The coming budget could have a plethora of measures for the agriculture sector. We believe, the following measures could be emulated for the long term benefits for the sector.

**First**, Financial institutions and Government can lend their helping hands to the farmers by providing market support starting from cultivation to sales. In this context, the Supplyco model as currently prevalent in Kerala could be effectively remodelled so as to transfer maximum benefits to consumers and farmers in the entire crop to cash cycle.

**Second**, capital formation in agriculture has significantly stagnated. A trend reversal will achieve the objective of doubling farm income by 2022. This can be achieved by providing an incentive to agri term loans for investment purpose through an enabling mechanism of either interest subvention or a credit guarantee fund.

**Third**, Fasal Bima Yojana /PMFBY currently cover mainly cover 3 types of crops, namely food crops (cereals, Millets, & Pulses), Oilseeds, annual commercial/horticulture crops. These crops cover only 30% of the total crop loans given by banks. Government should cover all types of crops under PMFBY, which will help banks to manage the risks.

**Fourth**, the Government must make a statement of intent in budget to increase the income support from Rs 6000 to Rs 8000 over a period of 5 years. This will provide a feel good factor and boost consumer sentiments. Our calculations suggest that even if we progressively increase the income support from, say, Rs 6,000 to Rs 8,000 in the terminal year (inflation indexed) and reduce the fiscal deficit to 3% in 2024, the additional cost for 14 crore farmers over the baseline estimates could be Rs 12,000 crore per annum, same as the revised estimates if only Rs 6,000 was provided to all 14 crore during the next five years. In our estimates, as growth comes back to the system, fiscal deficit could actually reduce to 3.0% of GDP in FY24!

**Fifth**, a strong push to Farmer Producer Organisations to reward the farmers in terms of an adequate remuneration for their produce!
FISCAL ARITHMETIC OF INCOME SUPPORT

We believe that income support is the most crucial scheme in order to improve the income and subsistence level of 14 crore farmers in the country (as reforms take time to percolate). Income support to the farmers should be provide in higher magnitude for a prolonged period (at least for five years).

The Government decision to now extend the PM-KISAN scheme to all farmers is a positive step. We also did some rough estimates to find out the fiscal cost of such an ambitious programme over the next five years. Our calculations suggest that even if we progressively increase the income support from, say, Rs 6,000 to Rs 8,000 in the terminal year (inflation indexed) and reduce the fiscal deficit to 3 per cent in 2024 (with a nominal GDP growth of around 11.5 per cent), the additional cost for 14-crore farmers over the baseline estimates could be Rs 12,000 crore per annum, same as the revised estimates if only Rs 6,000 was provided to all 14 crore during the next five years. We need a definitive consumption push in rural areas. In our estimates, as growth comes back to the system, fiscal deficit could actually reduce to 3.00% of GDP in FY24 with income support as % of GDP also declining from 0.40% to 0.34%.

Market Support (PILOT FOR CEREALS & PULSES)

- **CULTIVATION**
  - Government to provide 20 % advance of Cost of Production (COP) ( In earnest of procurement)
  - Banks to finance rest 80% of COP
  - Farmers’ contribution through Land & Labour

- **CROP INSURANCE UNDER PMFBY**
  - Loss to farmers including inability to sow, crop damages etc. gets protected

- **HARVESTING**
  - Procurement by State Govt. Agency (SGA) at assured prices: less 10% of the crop advance extended
  - Bank to finance receivables against Procurement Receipts of the SGA (Agri Finance) for 90-150 days depending upon crop
  - Crop Loan gets liquidated at this stage

- **PROCESSING/GRADING**
  - SGA to process, grade, pack and Retail (Maveli stores of Kerala State Civil Supplies Corporation Model)
  - Retail outlets of the SGA either own or franchisee
  - Upon the goods reaching the retail point, receivable financing to be liquidated by the SGA

- **SALES THROUGH SGA RUN RETAIL OUTLETS**
  - Stores to be set up by the SGA
  - Bank can provide trade credit, finance fixed assets for the stores and working capital till sales to consumer (SME finance)
  - Conversion to Cash (SME credit gets repaid)

Source: SBI Research
CROP TO CASH CYCLE: A HYPOTHETICAL MODEL FOR FARMERS

- Financial institution and Government can lend their helping hands to the farmers by providing market support starting from cultivation to sales. We provide a simple example of such. For example, if we look at the cycle of cash flow, the net margin is very minimal. In the current case, we construct a hypothetical example for Tur Dal, where the net margin is coming out to be only Rs 3452 after excluding the cost from all stake holders.
- Generally, Crop to Cash conversion period for Kharif crops is 240-330 days (as Crop production takes 90-120 days, Procurement by State Government Agency (SGA); 45-60 days, Processing/Grading packaging; 45-60 days and Retailing through SGA outlets; 60-90 Days). Farmers will be financed by banks at crop production stage as well as against procurement receipt from SGA. After processing stage, this will get converted into SME/trade finance, till sales to the ultimate consumer.

APMC AND FARMER PRODUCER ORGANISATIONS (FPOS)

- Though the APMC Act 2003 was adopted by many states but it failed to transform the Agri-marketing structure in India. In APMC, a farmer has to pay a commission to the agents before selling his produce to the traders at the APMCs, which ranges between 3-7% and sometimes even higher. Besides the charges levied by APMC, commissioning agents charge commission fees on transactions between buyers and farmers.
- The farmers get 1/3rd of the retail market price or even less than this. There were efforts, which, were taken for instance in Maharashtra, which restrained agents from collecting commission from farmers and also allowed farmers to sell their produce to buyers within or outside APMC yards as per their choice for better realisation. However, the decision was taken back quite soon.
- So, there is a need to work on a long-term solution, which gets correct price to the farmers. Involvement of the FPOs having marketing channel can help in this. As the FPO intends to provide a marketing channel for the farmers so that they get remunerative price for their produce.

### Cash Flow (e.g. of Tur Dal)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cultivation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Production</td>
<td></td>
<td>26,130</td>
</tr>
<tr>
<td>Interest to Banks (7%)</td>
<td></td>
<td>1830</td>
</tr>
<tr>
<td>Insurance (2%)</td>
<td></td>
<td>522</td>
</tr>
<tr>
<td><strong>Harvesting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output (at MSP of Rs. 55/Kg and Yield at 7 Quintal Per Acre)</td>
<td></td>
<td>38,500</td>
</tr>
<tr>
<td>Less: Cost</td>
<td></td>
<td>28,482</td>
</tr>
<tr>
<td><strong>Processing, Storage &amp; Retailing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage (10%)</td>
<td></td>
<td>385</td>
</tr>
<tr>
<td>Freight Cost (5%)</td>
<td></td>
<td>193</td>
</tr>
<tr>
<td>Processing, Grading, Packaging, Transportation to Retail (10%)</td>
<td></td>
<td>385</td>
</tr>
<tr>
<td><strong>Retailing Through SGA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realisation</td>
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<td>51,000</td>
</tr>
<tr>
<td>Cost To SGA</td>
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<td>38,500</td>
</tr>
<tr>
<td>Processing, Storage &amp; Retailing Cost</td>
<td></td>
<td>963</td>
</tr>
<tr>
<td>Bank &amp; Finance Cost (12% For 6 Months)</td>
<td></td>
<td>2,310</td>
</tr>
<tr>
<td>Other Expenses (15%)</td>
<td></td>
<td>5,775</td>
</tr>
<tr>
<td><strong>Net Margin</strong></td>
<td></td>
<td>3,452</td>
</tr>
</tbody>
</table>

Source: SBI Research

### AGRI-EXPORTS

- Since 2013-14, many of these commodities lost out on competitiveness, due to a fall in global prices and uncertain domestic marketing and trade policies. Exports are restricted through the use of minimum export prices and bans.
- Government must develop efficient global value chains and liberalise land lease markets across all states. It should encourage contract farming on a medium- to long-term basis.

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