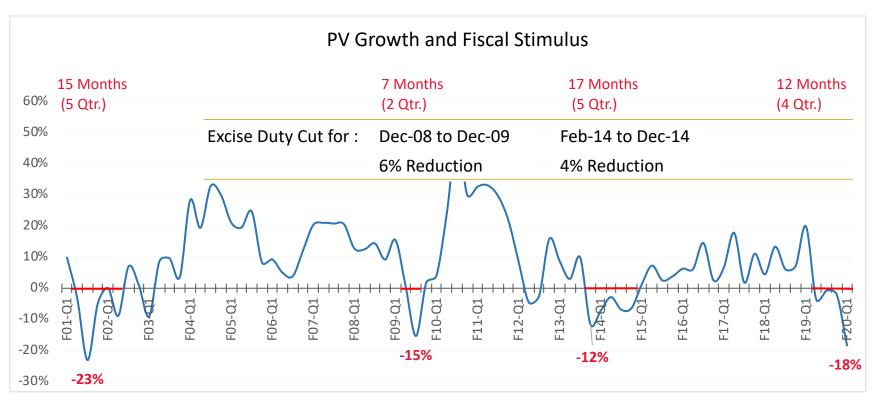


Recommended Measures

- 1. Improve liquidity and cost of financing
- 2. Review of regulations: Impact Vs Cost
- 3. Restart rural spending
- 4. Roll back of increases in the road tax by states post GST
- 5. Waiver on TDS for vehicle purchases above Rs. 10 lac price
- 6. Temporary reduction in GST
- 7. Vehicle scrappage policy



PV Growth Q1F01 to Q1F20





Mid-Term
Industry Drivers

- 1. Rural and infra thrust will continue
- 2. Agri Industry will transform
- 3. EVs will happen
- 4. ICE is far from dead
- 5. Shared mobility will grow
- 6. Auto industry dynamics will change
- 7. Regulatory environment will get aggressive and surprises will happen
- 8. Protectionism will grow, globally



EVs will happen

- Why?
 - Clean air
 - Energy security
- How?
 - Advancement in battery technology
 - Localisation of EV components
 - Charging infrastructure



Demand Side Incentives and Enablers

- 5% GST on EVs
- FAME II incentives
- Income tax benefits for EV owners
- State level EV policies giving additional subsidy
- No permit requirement for EVs
- Road tax waiver
- Green number plates
- Electric buses sanctioned in different states



Focus on Make in India

- Phased Manufacturing Program (PMP)
- Support for manufacturing land, utilities, tax rebates



Focus for charging infrastructure

- Government has invited bids for setting up charging infrastructure for 1,000 charging stations with 6,000 chargers
 - 70% funding for public chargers
- Government will fund part of the cost of setting up the above infrastructure using the Rs. 1,000 cr. earmarked for charging infrastructure as part of FAME II



Evolving EV landscape in India

- 4W EV application in fleet application
- 3W EV application profitable even today
- ICE and EV technologies need to co-exist



Shared Mobility will Grow

Established players







Emerging players





Fleet operators



Niche players





Agri industry will transform

- Agri productivity
- Shorter crop cycles
- Risk mitigation



Indian Tractor Industry: ~8% growth (Mid to Long term)

- 7mn* tractor parc is only ~ 43% of total tractor requirement of ~16mn*
- Consistent improvement in Irrigation with increasing investments by Gol
 - High direct correlation between tractor sales and irrigation intensity
- Rapid increase in horticulture
 - Current mechanization in horticulture is 50% lower than paddy & wheat
- Shortage of farm labour & rising cost of labour

^{*} Mahindra Estimate



India is Tractorized, not Mechanized

	India	Global
Tractor Industry	USD 5.6 bn	USD 60 bn
Farm Machinery Industry	USD 1 bn*	USD 100 bn

^{*} Organised Sector



Farm Machinery from Across the Globe



CoE Rice Machinery



Walk Behind Rice Transplanter



Self Propelled Rice Transplanter

HISARLAR

CoE
Tillage & Hay Machinery



Silage Baler



Square Baler



Total Mix Ration – TMR Wagon



CoE Harvesting Machinery



Harvesters*



CoE Spraying Machinery



Range of Mist Sprayers



CoE Potato Value Chain



Precision Potato Planter



CoE Horticulture Machinery



Precision Horticulture Planter



Emerging Technologies in Agriculture

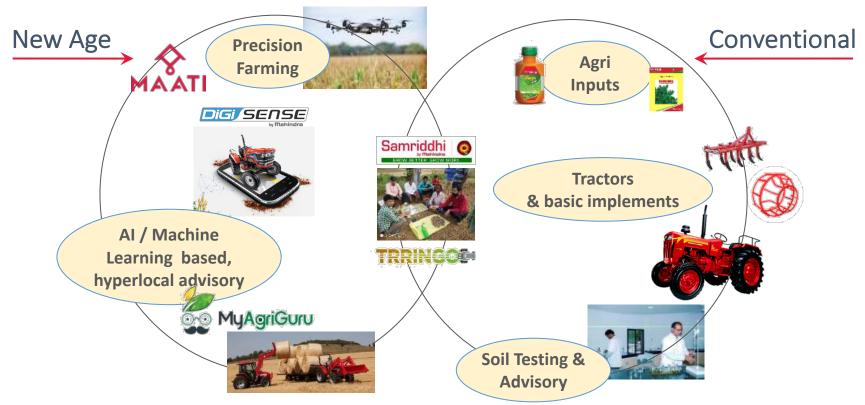


Right Time + Right Location + Right Quantity

\$240 Bn Global Addressable Market for Precision Farming



FaaS: Integrated solutions for the farmer





The Churn is Accelerating

- Electric Vehicles
 - Right solution for intracity mobility
 - Need a phased plan for adoption
 - Will coexist with ICE
- Shared Mobility
 - Will create new value propositions in mobility space
- Agri industry
 - Tractor industry will grow at ~ 8% in mid term
 - Mechanization and Technology integrated solutions will create new value propositions

