National Conference on Agriculture for Rabi Campaign, 2018-19

AGENDA NOTE

Government of India
Ministry of Agriculture and Farmers Welfare
Department of Agriculture, Cooperation and Farmers Welfare
Krishi Bhawan, New Delhi - 110001
www.agricoop.nic.in
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</tr>
</tbody>
</table>
PART-I: Pulses

1. **Background:**

1.1 Pulses are an important source of protein for human being. More than 80% of the pulses are grown in rainfed condition. India is one of the largest producers as well as consumers of pulses. Under NFSM, a number of initiatives have been taken to increase production of pulses like, intercropping of pulses with cereals, oilseeds and commercial crops, cultivation of pigeon pea pulses on farm bunds, additional demonstrations during rabi and summer, demonstrations of pulses under BGREI, laying of demonstrations through KVKs. In addition pulses are also promoted through another programme namely, Targeting Rice Fallow Area is for promotion of cultivation of pulses during rabi season in 6 Eastern States. The details of these two programmes are as under:

I- **National Food Security Mission-Pulses:**

National Food Security Mission-Pulses (NFSM-Pulses) is being implemented in 638 districts of 29 States of the country for increasing the production and productivity of food-grains crops through area expansion and productivity enhancement; restoring soil fertility and productivity; creating employment opportunities; and enhancing farm level economy.

2. **Interventions under programme:**

2.1 The interventions covered under NFSM are cluster demonstrations on improved package of practices, demonstrations on cropping system, Seed distribution/production of HYVs, Farm machineries/resources conservation machineries/tools, efficient water application tools, Plant protection measures, nutrients management/ soil ameliorants, cropping system based training of farmers etc.

3. **Strategies for increasing production:**

- Area expansion through cultivation of pulses as intercrop and pulses cultivation in the rice fallow areas in Eastern States and North Eastern States.
- Ensuring timely availability of bio-pesticides like NPV, Trichoderma and herbicides.
- Promoting, designing and development of efficient farm machineries like ridge planter, raised bed planter, weeder, pulse harvester, threshers, and zero-till drill.
- Promoting custom hiring centers for farm machineries.
- Strengthening of extension services by planning block demonstration and ensuring of supply of critical inputs like seeds, nutrients and plant protection chemicals.
- Improve supply of quality seeds by close monitoring of implementation of seed rolling plan.
- Advanced seed planning at State level crop-wise, variety-wise to improve availability of quality seeds.
- Educating farmers through soil health card to ensure balanced use of nutrients.
- Adoption of moisture conservation technologies through promotion of ridge planter, raised bed planter and sprinklers.
- Convergence with other schemes like RKVY, MNREGA, PMKSY in development of rain water harvesting structures such as farm ponds.
• Advanced forewarning and forecasting of weather conditions and pests situation.
• Promotion of sulphur as nutrient supplement.
• Controlling major pests like pod borer through effective pest monitoring, surveillance and management methods/techniques.
• Controlling diseases like wilt and yellow mosaic virus by seed treatment, promotion of resistant varieties and timely suitable measures.
• Implementation of development research projects through SAUs, ICAR and International Organizations like ICRISAT and ICARDA.
• Organization of Cluster Front line demonstrations on pulses through KVKs/SAUs.
• Distribution of seed minikits of newer varieties of pulses free of cost to farmers and subsidy on production of quality seed of pulses.
• Establishment of 150 seed hubs to create availability of quality seeds.
• Enhancing breeder seed production of pulses through ICAR institutes and State Agriculture Universities (SAUs).
• Procurement of pulses at Minimum Support Price (MSP) and also at higher prices to maintain buffer stock of pulses.

4. **New initiatives:**

4.1 The new initiatives taken for increasing production and productivity of pulses from 2016-17 onwards are as under:

• Breeder Seed production of pulses was introduced under NFSM-Pulses programme.
• 150 Seed Hubs are being implemented for increasing certified seeds of indigenous production of pulses in India through the Indian Institute of Pulses Research (IIPR), Kanpur and their centers.
• Supplying of Minikits of pulses seed varieties not older than 10 years free of the cost (100% share) to the farmers.
• In addition to State Governments, the ICAR/KVKs/SAUs also involve in conducting the demonstrations on improved latest package of practices of pulses.
• 15% allocation is earmarked for pulses under NFSM for production of quality seeds through State Governments.
• The government has decided to create a buffer stock of pulses to control fluctuation of prices of pulses. Procurement has already started.

II- **Targeting Rice Fallow Area (TRFA):**

Targeting Rice Fallow Area is for promotion of cultivation of pulses and oilseeds during rabi season in 6 Eastern States namely Assam, Bihar, Chhattisgarh, Jharkhand, Odisha and West Bengal. Various interventions like cluster demonstration on latest crop production technology, distribution of newly released varieties, INM & IPM techniques, water saving devices and farm implements/tools are being promoted to increase the production of these crops.

5. **Interventions and programme coverage:**

5.1 The TRFA was implemented in 15 districts of 6 States during 2016-17 and extended to 40 districts covering 4000 villages with a view to cover 15.00 lakh ha under pulses (12.00 lakh ha) and oilseeds (3.0 lakh ha) with support for cluster demonstrations, minikit distribution and training to the farmers etc. The additional area coverage resulted a
production of 9.04 lakh tonne of pulses and oilseeds as against the production target of 10.00 lakh tonne. Most of the rice fallows were covered under pea, lentil, black gram, green gram, chickpea, arhar and lathyrus. The oilseeds grown in rice fallows were mustard, sesame, sunflower, groundnut and linseed. The State-wise area coverage so far under TRFA is as under.

<table>
<thead>
<tr>
<th>Name of states</th>
<th>No. of Dist.</th>
<th>Actual Villages covered</th>
<th>Area under Pulses</th>
<th>Area under Oilseeds</th>
<th>Total area coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Target</td>
<td>Achiv.</td>
<td>Target</td>
</tr>
<tr>
<td>Assam</td>
<td>8</td>
<td>800</td>
<td>184</td>
<td>92.00</td>
<td>46</td>
</tr>
<tr>
<td>Bihar</td>
<td>5</td>
<td>380</td>
<td>24</td>
<td>75.49</td>
<td>6</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>5</td>
<td>427</td>
<td>280</td>
<td>448.86</td>
<td>70</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>4</td>
<td>378</td>
<td>24</td>
<td>17.65</td>
<td>6</td>
</tr>
<tr>
<td>Odisha</td>
<td>9</td>
<td>854</td>
<td>344</td>
<td>204.50</td>
<td>86</td>
</tr>
<tr>
<td>W. Bengal</td>
<td>12</td>
<td>900</td>
<td>344</td>
<td>75.00</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>3739</td>
<td>1200</td>
<td>913.50</td>
<td>300</td>
</tr>
</tbody>
</table>

6. Performance during 2017-18

6.1 Under the programme, the area coverage has increased and an additional production of 7.92 lakh tonne of pulses and 1.12 lakh tonne of oilseeds was obtained during 2017-18. The higher target of area coverage and production has been proposed during current year 2018-19.

6.2 The State-wise targeted area and production targets fixed under TRFA for the year 2017-18 is given below:

State-wise production of pulses and oilseeds under TRFA during 2017-18

<table>
<thead>
<tr>
<th>States</th>
<th>Pulses Production</th>
<th>Pulses Yield</th>
<th>Oilseeds Production</th>
<th>Oilseeds Yield</th>
<th>Total Production</th>
<th>Total Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assam</td>
<td>82524</td>
<td>897</td>
<td>10231</td>
<td>741</td>
<td>92755</td>
<td>877</td>
</tr>
<tr>
<td>Bihar</td>
<td>70964</td>
<td>940</td>
<td>9680</td>
<td>968</td>
<td>80644</td>
<td>943</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>447510</td>
<td>997</td>
<td>28777</td>
<td>577</td>
<td>476287</td>
<td>955</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>19044</td>
<td>1079</td>
<td>7290</td>
<td>648</td>
<td>26334</td>
<td>911</td>
</tr>
<tr>
<td>Odisha</td>
<td>107158</td>
<td>524</td>
<td>12271</td>
<td>908</td>
<td>119429</td>
<td>548</td>
</tr>
<tr>
<td>West Bengal</td>
<td>65100</td>
<td>65100</td>
<td>43726</td>
<td>718</td>
<td>108826</td>
<td>801</td>
</tr>
<tr>
<td>Total</td>
<td>792300</td>
<td>867</td>
<td>111975</td>
<td>703</td>
<td>904275</td>
<td>843</td>
</tr>
</tbody>
</table>


7.1 The programme will be implementation in Eastern India covering about 80% area of rice fallow is under pulses crops and remaining 20% under oilseeds crops during 2018-19. Total 50 districts in the States of Assam, Bihar, Chhattisgarh, Jharkhand, Odisha and West Bengal covering 5000 villages will be covered during 2018-19. The funds would be released to the States as per norms of NFSM -Pulses and NFSM- Oilseeds. It has been targeted to cover an area of 18.65 lakh ha under pulses and oilseeds which will contribute an additional production of 1.35 million tonne of pulses and oilseeds during 2018-19.
PART-II: Oilseeds

1. Background:

1.1 The demand and supply gap in edible oils has necessitated huge import accounting for 60 per cent of the country’s requirement (import 14.01 million tonnes; cost Rs. 73,048 crore during 2016-17). Despite notable performance of domestic oilseeds production of the nine annual crops (Compound Annual Growth Rate of 3.89%), it could not match the galloping rate of per capita demand (~6%) due to enhanced per capita consumption (19 kg oil per annum) driven by increase in population and enhanced per capita income.

1.2 In India, annual oilseeds are cultivated over 26.67 million hectares of area producing 30.06 million tonnes annually. Majority of the oilseeds are cultivated under rainfed ecosystem (70%). The area under oilseeds has experienced a deceleration in general, and this is due to their relative lower profitability against the competing crops like maize, cotton, chickpea etc., under the prevailing crop growing and marketing situations.

1.3 The total vegetable oil requirement in the country by 2022 has been estimated to be 33.20 million tonnes assuming per capita consumption of about 22 kg per person per annum form the level of 19 kg per person per annum during 2015-16. The production of nine annual oilseed crops (primary source) has been targeted at 45.64 million tonnes from which availability of vegetable oils would be about 13.69 million tonnes by 2022 as against the current annual output of 7.31 million tonnes. The estimated area, production and yield of annual oilseed crops by 2022 are given in Table below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Area (million ha)</th>
<th>Production (million tonnes)</th>
<th>Yield (kg/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-18 (4th Adv Est.)</td>
<td>24.65</td>
<td>31.31</td>
<td>1270</td>
</tr>
<tr>
<td>2018-19</td>
<td>28.50</td>
<td>38.00</td>
<td>1335</td>
</tr>
<tr>
<td>2019-20</td>
<td>29.41</td>
<td>40.50</td>
<td>1379</td>
</tr>
<tr>
<td>2020-21</td>
<td>30.30</td>
<td>43.10</td>
<td>1423</td>
</tr>
<tr>
<td>2021-22</td>
<td>31.20</td>
<td>45.65</td>
<td>1463</td>
</tr>
</tbody>
</table>

1.4 The vegetable oil availability from secondary sources viz. coconut, cotton seed, rice bran, solvent extracted oil (SEO) of tree & forest origin has been estimated at 5.22 million tonnes by 2022 from the present level of 3.58 million tonnes. Consequently the estimated vegetable oil availability (primary + secondary + oil palm) would be about 17.03 million tonnes indicating a possible reduction in imports to the tune of about 15% from the current level of 67% by 2022 and reduction of import burden to the extent of Rs. 15,000 crore.

2. Schemes under implementation:

2.1 National Mission on Oilseeds and Oil Palm (NMOOP) was implemented from 2014-15 to 2017-18 and is now merged with National Food Security Mission (NFSM) as NFSM (Oilseeds & Oil Palm) from 2018-19 and will continue upto 2020. The scheme is implemented in 26 States through State Departments of Agriculture & Horticulture, ICAR /SAUs /KVKs and Central Seed Agencies.

2.2 The scheme supports seed production, distribution, minikits and seed hubs to increase SRR. Large scale cluster demonstrations, Front Line Demonstrations (FLD), Cluster FLDs are conducted to demonstrate modern technologies/varieties including
beekeeping. Production inputs in the form of nutrients, machineries, equipments are provided in addition to capacity building of farmers and extension workers.

3. Strategies proposed

Besides the assistance provided under NFSM (OS&OP), there is need for special focus to increase oilseeds area and productivity in a time bound manner to achieve the production target set for 2022. In view of this the following strategies to increase area under oilseeds are suggested:

i. Intercropping of oilseeds in a large scale
ii. Oilseeds cultivation in non-traditional areas/seasons and states
iii. Extending TRFA scheme beyond six eastern states

3.1 Intercropping of oilseeds in a large way with other crops

3.1.1 Possible inter-cropping with major crops in different regions:
- Sunflower with groundnut, pigeon-pea and soybean.
- Castor with groundnut, pigeon-pea, cluster bean and mung-bean.
- Safflower with chickpea, coriander and rabi sorghum.
- Linseed with wheat, chickpea and lentil.
- Soybean with pigeon-pea, maize, sorghum, cotton, sugarcane and orchard crops.
- Groundnut with pigeon-pea, cotton, pearl millet, cowpea, maize, sesame, castor, sugarcane and plantation crops.
- Mustard with chickpea and lentil.

3.1.2 Under NFSM-(OS&OP) there is no separate component for intercropping. It is proposed to provide assistance for intercropping @ Rs.3000/- to Rs.5000/- per ha depending upon the type of intercrops. The component will be a part of AAP of NFSM-(OS&OP) of respective states with set area coverage and production targets. The potential cropping system and area expansion with intercropping in specific States is given below in Table-2:

<table>
<thead>
<tr>
<th>Crop</th>
<th>Potential crop/cropping systems</th>
<th>Specific states</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybean</td>
<td>Sugarcane (irrigated), black-gram, green-gram, pigeon-pea &amp; hybrid cotton</td>
<td>Maharashtra, Telangana &amp; Karnataka</td>
<td>Area 1.00 million ha and production 1.50 million tonnes</td>
</tr>
<tr>
<td>Groundnut</td>
<td>Pigeon-pea</td>
<td>AP, TN, Karnataka, UP (Bundelkhand), Gujarat &amp; MS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Castor &amp; soybean</td>
<td>AP, TN, Gujarat &amp; MP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maize, sorghum &amp; bajra</td>
<td>Rajasthan, Bihar, Punjab, NEH, MS, UP, Karnataka &amp; Gujarat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cotton</td>
<td>Gujarat MS, AP &amp; TN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sugarcane</td>
<td>MS, UP &amp; Bihar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coconut &amp; Cassava</td>
<td>Kerala, AP &amp; TN</td>
<td></td>
</tr>
<tr>
<td>Rapeseed-Mustard</td>
<td>Sugarcane (irrigated)</td>
<td>UP &amp; Bihar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Potato</td>
<td>Western UP</td>
<td></td>
</tr>
</tbody>
</table>
3.1.3 States are suggested to provide the cost norms for intercropping along with the target of area coverage / additional production both during kharif and rabi seasons.

3.2 Oilseeds in non-traditional areas/seasons

3.2.1 In the country there is a scope of introducing different oilseed crops in different zones in different seasons in non-traditional areas / seasons as indicated below:

- Spring sunflower in Indo-gangetic plains region; rabi sunflower in WB & Odisha
- Spring groundnut in Uttar Pradesh
- Safflower in Gujarat and Madhya Pradesh
- Mustard in Andhra Pradesh, Telangana and Karnataka
- Soybean in Telangana and Jharkhand.
- Rabi castor in Telangana, Karnataka & Tamil Nadu;
- Castor in Haryana

3.2.2 Separate project “Oilseeds in Non Traditional Area (ONTA)” will be formulated in consultation with State Departments to produce additional 1.50 million tonnes of oilseeds from 1.0 million ha.

3.2.3 The States are requested to submit separate programme in project mode with set targets of area and production by 2022 to be implemented by State Department of Agriculture including ICAR/SAU/KVKs.

## Area expansion of oilseeds in non-traditional areas

<table>
<thead>
<tr>
<th>Crop</th>
<th>Non Traditional Area</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybean</td>
<td>MS, Rajasthan, Telangana, Jharkhand, Gujarat &amp; NEH</td>
<td>Area 1.00 million ha and 1.50 million tonnes production</td>
</tr>
<tr>
<td>Groundnut</td>
<td>UP (C&amp;W), Gujarat, WB, Manipur, Mizoram &amp; Arunachal Pradesh</td>
<td></td>
</tr>
<tr>
<td>Rapeseed -</td>
<td>Karnataka, Rajasthan (S), Ratlam and Indore (MP) &amp; Vidarbha (MS), AP, NEH &amp; low</td>
<td></td>
</tr>
<tr>
<td>Mustard</td>
<td>irrigated / low yielding wheat areas in Haryana &amp; UP</td>
<td></td>
</tr>
<tr>
<td>Sesame</td>
<td>NEH</td>
<td></td>
</tr>
<tr>
<td>Sunflower</td>
<td>Indo-Gangetic plain region</td>
<td></td>
</tr>
<tr>
<td>Safflower (saline</td>
<td>Gujarat, MP and CG</td>
<td></td>
</tr>
<tr>
<td>situation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Castor</td>
<td>TN, Haryana, Karnataka &amp; Odisha</td>
<td></td>
</tr>
<tr>
<td>Linseed</td>
<td>NEH</td>
<td></td>
</tr>
<tr>
<td>Niger</td>
<td>AP, Karnataka &amp; TN</td>
<td></td>
</tr>
</tbody>
</table>
### 3.3 Extending Targeting Rice Fallow Area (TRFA) scheme beyond six Eastern States

#### 3.3.1 Raising production and productivity of pulses and oilseeds are the key focus of the Government and utilization of rice fallow areas could complement the goal of Doubling Farmers’ Income as envisaged by Hon’ble Prime Minister. The Department has initiated a special programme on ‘Targeting Rice Fallow Areas (TRFA)’ which is being implemented since 2016-17 in 6 Eastern States of the country and is being continued in 2017-18 and 2018-19.

#### 3.3.2 During 2017-18 an area of 10.72 lakh ha was covered under pulses (9.13 lakh ha) and oilseeds (1.60 lakh ha) in rice fallows of six Eastern States. Besides, 73,878 minikits of pulses and oilseeds were distributed in 43 TRFA districts. The additional area coverage resulted in an additional production of 9.04 lakh tonnes of pulses and oilseeds from rice fallows.

#### 3.3.3 During 2018-19 it has been targeted to cover 18.50 lakh ha area with an additional production of 13.50 lakh tonnes of pulses and oilseeds under which 5,000 villages in 50 districts will be included for promotion of pulses and oilseeds during rabi season in six Eastern States. About 80,000 pulses minikits and 40,000 oilseeds minikits will be supplied through central agencies.

#### 3.3.4 The following broad strategies are included:
- Organizing cluster demonstrations of pulses and oilseeds over an area of 50 ha in each identified village continuously for three years.
- Promotion of short duration varieties of pulses and oilseeds through minikit pogramme
- Capacity building of field functionaries/farmers/officers for sustainable cultivation of pulses and oilseeds in rice fallows by adopting latest crop production technologies
- Creation of awareness through mass communication, advertisements, seminar/workshop/kisan mela.
- Formation of FPOs for value addition of produce

#### 3.3.5 It is proposed to extend the TRFA in the states of AP, Tamil Nadu, Karnataka, Maharashtra, Gujarat, NE and Himalayan states where large area of rice fallows are available.

#### Cultivation in rice and other fallow areas

<table>
<thead>
<tr>
<th>Crop</th>
<th>Rice fallow areas</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybean</td>
<td>Punjab, Jharkhand, Odisha, CG, Karnataka, Nagaland, Manipur, Meghalaya, Maharashtra &amp; Gujarat</td>
<td>Area 1.50 million ha and 2.50 million tonnes production</td>
</tr>
<tr>
<td>Groundnut</td>
<td>Rice fallow: TN, AP, Odisha, WB, Goa, Potato fallow: Deesa, Western UP, WB, Riverbed and upland: WB, TN &amp; Odisha</td>
<td></td>
</tr>
<tr>
<td>R-M</td>
<td>UP (E), Bihar, WB, NEH, Jharkhand, Odisha &amp; CG</td>
<td></td>
</tr>
<tr>
<td>Sunflower</td>
<td>AP, Karnataka, Odisha, Bihar and WB</td>
<td></td>
</tr>
<tr>
<td>Sesame</td>
<td>WB, Odisha, TN, AP</td>
<td></td>
</tr>
<tr>
<td>Linseed for</td>
<td>CG, WB, Odisha, Bihar, Assam</td>
<td></td>
</tr>
<tr>
<td><em>Utera</em> situation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3.3.6 New states and components will be included under TRFA with the existing and new norms of assistance. States are requested to formulate the revamped TRFA scheme with set target area and production upto 2022.
**TOPIC-II:** Important agro-forestry models including agronomics – experience cross sharing States, CAFRI (including All India Coordinated Research Project) and development of value chain under restructured National Bamboo Mission

**PART-I:** Sub-Mission on Agro-forestry

1. **Background:**

1.1 The Sub-Mission on Agro-forestry has been launched for first time by the present Government in 2016-17 to encourage tree plantation on farm land “Har Medh Par Ped”, along with crops/ cropping system.

1.2 The scheme is being implemented in the States which have liberalized transit regulations for selected tree species. For implementation of the scheme so far 21 States have liberalized transit regulations. Other States are also being motivated to exempt selected species from transit regulations. Agro-forestry will not only help in creating additional source of income to farmers but also in increasing soil organic carbon.

2. **Interventions:**

The Sub-Mission has four broad interventions:

2.1 **Nursery Development for quality planting material (NDQPM):** Assistance shall be given for nurseries for producing quality planting/seed material to meet the requirement of planting material, assistance will be provided for setting up new small nurseries and hi-tech big nurseries.

2.2 **Peripheral and Boundary Plantation (PBP):** To make potential use of the area occupied by these bunds around the periphery of the farmers fields, tree species under Agroforestry can be grown as Peripheral boundary plantations to add more income to the farmers’ basket. This will not only make effective use of the precious land for livelihood support and generating income opportunities to the farmers, but also help in stabilising the bunds and reducing soil erosion.

2.3 **Low Density Plantation on Farm Lands(LDPFL):** Low Density Block Plantation(HDBP) ranging from more than 100 plants/ha to more than 500 plants/ha without sacrificing the yield of the existing crops/cropping systems, shall be incentivized at the proportionate rates as applicable to per plant expenditure.

2.4 **High Density Block Plantation (HDBP):** High density Block Plantations on farm lands( HDBP) will be supported as a complementary source of income to the farmers. Differential planting densities ranging from 500 plants/ha to 1500 plants/ha as intermediate blocks or strip plantations would be supported. Farmers can take up block plantation in waste and degraded land not suitable for growing crops to make productive use of this land in creating livelihood and income opportunities for them. In addition, the tress will help in enriching the soil and making it fertile & more productive thereby bringing land under crops in times to come.

3. **Status & Issues to be taken up with State:**

3.1 **Meghalya:** For implementation of SMAF an amount of Rs. 100.00 Lakh has been released during the year 2017-18. State has not made any progress and entire funds are unspent.
3.2 **Mizoram:** For implementation of SMAF an amount of Rs. 125.00 Lakh has been released to the State during 2017-18 & 2018-19. An amount of Rs. 50.00 lakh has been utilised till date and 06 no. of nurseries for production of quality planting material have been established.

3.3 **Nagaland:** For implementation of SMAF an amount of Rs. 165.89 Lakh has been released to the State during the year 2017-18 & 2018-19. An amount of Rs. 90.89 lakh has been utilised till date. Physical achievement is awaited.

3.4 **Andhra Pradesh:** For implementation of SMAF an amount of Rs.315.00 Lakh has been released to the State during 2016-17. An amount of Rs. 210.95 lakh has been utilised till date. 25 no. of nurseries for production of quality planting material have been established and an area of 1300 ha has been covered under plantations. Funds released during 2016-17 are still unspent.

3.5 **Bihar:** Sub-Mission on Agro-forestry (SMAF) was launched during 2016-17 to encourage tree plantation on farm land “Har Medh Par Ped”. For implementation of SMAF an amount of Rs.300.00 Lakh has been released to the State during 2017-18. An amount of Rs. 73.70 lakh has been utilised till date. Physical progress is awaited.

3.6 **Chhattisgarh:** For implementation of SMAF an amount of Rs. 400.00 Lakh has been released to the State during 2017-18 & 2018-19. An amount of Rs. 234.10 lakh has been utilised till date. 27 no. of nurseries for production of quality planting material have been established and an area of 1025 ha has been covered under plantations.

3.7 **Gujarat:** For implementation of SMAF an amount of Rs. 970.00 Lakh has been released to the State during 2016-17, 2017-18 & 2018-19. An amount of Rs. 719.02 lakh has been utilised till date and an area of 11,600 ha has been covered under plantations.

3.8 **Haryana:** For implementation of SMAF an amount of Rs. 175.00 Lakh has been released to the State during 2016-17. An amount of Rs. 65.00 lakh has been utilised till date and an area of 1200 ha has been covered under plantations. Pace of implementation is very slow and funds released during the year 2016-17 are still unspent.

3.9 **Himachal Pradesh:** For implementation of SMAF an amount of Rs. 263.69 Lakh has been released to the State during the year 2016-17, 2017-18 & 2018-19. An amount of Rs. 157.89 lakh has been utilised till date and 15 no. of nurseries for production of quality planting material have been established and an area of 324 ha. has been covered under plantation.

3.10 **Jharkhand:** For implementation of SMAF an amount of Rs. 500.00 Lakh has been released to the State during the years 2017-18 and 2018-19. An amount of Rs. 216.00 lakh has been utilised till date and 9 no. of nurseries for production of quality planting material have been established.

3.11 **Jammu & Kashmir:** For implementation of SMAF an amount of Rs. 210.71 Lakh has been released to the State during 2017-18 & 2018-19. An amount of Rs. 60.71 lakh has been utilised till date and 08 no. of nurseries for production of quality planting material have been established and an area of 19 ha. has been covered under plantation.
3.12 Karnataka: For implementation of SMAF an amount of Rs. 1025.00 Lakh has been released to the State during the years 2016-17, 2017-18 and 2018-19. An amount of Rs. 768.31 lakh has been utilised till date and 58 no. of nurseries for production of quality planting material have been established and an area of 6769 ha. has been covered under plantation.

3.13 Kerala: For implementation of SMAF an amount of Rs. 206.46 Lakh has been released to the State since 2016-17. An amount of Rs. 138.00 lakh has been utilised till date. Physical progress is awaited.

3.14 Madhya Pradesh: For implementation of SMAF an amount of Rs. 420.00 Lakh has been released to the State since 2016-17. Entire funds released during the year 2016-17 are unspent and there is no progress.

3.15 Maharashtra: For implementation of SMAF an amount of Rs. **600.00** Lakh has been released to the State during the years 2017-18 and 2018-19. An amount of Rs. **364.77** lakh has been utilised till date and 55 no. of nurseries for production of quality planting material have been established.

3.16 Odisha: For implementation of SMAF an amount of Rs. 600.00 Lakh has been released to the State during the year 2017-18 & 2018-19. An amount of Rs. 325.00 lakh has been utilised till date and 47 no. of nurseries for production of quality planting material have been established.

3.17 Punjab: For implementation of SMAF an amount of Rs. 200.00 Lakh has been released to the State during the year 2017-18. An amount of Rs. 135.90 lakh has been utilised till date and 08 no. of nurseries for production of quality planting material have been established and an area of 1833 ha. has been covered under plantation.

3.18 Rajasthan: For implementation of SMAF an amount of Rs. 600.00 Lakh has been released to the State during the year 2017-18. An amount of Rs. 45.15 lakh has been utilised till date and 30 no. of nurseries for production of quality planting material have been established and an area of 205 ha. has been covered under plantation. Pace of implementation is very slow and State needs to provided Utilization Certificate and Physical reports against funds released during 2017-18

3.19 Tamil Nadu: For implementation of SMAF an amount of Rs. 250.00 Lakh has been released to the State during the year 2016-17. An amount of Rs. 193.20 lakh has been utilised till date and 19 no. of nurseries for production of quality planting material have been established.

3.20 Telangana: For implementation of SMAF an amount of Rs. 300.00 Lakh has been allocated for FY 2018-19. State has not yet submitted Annual Action Plan. The matter is being taken up with the State from the year 2017-18

3.21 Uttar Pradesh: For implementation of SMAF an amount of Rs. 600.00 Lakh has been released to the State during the year 2017-18. State has not made any progress against funds released during the year 2017-18. Entire funds are unspent.
PART-II: Development of Value Chain under Restructured National Bamboo Mission

1. The restructured National Bamboo Mission (NBM) has been launched this year with the approval of Cabinet Committee on Economic Affairs (CCEA) vide order No. CCEA/13/2018(i) dated 26th April, 2018 under the National Mission for Sustainable Agriculture (NMSA).

2. Mission emphasises complete value chain approach starting from bamboo growers to consumers. Focus is not only being given on production and productivity enhancement and good agronomic practices but also on preservation, processing, product development and marketing in an integrated manner adopting cluster approach involving inter alia Farmers Producers Organizations and Cooperatives.

3. Plantations will be done only on non-forest Government land and farmers fields, homesteads, community lands, arable wastelands, and along irrigation canals, water bodies etc in bamboo rich States including North Eastern region, Madhya Pradesh, Maharashtra, Chattisgarh, Odisha, Karnataka, Uttarakhand, Bihar, Jharkhand, Andhra Pradesh, Telangana, Gujarat, Tamil Nadu and Kerla. However bamboo plantations carried out in earlier NBM and various other programs/funding, including those in forest areas, should be brought into value chain being developed.

4. There are various stages of value addition subsequent to harvesting of Bamboo. Mission has provision for assisting of bamboo treatment and preservation, carbonisation plants and livelihood business incubators.

5. Mission will also give assistance for product development and processing in the form of establishment of processing unit, handicraft/cottage industry, furniture making, fabric/jewellery making, bamboo shoot processing, incense stick making, Common Facility Centre (CFC), Bamboo Board/mat/corrugated sheet/floor tiles making etc.

6. It has also provision for promotion and development of infrastructure for bamboo market, development of tools, equipment and machinery. For empowerment of the growers & rural youth for their active participation in value addition in bamboo sector, provision has also been made in the organisation of workshop/seminars at local state/national levels.

7. With an industry driven approach, species identified to be planted are Bambusa tulda, B.bambos, B.balcooa, B.cacharensis, B.polymorpha, B.nutans, Dendrocalamus asper, D.hamiltonii, Thyrostachys oliveril and Melocanna baccifera.

8. Synergy with M/o MSME and Industries Development in the States should be established.

9. Fund for assistance shall be provided through the State Bamboo Mission in the manner detailed in the operational guidelines.
TOPICT-III:  To develop & upgrade rural haats as GrAMS- road ahead and implementation of National Agricultural Market (e-NAM)

1.  Introduction:

1.1 Agricultural marketing performs a series of services and functions involved in moving the agricultural goods from the point of production to the point of consumption and include all the activities involved in creation of time, place, form and possession utility. In India, where landholding is fragmented and dominated by Small & Marginal Farmers, agriculture marketing cannot be seen in isolation as input marketing and output marketing. Farmers need such a common market platform wherein they can sell their output and can simultaneously purchase agri- inputs; and can also buy items of their daily need. All “Rural Haats” irrespective of periodicity, throughput, ownership, management, operation and regulatory status should provide such common platform for producers.

1.2 Rural Haats, known by varied names like haats, shandies, painths and fairs, etc. are reported to be 22,941. These Rural Haats are owned and managed by local bodies including Panchayats/ Councils, State Agriculture /Horticulture Departments, State Agricultural Marketing Boards/ Agriculture Produce Market Committees, Cooperatives, Trusts, Worship places and the private Individuals. These are located in rural and interior areas closer to farm gate and serve as focal points to a great majority of the farmers- mostly small and marginal ones. The small & marginal farmers with uneconomical size of their marketable surpluses have been finding it difficult to travel to distant APMC market yards and participate in price discovery auction system. About 90 per cent of the total marketable surpluses in the remote areas are sold through these markets. As per the information available from the States/ Marketing Boards, there are a total of 22,941 rural haats in the country.
   - Under local Bodies including Councils- 11811
   - Under Marketing Board/APMCs- 1274
   - Under Private sector (Trust, individuals, etc.)- 9856

2.  Announcement in Union Budget for 2018:

2.1 It was announced to develop and upgrade existing 22,000 rural haats into Gramin Agricultural Markets (GrAMs). In these GrAMs, physical infrastructure to be strengthened using MGNREGA and other Government Schemes. These GrAMs, electronically linked to e-NAM and exempted from regulations of APMCs, will provide farmers facility to make direct sale to consumers and bulk purchasers. It was also announced that an Agri-Market Infrastructure Fund with a corpus of `2000 crore would be set up for developing and upgrading agricultural marketing infrastructure in the 22000 Grameen Agricultural Markets (GrAMs) and 585 APMCs.

2.2 To provide road connectivity from habitations to the GrAMs, budget speech, inter-alia, provides for strengthening the road linkages under Prime Minster Gram Sadak Yojana Phase III.

3.  Advantage of GrAMs:
   - Farmers and consumers both will benefit from accessibility of market nearer to their place of residence, resulting into reduced transportation cost. As incidental benefit, post-harvest wastages will also be reduced significantly.
- Hygiene will be approved and marketing activities will be carried out in sanitary manner leading to good health to public in general and consumers in particular.
- After all, GrAM will serve one step integrated solution for farmers and more so women farmers and consumers as well.
- Small and marginal farmers’ uneconomical surpluses will be aggregated, value added and processed so as to make the produce better marketable and thereby enhanced income. FPOs may be roped in the activity.
- No intermediation will result into least marketing cost and margin, as corollary there will be tab on food inflation.

4. Road Map:

4.1 Infrastructure:
- Basic and supportive infrastructure comprising of 11 basic and supportive infrastructures are indicated in MGNAREGS Guidelines for guidance to States and as amended for time to tome and are:—
  i. Open raised & covered platform
  ii. Separate toilets for men and women
  iii. Drinking water facility
  iv. Drains
  v. Brick soling in the moving space
  vi. Garbage pits at corner
  vii. Storage (small size)
  viii. Boundary wall/ fencing with two gates
  ix. Parking space
  x. Drinking water facilities for cattle
  xi. Office Block
- Ministry of Rural Development (MoRD) has already received proposals for 5002 rural haats from States to develop.
- PMGSY (Phase-III) would provide rural road linkages from habitations to GrAMs.
- Marketing infrastructure would be developed in GrAMs under Schemes of Ministry of Agriculture and Farmers’ Welfare (MoA&FW). Further, draft EFC memo to implement and operationalize Agri-Market Infrastructure Fund (AMIF) as per the budgetary announcement and circulated to States for comments is in the process of finalization.

4.2 Institutional Arrangements: States would be advised to put in place adequate Intuitional mechanism to monitor and guide the development and operation of the GrAMs. Further, at GrAM’s level, there would be a professional Management Committee to operationalize agricultural marketing activities professionally. In the Committee, amongst others, representatives of FPOs/ SHGs and other farmers’ association will be included. However, owners of the GrAMs will be at liberty to constitute a Management Committee with professional competence.

4.3 Functional Structure: GrAMs will function as market place for farmers to directly market their produce to consumers and bulk purchasers and will also function as aggregation point-

- **As Direct Market Platform:** Farmers and consumers including bulk purchasers both will benefit from accessibility of market resulting into reduced transportation cost. Due to disintermediation, farmers and consumers both will be benefitted and
consumers will get additionally fresh and quality produce. As incidental benefit, post-harvest wastages will also be reduced.

- **As Collection/ Aggregation Platform:** In order to achieve scales of economy and efficiency of marketing in transacting small lots of farmers, aggregation of produce is essential. Therefore, it is required to build aggregation platforms in close proximity to farm gates, and facilitate a formal & transparent system of aggregation, displacing the village-trader based intermediation that happens today in rural areas. The existing Gramin Haats will be utilized to build aggregation platforms, by putting in place the required infrastructure and processes. The farmers individually or collectively in the form of their groups/ FPOs will bring their small/aggregated lots of marketable surpluses to these markets and the same shall be processed, cleaned, sorted, graded and packaged for further transportation & sale through auction at regulated markets (APMCs etc.). Aggregated lots can be on-line traded from GrAM itself or may be brought for sale in secondary markets or to the processors, organized retailers, etc.

4.4 Regulatory Frame-Work:
States/ UTs, where APMC Act is enforced, will have to amend their APMC Acts, if so required, to deregulate the marketing of agricultural produce taking place in the GrAMs.

5 **Issues to be taken up with States:** In order to properly develop the rural haats as GrAMs, professionally operationalise them, intense deliberation with the States is required on following critical issues-

(i) Approach for identifying existing rural haats to develop and upgrade as GrAM;

(ii) Since GrAMs are to be free from APMC regulation, therefore, State Government are requested to deregulate GrAMs from APMC regulations early;

(iii) Type of institutional mechanism to put in place for overall monitoring and guidance for the development of rural haats and operationalization of GrAMs, as well as professionally managing the GrAM through some sort of equipped management committee. Issue of composition of such institutional mechanism may also be deliberated;

(iv) Issues relating to utilisation of fund from AMIF may also be discussed so as to maximise the utilisation of fund for development of GrAMs;

6 **Implementation of National Agriculture Market (e-NAM):**

6.1 In order to enhance transparency in trading, quality based better price discovery and to provide multiple choices to the farmers to on-line sell their commodities to the buyers and in the markets of their choice, offering the best bid, department launched e-National Agriculture Market (e-NAM) in April, 2016. Under the scheme, a total of 585 regulated wholesale markets across the States are to be integrated to the portal by March, 2018, which has been achieved. The States/UTs willing to integrate their mandis with e-NAM platform and seeking assistance under the scheme will have to undertake three mandatory legal reforms in the marketing regulations as prerequisites. These prerequisites are - (i) a single license to be valid across the State; (ii) single point levy of market fee across the State; and (iii) provision for electronic auction as a mode for price discovery.

6.2 Progress- As on 05th September, 2018:

- 585 mandis of 16 States & 02 UTs have been integrated with e-NAM;
- 1,15,82,492 Farmers, 1,17,380 Traders & 65,737 Commission Agents have been registered under e-NAM;
• 2,01,31,504.97 Ton quantity of having trade value of Rs 50,567.76 crore have been traded through e-NAM portal.
• For 90 commodities tradable parameters framed & uploaded on e-NAM portal;
• Availability of e-NAM website in 09 languages and live trading facility is available in 09 different languages;
• e-NAM software is enabled for inter-mandi trade and so far 7 States have carried out inter-mandi trade of 1.549 lakh MT of commodities worth Rs.407.18 crore (upto 31st August, 2018);
• Since May, 2018, provision has been made in e-NAM platform to onboard FPOs and 243 FPOs from 13 States have been on-boarded on e-NAM platform;
• 69 markets of 51 aspirational districts of 14 States have been integrated to e-NAM platform;
• To strengthen the e-NAM platform, new and user-friendly features launched on 21st February, 2018 such as advanced lot registration facility for farmers to reducing waiting time at gate entry. Now farmers can view through their mobile bids in progress for their lot for better transparency. Quality assaying parameters now can be seen on mobile. Payment to farmers by traders now can be done through mobile phone. BHIM payment facility has been provided including through mobile phone.

6.3 Issues to be taken up with States:

a) Strengthening of infrastructure particularly at gate entry as per peak arrivals. Promote use of tabs/ hand held devices at gate entry.

b) Strengthening of Quality Assaying labs-
   • Existing equipments are not time efficient for assaying of all prescribed parameters
   • Trained manpower both in terms of numbers as well their skill level is inadequate
   • Set up assaying labs immediately without delay in e-NAM mandis, which don’t still have assaying labs.

c) Integration of electronic weighing scales (after bidding) is not happened in many states.

d) Issue of a unified trading license to the traders/ buyers in sufficient numbers on liberal terms and conditions. States/UTs (except Telangana, Odisha & Uttarakhand) may consider to convert all local licenses issued by APMCs to traders to be unified licenses holders valid for trading in entire state to promote inter mandi trade.

e) Inter-mandi trade has picked up only in 07 States (Andhra Pradesh, Chhattisgarh, Haryana, Telangana, Madhya Pradesh, Uttar Pradesh & Uttarakhand).

f) States/ UTs may also adopt the provision of Model APLM Act, 2017, wherein under section 72, provision has been made for recognition of unified single trading license issued by any other State/ UT for inter-state trade.

g) For out station buyers, logistics would be an important consideration, APMC/ RMC may ensure that an efficient and cost effective logistic support is available for the stakeholders of the market. APMC/ RMC should provide all logistic support.

h) On boarding of FPOs as sellers and processors/ Exporters as buyers on e-NAM.

i) State/UT to facilitate the provisions for warehouse based trading by declaring selected warehouses as market sub-yards.

j) Incentives for farmers and traders to adopt online trading and e-payment on e-NAM.

k) Pending UCs (Jharkhand, Maharashtra, Madhya Pradesh, Chhattisgarh etc.)
**TOPIC-IV: Procurement and disposal mechanism for MSP crops**

1. **Background:**
   1.1 The Price Support Scheme (PSS) is implemented for procurement of oil seeds and pulses through central nodal agencies at MSP as and when the prices falls below the Minimum Support Price (MSP). When a request is received from the concerned State government / union territory which agree to exempt the procured commodities from levy of mandi tax and assist central nodal agencies in logistic arrangements, including gunny bags, working capital for state agencies, creation of revolving fund for PSS operations, etc. as required under the scheme guidelines, the procurement process is initiated. The Fair Average Quality (FAQ) stocks procured directly from the farmers and are generally stored with Central Warehousing Corporation (CWC) and State Warehousing Corporations (SWCs). On the closure of procurement, the stock is sold in open market through competitive bidding on online platform within the biological life of the procured stock in the off season. The cost of procurement, transportation to warehouses, storage, Interest and losses at the time of disposal (if any) are borne by the central government.

   1.2 While disposing off the stock procured under the scheme, it is generally observed that the losses are mainly on account of:-
      a. the difference between the prevailing market rate of pulses at the time of disposal and its notified MSP;
      b. procurement expenses upto warehouse point, interest cost on investment and other holding expenses; and
      c. any storage loss / deterioration of the stock etc.

2. **Progress under PSS:**
   2.1 During KMS-2017-18 and RMS- 2018-19, 45.43 lakh MT of pulses and 20 lakh MT of oilseeds have been procured from various States under PSS. At present, the department has stock of 44.88 lakh MT of pulses procured under PSS. Based on the request of Department of Consumer Affairs (DoCA), the department will transfer 10 lakh MT to National Buffer Stock of Pulses (under PSF). The balance stock of pulses under PSS will be 34.88 lakh MT.

3. **MSP Notification:**
   The Central Government notifies MSP well before the crop season covering various crops. The notification of MSP for kharif 2018 has by adopting a minimum of 1.5 times the cost of production as the basis for determining the MSP. With this, the MSP of 14 kharif crops including the pulses have gone up substantially. It is anticipated, that the market prices for pulses which are already ruling below MSP is likely to rule below the new notified MSPs as well, and thereby entail procurement of pulses and oilseeds from the producing states in the forthcoming kharif marketing season beginning September-October, 2018. Due to record procurement of pulses and oilseeds under PSS, there are constraints of warehousing space in producing states and working capital to sustain smooth procurement operations under PSS in coming season.

4. **Main Provisions in the Guidelines:**
   4.1 As per PSS guidelines, the PSS stock is to be disposed through competitive bidding like e-auctions, open auction using online platform of commodity exchange/online spot market etc. As per PSS guidelines, the disposal shall be carried out in most
transparent and competitive manner well within the biological life of the procured stock and in the off season when the price of the produced are usually high.

4.2 Under the existing Guidelines of Price Support Scheme, there is a provision for distribution of procured stock of pulses for various welfare schemes of state governments for which, central government can provide procured stocks at a discounted rate of 2 per cent, of ex-godown cost of the central agency on prevailing market price. Most of the States/UTs are not willing to take the PSS stock for welfare schemes as per existing provisions, as the market rate of these commodities are mostly lower than the ex-godown cost minus the 2% of prevailing rates.

4.3 In view of the huge stock of pulses, in the proposed scheme, this provision is modified to dispose of the pulses by offering a concession/subsidy of Rs.15 per kg to the States/UTs for utilization under their various welfare schemes like Mid-Day Meal, Public Distribution System, ICDP etc. The ‘Issue Price’ will be worked out based on weighted average of wholesale price in the selected Agricultural Produce Market Committee(APMC) mandis of the sourcing state or weighted average of Dynamic Reserve Price, whichever is more. This mode of disposal is in addition to existing open market disposal of PSS stock. This will be one-time dispensation for a period of 12 months or complete disposal of 34.88 lakh MT of pulses stock whichever is earlier.

5. New Initiatives:

Recently, in a meeting held on 21.07.2018, PMO has directed this Department to take following actions:

(i) For pulses and oilseeds, 25% of the estimated production will be procured under PSS by the Govt. of India in accordance with the current policy. For production beyond 25% and up to 40%, procurement will be done by the central agencies provided the states undertake to use the same for their PDS & other welfare operations, at their own cost.

(ii) To offer the option of procuring the oilseeds through PDPS instead of PSS to the desirous State Govt.

(iii) Private Procurement and Stockist Scheme (PPSS) may be piloted in one district of one state for oilseeds, to test its workability. Further, to work out the percentage of service charge and other support measures needed in consultation with NITI Aayog.

Regarding Procurement of oilseeds and pulses at MSP, based on the report of NITI Aayog which was finalized after the discussion held with the State Govt./UT & Central Govt., the Cabinet Note for ‘introducing an umbrella scheme ‘Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA)’ to ensure minimum support price to farmers, comprising of Price Support Scheme(PSS), Price Deficiency Payment Scheme (PDPS), pilot Private Procurement & Stockist Scheme (PPSS) has been forwarded to Cabinet Secretariat for its approval. The details of the above scheme will be shared during the said Rabi Conference.
TOPIC-V: Role of FPOs in doubling of farmers’ income

1. Introduction:

1.1 In India, there are many legal forms of organisations into primary producer can organise themselves. A Producer Company (PC) is one such and relatively new legal entity of the producers of any kind, viz., agricultural produce, forest produce, artisanal products, or any other local produce, where the members are primary producers. In 2002, through an amendment in the Indian Companies Act. 1956, the Government of India (GoI) enacted the Producer companies Act. by incorporating a new section IXA in the Indian Companies Act.1956 based on the recommendations of the Y.K. Alagh Committee set up for this purpose. The producer companies are incorporated with the Registrar of Company (RoC). The objective of the Government of India for such an initiative was to formulate a legislation that would enable incorporation of cooperatives as companies and conversion of existing cooperatives into companies, while ensuring that the unique elements of the cooperative business remain intact in the new legislation.

1.2 A PC is formed with the equity contribution by the members. The day to day operation is expected to be managed by the professionals, hired from outside, under the direction of the Board of Directors (BoD) elected/ selected by the General body of the PC for a specific tenure. Since farmers or the producers are the equity holders of the company, a PC as an organisation provides an appropriate framework for owning the company by the producers themselves. The need to organise farmers, especially the small holders, is a well established fact. The basic purpose of the PC is to collectivise small farmers or producers for (a) backward linkage for inputs like seeds, fertilisers, credit, insurance, knowledge and extension services and (b) forward linkages such as collective marketing, processing, market led production, marketing, etc.

2. Status of FPOs in India

2.1 Department of Agriculture and Cooperation (DAC), Ministry of Agriculture, Government of India launched a pilot programme for promoting member-based Farmer Producer Organisations (FPOs) during 2011-12, in partnership with state governments, which was implemented through the Small Farmers’ Agribusiness Consortium (SFAC). The pilot involved the mobilisation of approximately 2.50 lakh farmers into 250 FPOs (each with an average membership of 1000 farmers) across the country, under two sub-schemes of the Rashtriya Krishi VikasYojana (RKVY), namely National Vegetable Initiative for Urban Clusters and Programme for Pulses Development for 60,000 Rainfed Villages. The purpose of the project was to collectivise farmers, especially small producers, at various levels across several states, so as to foster technology penetration, improve productivity, enable improved access to inputs and services and increase farmer incomes, thereby strengthening their sustainable agriculture based livelihoods.

2.2 The initiative on formation of Farmer Producer Organizations got momentum after the Department of Agriculture and Cooperation (DAC), Ministry of Agriculture, Govt. of India issued a national policy and process guidelines for farmer producer organization in 2013 recognizing farmer producer organization registered under the special provisions of the Companies Act, 1956 (now 2013) as the most appropriate institutional form around which to mobilize farmers and build their capacity to collectively leverage their production and marketing strength. In 2015, NABARD (National Bank for Agriculture and Rural Development) issued its own guidelines for the promotion of FPOs. Besides financial
allocation for the promotion of FPOs, the central government took some policy measures to facilitate creating enabling environment.

2.3 There are around 4500 FPOs in the country promoted by SFAC, NABARD, State Governments, International Agencies, etc. (List of FPOs promoted by SFAC & NABARD is given at Annexure-I).

3. FPO Service Model

3.1 The FPO offers a variety of services to its members as illustrated in the table. It can be noted that it is providing almost end-to-end services to its members, covering almost all aspects of cultivation (from inputs, technical services to processing and marketing). The FPO facilitate linkages between farmers, processors, traders, and retailers to coordinate supply and demand and to access key business development services such as market information, input supplies, and transport services. Based on the emerging needs, the FPO keep on adding new services from time to time. The set of services include Financial, Business and Welfare services. An indicative list of services includes:

- Financial Services: The FPO will provide loans for crops, purchase of tractors, pump sets, construction of wells, laying of pipelines.
- Input Supply Services: The FPO will provide low cost and quality inputs to member farmers. It will supply fertilizers, pesticides, seeds, sprayers, pumpsets, accessories, pipelines.
- Procurement and Packaging Services: The FPO will procure agriculture produce from its member farmers; will do the storage, value addition and packaging.
- Marketing Services: The FPO will do the direct marketing after procurement of agricultural produce. This will enable members to save in terms of time, transaction costs, weighment losses, distress sales, price fluctuations, transportation, quality maintenance etc.
- Insurance Services: The FPO will provide various insurance like Crop Insurance, Electric Motors Insurance and Life Insurance.
- Technical Services: FPO will promote best practices of farming, maintain marketing information system, diversifying and raising levels of knowledge and skills in agricultural production and post-harvest processing that adds value to products.

3.2 Networking Services: Making channels of information (e.g. about product specifications, market prices) and other business services accessible to rural producers; facilitating linkages with financial institutions, building linkages of producers, processors, traders and consumers, facilitating linkages with government programmes.

4. Schemes for FPOs

a) Equity Grant Fund-
The Equity Grant Fund enables eligible FPCs to receive a grant equivalent in amount to the equity contribution of their shareholder members in the FPC, thus enhancing the overall capital base of the FPC. The Scheme shall address nascent and emerging FPCs, which have paid up capital not exceeding Rs. 30 lakh as on the date of application. The Equity Grant shall be sanctioned to eligible FPCs as follows:
i. Equity Grant shall be a cash infusion equivalent to the amount of shareholder equity in the FPC subject to a cap of Rs. 10 lakh per FPC.

ii. Equity Grant sanctioned shall be directly transferred to the bank account of the FPC.

iii. The FPC shall, within 45 days of the receipt of the Equity Grant, issue additional shares to its shareholder members, equivalent in value to the amount of the Grant received by it.

The FPC shall be allowed to draw the Equity Grant in a maximum of two tranches (within a period of 2 years of the first application) subject to the cap of Rs 10.00 lakh per FPC, provided and to the extent that it is able to raise additional Member Equity to qualify for an additional matching grant within the overall ceiling of Rs. 10.00 lakh. The request for the second tranche shall be treated as a fresh application and the full process of due diligence shall be repeated.

b) Credit Guarantee Fund-
The Fund has been set up with the primary objective of providing a Credit Guarantee Cover to ELI to enable them to provide collateral free credit to FPCs by minimising their lending risks in respect of loans not exceeding Rs. 100.00 lakhs.

i. ELI shall be eligible to seek Guarantee Cover for a credit facility sanctioned in respect of a single FPC borrower for a maximum 2 times over a period of 5 years.

ii. Maximum Guarantee Cover shall be restricted to the extent of 85% of the eligible sanctioned credit facility, or to Rs. 85 Lakh, whichever is lower.

5. Issues and Challenges in Building Robust FPOs

5.1 The following challenges are arising in building robust Farmers’ Producer Organizations-

(i) Lack of awareness among the farmers about benefits of collectivization & non availability of capable Anchor Agencies / POPIs for providing consultancy and handholding support in organizational development

(ii) Mobilization of individual farmers into a formal structured organizations is a big challenge. It requires very high skills to convince individual producers / growers to form organizations.

(iii) Non availability of required KYC documents for registration of FPO.

(iv) Lack of Legal and technical knowledge about Acts and Regulations related to formation of FPO in general and FPCs in particular.

(v) Weak Financials -FPOs are mostly represented by SF/MF with poor resource base and hence, initially they are not financially strong enough to deliver vibrant products and services to their members and build confidence.

(vi) Lack of / Inadequate Professional Management- Farmers’ Organizations are required to be efficiently managed by experienced, trained and professionally qualified CEO and other personnel under the supervision and control of democratically-elected Boards of Directors. However, such trained manpower are presently not available in the rural space to manage FPO business professionally.

(vii) Inadequate Access to credit - Lack of access to affordable credit for want of collaterals and credit history is one of the major constraints, the FPOs are facing today. Further, the credit guarantee cover being offered by SFAC for collateral free lending is available only to Producer Companies (other forms of FPOs are not covered) having minimum 500 shareholder membership. Due to this, the banks are
reluctant to extend credit facility to FPOs, which are registered under other legal statutes.

(viii) Lack of Risk Mitigation Mechanism - Presently, while the risks related to production at farmers’ level are partly covered under the existing crop / Livestock / other insurance schemes, there is no provision to cover business risks of FPOs.

(ix) Inadequate Access to Market - Marketing of produce at remunerative prices is the most critical requirement for the success of FPOs. The input prices are largely fixed by corporate producers. The cultivators lose through the complex gamut of market processes in the input and output prices. There are more market opportunities; if FPOs can identify local market needs of the consumers and have tie-up for sale of its produce. The linkage with Industry/ other market players, large retailers, etc. is necessary for long term sustainability of FPOs.

(x) Inadequate Access to Infrastructure- The producers' collectives have inadequate access to basic infrastructure required for aggregation like transport facilities, storage, value addition (cleaning, grading, sorting, etc.) and processing, brand building and marketing. Further, in most of the commercial farming models, the primary producers are generally excluded from the value chain.

6. Strategies for Doubling of Farmers’ income through FPOs

- Existing Farmers' Clubs/ JLGs/ SHGs, may be encouraged to federate their organizations in to Farmer Producer Organizations to undertake certified seed production of major crops locally under the technical guidance of KVK and supply to farmers at affordable price.
- FPOs may be incentivized to undertake vermin compost production, dairying and backyard poultry activities for feeding the local market.
- Necessary credit support through financial Institutions may be facilitated.
- Government may implement farmer centric schemes through FPOs like Farm ponds/ tanks, Minor Irrigation, Agri implements, food security Schemes, etc.
- Awareness on water conservation using local technology, rainwater harvesting including well recharge and use of irrigation efficient devices coupled with better crop planning, may be implemented through FPOs.
- Promote value addition in agriculture through FPOs and facilitate market linkage at block/ mandi level. Skill development of these institutions may be done by Agriculture Universities/ KVKs.
- FPOs may be encouraged to set up soil testing lab, rural godown and value addition units under Govt. schemes and operate on sustainable business model by engaging local/ trained technical experts.
- Using FPO platform, KVK may develop production strategies of major crops and educate farmers on improved agro techniques through workshops, trainings, leaflets, etc.
- Fruits/ vegetables production in potential pockets may be encouraged. Cluster level rural markets may be established/ managed by local panchayats.
- New dairy societies with women members may be created and linked to milk route for promoting milk production & organized marketing.
- KVK, along with Agriculture Department, may prepare a comprehensive list of ongoing schemes of the Govt./ other agencies, which offer financial/ non-financial incentives to farmers/ non-farmers and popularize the same for improved awareness.
7. **Ecosystem for a Sustainable FPO**

7.1 In order to build a sustainable FPO, a favourable ecosystem is a must. Some of the critical ecosystem services include:

A. **Policy Environment** - Risk mitigation, licensing, agri-logistics, infrastructure arrangements, contract farming, etc.

B. **Technology Support** - Extension service, advisory, value addition, processing & marketing, etc.

C. **Financial Support** - Promotional grants for institution building, equity/capital, venture/seed funds, affordable credit for business growth (working capital, term loan, subordinate debt, composite credit, etc.), interest subvention, credit guarantee for accessing commercial loans, etc.

D. **Retail Services/ Markets** - Quality inputs, direct marketing, retailing, spot markets (e-NAM, APMC), Future's trading (NCDEX), Linkages with agri corporates, Processors/Exporters, etc.

*Graphical Representation of the Ecosystem requirements is given below:-*

**Support required from Government of India**

The following support is necessary for building robust ecosystem for promotion & strengthening the FPOs in the country:

- Amendment in the Producer Companies Act, 2013 to make provision for private investment in FPO or refundable long-term capital infusion.
- Angel/Venture capital support to FPOs on the lines of Start-ups.
- Extending the benefits of Credit Guarantee Fund of GOI (SFAC) to all forms of FPOs and even the smaller FPOs having minimum shareholder membership of 200 farmers.
- Enhancing the existing Credit Guarantee Fund corpus for FPOs for encouraging collateral free loan to the FPOs similar to Credit Guarantee Fund Trust for Micro & Small Enterprises (CGTMSE) applicable for SMEs & MSMEs.
• Enhance existing eligibility of FPOs from Rs.10 lakh to Rs. 25 lakh per FPO under equity grant support, scheme of SFAC subject to achievement of milestones.
• Making provision under the Food grain Procurement Policy of Government of India requiring at least 20 to 30% procurement directly from FPOs.
• Creation of farm level infrastructure for cleaning, grading, sorting, assaying, processing, branding & transportation of Agri commodities up to delivery / market centres as also for establishment of custom hiring centres for the benefit of shareholder members under RKVY, MIDH, etc. through FPOs.
• Creating unified market for agri produce with no restrictions on commodity movement as also to enable FPOs market their produce directly to the consumers/ bulk-buyers, without payment of mandi fee. Buyers may be permitted to set up collection centres near to farmers’ fields/ production centres.
• Farmers-centric schemes may be implemented through FPOs for efficient delivery of services and improved outcomes. FPOs may be allowed to operate & manage some of the Gramin Agri Markets (out of 22000 GRAMs announced in the union budget).
• Earmarking certain amount of funds in centrally sponsored schemes of the Department of Agriculture and Cooperation and Ministry of Rural Development for promotion of FPOs.
• The Govt. of India may consider providing relief to FPOs from penal provision in default in statutory compliances at least initially for 5 years period till they become competent enough to comply with such requirements.
• Govt. may consider providing financial assistance to the ICAR Centres/ State Agri Universities to set up Agri Incubation Centres for technical handholding services to FPOs as also to introduce special course on FPO Management.
• Central Sector Schemes such as ACABC scheme, RKVY, etc. may be modified to extend benefits of exposure visits, demo units, training/ capacity building, etc. to FPOs.
• State specific policy for supporting FPOs may be adopted with provision of earmarking adequate financial resources under different schemes, involvement of FPOs in MSP, convergence of schemes at FPO level, Risk fund, single window licensing and other needed critical ecosystem services. Government of India may issue necessary advisory in this regard.

8. **Support required from State Governments**

8.1 Ecosystem support required for development of FPOs varies from State to State. There is, therefore, a need to identify various support systems/ services/ facilities required at the State level. It is, therefore, suggested that a State Level Committee may be constituted under the Chairmanship of APC/Secretary. FPOs are being promoted by various players viz. NABARD, SFAC, NGOs, corporates and various State Government departments. There is a need to have support system for their orderly development, synergy/coordination and for avoiding duplicity/over-lapping of efforts & membership. Some areas for evolving common policy/understanding are:-

- Support for organising FPOs
- Model Bye-laws
- Model Accounting system
- Training for POPIs and state agencies.
- Training for CEOs and Directors of FPOs
- Business development training for FPO functionaries (Activity specific)
- Orientation programmes for Bankers
- Single window licencing for FPOs for all types of sale of inputs and services
• Single licencing for participation in all agricultural markets across the state – including that for export. Exempting FPOs from Mandi cess. Linking FPOs to commodity Markets.
• Concessional availability of all types of farm equipments for renting (custom hiring centres)
• Allocation of land for infrastructure building like soil testing labs, warehouses, processing units, etc. for FPOs on reaching a certain level of development
• Support in the form of seed money/margin money or interest subvention.
• Credit guarantee scheme for FPO financing
• Technology support for business operations
• Treating FPOs on par with PACS for all types of concessions, etc.
• Support for statutory and other compliances
• Setting up Incubation Centres (on the lines of those start-ups) for regular handholding & guidance of FPOs.
TOPIC-VI: Certification, value chain development and marketing of organic products with special reference to Paramparagat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) schemes

1. Accreditation and Certification Mechanism for Organic Farming

Certification is very important for marketing of organic products. There are two ways of Accreditation and Certifying organic farming: one is ‘Participatory Guarantees System’ (PGS-India), which is for domestic trade; and second is Agricultural and Processed Foods Export Development Authority (APEDA), which is ‘Third Party Verification’ and certification of organic production processes for export under Ministry of Commerce.

1.1 Participatory Guarantee System (PGS)

Participatory Guarantee System (PGS) is a quality assurance initiative that is locally relevant with active participation of stakeholders including producers/farmers, traders and consumers in certification system. This group certification system is supported by Paramparagat Krishi Vikas Yojana (PKVY) scheme. It is in a way supports domestic demand for organic produce and trains the farmers in document management and adherence to other requirements of certification process and prepares the farmers to opt for third party certification, if he wishes to go for export.

In order to promote domestic organic market growth and also to enable small and marginal farmer to have easy access to organic certification, a decentralized organic farming certification system called Participatory Guarantee System –India (PGS-India) is being implemented by the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India. It is cost effective, farmer-friendly and hassle-free. It is outside the framework of third party system of certification, which is a pre-requisite to enter export market of organic produce. In PGS-India certification the organic products are certified by farmers’ groups themselves. Thus, there will be no financial burden on the farmers for expenditure on certification.

1.2 Third Party Certification

National Programme of Organic Produce (NPOP) notified in 2001 under FTDR Act, is primarily for regulation and certification of organic commodities meant for export. The present system of third party accreditation and certification mechanism for exports is well recognized. For international trade, NPOP has equivalence with Europe and USA. All the importing countries in South-East Asia, Europe and USA are accepting the NPOP certified products. For quality assurance, the country has internationally acclaimed certification process for organic produce in place for export, import and domestic markets. The National Programme on Organic Production (NPOP) notified in 2001 under Foreign Trade Development and Regulation (FTDR) Act (administered by Department of Commerce) defines the regulatory mechanism for export of organic produce. As a Secretariat to NPOP, the various activities of APEDA involved in the implementation of NPOP are:

- Updating the national standards for organic production.
- Evaluation of Certification bodies for accreditation.
Accreditation of Certification Bodies.
Surveillance of Certification Bodies to maintenance of uniform system of operations as per ISO 65.
Bilateral negotiations with the importing countries for recognition of equivalence.
Data Management for Organic Products through web – based traceability system for enhancing the credibility of certification system has been developed.

NPOP has earned equivalence with European Union and Switzerland. USDA has accepted the conformity assessment system of NPOP. This means that any produce certified by Indian agencies can be exported to these countries without the requirement of recertification.

2. **Value Chain Development**

Policy measures taken by the Government of India for value chain development and to boost marketing of certified organic produce under the schemes are as:

2.1 **Paramparagat Krishi Vikas Yojana (PKVY):**

- Financial assistance is given for direct marketing to the groups and clusters including procuring common packing material, printing, preparation of labels, transportation expenses to local markets, hiring spaces on rent for specific organic markets and branding of organic products;

- Post-harvest, value addition and processing facilities preferably under the institutions such as Farmer Producer Organisations (FPOs)/ Farmer Producer Companies (FPCs) for creation, collection and aggregation of post harvest process centre.

- Market linkage/ brand building with FPO/ Small Medium Enterprises (SME) including the cost of organic fare are provided.

2.2 **Mission Organic Value Chain Development for North Eastern Region (MOVCDNER):**

Financial assistance is given for-

- setting up of functional infrastructure for collection, aggregation, grading units and North-Eastern (NE) organic bazaar;
- Integrated Processing Units;
- Integrated pack house; Transportation/ 4 wheeler;
- Refrigerated transport vehicle/ Pre-cooling/ cold stores/ ripening chambers.

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