RAJASTHAN ORGANIC FARMING POLICY 2017
RAJASTHAN
ORGANIC FARMING
POLICY 2017

May, 2017
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## ABBREVIATIONS

<table>
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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>APEDA</td>
<td>Agricultural and Processed Food Products Export Development Authority</td>
</tr>
<tr>
<td>ATC</td>
<td>Adaptive Trial Centre</td>
</tr>
<tr>
<td>CFC</td>
<td>Common Facility Centre</td>
</tr>
<tr>
<td>COE</td>
<td>Centre of Excellence on Organic Farming Research</td>
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<tr>
<td>DOA</td>
<td>Department of Agriculture</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<tr>
<td>FiBL</td>
<td>Forschungsinstitut für biologischen Landbau (in German)</td>
</tr>
<tr>
<td></td>
<td>Research Institute of Organic Agriculture, Switzerland (in English)</td>
</tr>
<tr>
<td>FPO</td>
<td>Farmer Producer Organization</td>
</tr>
<tr>
<td>GMO</td>
<td>Genetically Modified Organism</td>
</tr>
<tr>
<td>GOI</td>
<td>Government of India</td>
</tr>
<tr>
<td>GOR</td>
<td>Government of Rajasthan</td>
</tr>
<tr>
<td>GSDP</td>
<td>Gross State Domestic Product</td>
</tr>
<tr>
<td>ICAR</td>
<td>Indian Council of Agriculture Research</td>
</tr>
<tr>
<td>ICS</td>
<td>Internal Control System</td>
</tr>
<tr>
<td>IFOAM</td>
<td>International Federation of Organic Agriculture Movements</td>
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<tr>
<td>IPM</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>LRP</td>
<td>Local Resource Person</td>
</tr>
<tr>
<td>NABL</td>
<td>National Accreditation Board for Testing and Calibration Laboratories</td>
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1. Preamble
Introduction of green revolution has been the milestone of India’s Agricultural achievement, transforming the country from the stage of food deficiency to self sufficiency. The milestone was achieved primarily through introduction of high yielding varieties, usage of higher levels of fertilizer, plant protection chemicals and farm mechanization.

While the success of Green Revolution is undisputed and it led to self-sufficiency in production of food grains, it is now being realized that the success achieved was mostly at the cost of resources, environment & sustainability. Indiscriminate and excessive use of chemicals has put a question mark on soil health, human health and sustainability of agriculture.

Recognizing the adverse impact of excessive use of chemicals on soil health and human health, there has been a felt need for integrated management system. Since organic farming addresses the challenges pertaining to soil health, human health and environmental health and is eco-friendly, it appears to be one of the best options for sustainability.

2. Concept of Organic Farming
‘Organic’ in organic agriculture is a labelling term that denotes products that have been produced in accordance with certain standards during food production, handling, processing and marketing stages, and certified by a duly constituted certification body or authority. The organic label is therefore a process claim rather than a product claim. It simply means that the products follow the defined standards of production and handling, and surveys indicate that consumers consider the organic label as an indication of purity and careful handling.

**Definition:** Internationally prevalent definitions of Organic Farming are as follows:

- As per IFOAM, “Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.

- As per FAO, “Organic farming is a holistic production management system which...
promotes and enhances health of agro-ecosystem, including biodiversity, biological cycles, and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account their regional conditions and require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials in order to fulfill any specific function within the system.

As per NPOP, “A system of farm design and management to create an ecosystem, which can achieve sustainable productivity without the use of artificial external inputs such as chemical fertilizers and pesticides”.

3. Context
The Government of Rajasthan’s Policy on Agriculture lays emphasis on organic farming in view of soil and human health, sustainable agriculture and environmental protection. Various schemes were/are in vogue in the State for promotion of organic farming:

a. Rashtriya Krishi Vikas Yojana (RKVY)
b. Paramparagat Krishi Vikas Yojana (PKVY)
c. Rainfed Area Development Programme (RADP)
d. National Horticulture Mission (NHM)

Rajasthan Kisan Aayog also advocated incentives and initiatives for promotion of organic farming for the farmers of the State. Now, it is felt and desired that the State should have a well-defined policy on Organic Farming.

4. Principles of Organic Agriculture
Concept of organic farming is based on the following principles:

a. Health: Organic agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one individual.
b. Ecology: Organic agriculture should be based on living ecological systems and cycles, work with them and help sustain them.
c. Fairness: Organic agriculture should be built on relationships that ensure fairness with regard to the common environment and life opportunities.
d. Care: Organic agriculture should be managed in a precautionary and responsible manner to protect the health and well being of current and future generation and the environment.

Organic farming is based on traditional system in which soil health must be kept in mind. The soil in this system is a living entity. The population of micro-organisms in the soil should be maintained through natural methods. Soil cover plays a vital role in organic farming which should be protected to enrich the soil environment.

The principles show that organic farming is much more holistic than mere renunciation of agro-chemicals.

5. Agriculture Scenario in Rajasthan
a. Climate: The climate of Rajasthan State has varied contrasts, and the presence of Aravallis in the South and desert in western part of State are the greatest influencing factors. On the bases of average rainfall, average temperature, soil type, etc. the State has been broadly divided into 10 arid, semi-arid, sub-humid and humid agro-climatic zones.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Area</th>
<th>Districts Covered</th>
<th>Avg Rainfall (mm)</th>
<th>Temp °C</th>
<th>Major Crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>Arid western plain</td>
<td>Barmer &amp; part of Jodhpur</td>
<td>200-370</td>
<td>40.0</td>
<td>8.0</td>
</tr>
<tr>
<td>IB</td>
<td>Irrigated north western plain</td>
<td>Sriganganagar, Hanumangarh</td>
<td>100-350</td>
<td>42.0</td>
<td>4.7</td>
</tr>
<tr>
<td>IC</td>
<td>Hyper arid partial irrigated zone</td>
<td>Bikaner, Jaisalmer, Churu</td>
<td>100-350</td>
<td>48.0</td>
<td>3.0</td>
</tr>
<tr>
<td>IIA</td>
<td>Internal drainage dry zone</td>
<td>Nagaur, Sikar, Jhunjhunu, part of Churu</td>
<td>300-500</td>
<td>39.7</td>
<td>5.3</td>
</tr>
<tr>
<td>IIB</td>
<td>Transitional plain of Luni basin</td>
<td>Jalore, Pali, part of Sirohi, Jodhpur</td>
<td>300-500</td>
<td>38.0</td>
<td>4.9</td>
</tr>
<tr>
<td>IIIA</td>
<td>Semi arid eastern plains</td>
<td>Jaipur, Ajmer, Dauso, Tonk</td>
<td>500-700</td>
<td>40.6</td>
<td>8.3</td>
</tr>
</tbody>
</table>
Rajasthan has a gross irrigated area of approx 9 million hectares. Major sources of irrigation in the State are tube wells, open wells, canals, tanks, etc. Canals are the third largest source of irrigation, accounting for over 20% of the irrigation while tanks and other sources accounted for 2% of the State's irrigation in 2014.

Rajasthan with its 57.7 million livestock population, ranks second in the country and accounts for more than 11% of India's total livestock population. The State ranks first in the country with 16% share in the total goat population of India.

Rajasthan is one of the leading milk producers, with the fifth-largest cattle population in India and some of the finest breeds of milch and draught cattle. Gir, Tharparkar, Rathi and Sahiwal are the best milk producing indigenous breeds and Nagauri Bull is a prominent draught breed. The State ranks second in terms of buffalo population.

Rajasthan is the 2nd largest producer of milk in the country and produced around 17 million MT (12% of India's total milk produce) in 2015. Buffaloes were the largest contributor of milk, followed by cow and goat respectively.

6. Organic Agriculture

a. The World of Organic Agriculture: According to the latest FiBL-IFOAM survey on certified organic agriculture worldwide, nearly 50.9 million ha land is being certified as organic in 179 countries, constituting 1.1% of the total agricultural land of the countries under study. The regions with the largest areas of organic agricultural land are Oceania (22.8 million ha) and Europe (12.7 million ha). Latin America has 6.7 million ha followed by Asia (4 million ha), North America (3 million ha) and Africa (1.7 million ha). The countries with the most number of producers are India (585,200), Ethiopia (203,602), and Mexico (200,039).

b. Organic Agriculture in India: As per the available statistics, India’s rank in terms of World’s Organic Agricultural land was 9th as of 2015 (Source FiBL & IFOAM Year Book 2017). The total area under organic certification is 5.71 million hectare (2015-16). This includes 26% cultivable area with 1.49 million hectares (34,239 sq.km). It covers 10.5% of the total geographical area of the nation, but only 1% water of the entire nation is available in the state. Rajasthan has 14% of India's cultivable land, which accounts for 25.5 million hectares. About 53% of the state's total land area is net sown area.

- The state has a population of 68.6 million (as per 2011 census). Around 2/3rd of the population is connected with the agricultural sector. The agricultural and allied sectors contributed to 31% of its total GSDP in 2015. This contribution is above the national average of 20%.
- Rajasthan is the largest producer of mustard, guar seed and moth beans, second largest producer of gram and total oilseeds and third largest producer of soybean.
- Rajasthan is India's 4th largest producer of food grains including coarse grains, ground nut and garlic, 6th largest producer of citrus fruits, 8th largest producer of pomegranate. Currently Rajasthan is producing 68% of the country’s Coriander, 39% Cumin, 89% Fenugreek, 24% Garlic, 7% Fennel, 7% Mandarin and more than 95% of Isabgol, Henna & Ajwain. The State is a known producer of Bajra, Meth, Onion, Maize, Jawar, Moong, Urad, Wheat, Kinnow, Aonla, Guava, etc.
farmers tend to not use costly chemical inputs like fertilizer, pesticides, weedicides, etc.  
• In Rajasthan, consumption of plant nutrients through fertilizers is 51.7 kg/ha (37.2 kg N + 13.7 kg P₂O₅ + 0.8 kg K₂O) in year 2012-13, which is low as compared to national consumption of 128.3 kg/ha (84.5 kg N + 33.5 kg P₂O₅ + 10.4 kg K₂O) which facilitates for easy conversion to organic farming in Rajasthan.  
• In a nutshell, due to minimal use of fertilizers, insecticides, and pesticides and minimal occurrence of insects, pests and diseases, much of this area is close to being organic by default. With concerted efforts, this can easily be converted into certified organic.  
• The State’s economy has undergone a considerable transformation in the recent past with growth of manufacturing and services sectors. However, agriculture, with over 60% of the State’s population dependent on it, continues to play an important role. Agriculture, including animal husbandry, contributes about one-fourth to the State’s Gross Domestic Product. Growth of the agriculture sector therefore has an important impact on State’s economy.  
• Because of its strategic location the state has good market access. 8,380 sq km of its area falls in the NCR, which has a substantial sale of organic food products and consumption. There is excellent rail, road & air connectivity from the state to all parts of the country.  
• As per estimates of the planning commission, about 15% of total cropped area can be brought under certified organic cultivation in the country. Rajasthan has a potential to convert 5% of total cropped area (~10 lakh hectare) very easily under certified organic in the niche areas of seed spices, medicinal and herbal plants, fruit and vegetables and arid crops in next 5 years.  
• Moreover, several crops grown in Rajasthan have tremendous export potential e.g. Psyllium Husk, Coriander, Cumin, Fenugreek, Ajwain, Sesame, Amaranth, Olives, Garlic, Henna, Kinnow, Amla, Soybean, Wheat, Maize and Pulses. Since the market for organic produce of these crops is expanding, efforts to convert large areas under organic can yield rich dividends for its farmers.  
• Tribal farmers in Southern Rajasthan (Udaipur, Banswara, Dungarpur, hectare and rest 74% (4.2 million hectare) forest and wild area for collection of minor forest produces.  

The country produced around 1.35 million MT (2015-16) of certified organic products which includes all varieties of food products namely Oilseeds, Cereals & Millets, Sugar, Cotton, Pulses, Medicinal Plants, Tea, Fruits, Spices, Dry Fruits, Vegetables, Coffee, etc. The production is not limited to the edible sector but also produces organic cotton fibre, functional food products, etc. (Source FIBL & IFOAM Year Book 2015)

c. Organic Agriculture in Rajasthan: The districts having potential for organic production are Jaisalmer, Barmer, Jodhpur, Jalore, Pali, Sirohi, Dungarpur, Nagaur and Jhunjhunu. Currently, only 56,106.747 ha area (excluding wild) is under organic certification in the State.

<table>
<thead>
<tr>
<th>S No</th>
<th>Status</th>
<th>Area (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Certified area</td>
<td>69,750.31</td>
</tr>
<tr>
<td>2</td>
<td>In-conversion area</td>
<td>141,369.60</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>211,119.92</td>
</tr>
</tbody>
</table>

Source: APEDA, 2014-15

7. Scope and Opportunities of Organic Farming in Rajasthan
A number of opportunities exist in Rajasthan for the Organic sector. The focal points of these opportunities are as follows:

• In Rajasthan, 61% of the cultivable area falls under arid and semi arid zones where rainfall is very low and soils are poor in fertility and water holding capacity. Due to low rainfall, inadequate irrigation facilities and low humidity associated with high temperature (up to 48ºC) in summers, the occurrence of insects, pests & disease is minimal.

• Arid & semi-arid regions of State have low consumption of pesticides and fertilizers, which makes it easy to go for organic conversion without significant yield loss during conversion period.

• Out of 17.4 million ha. cultivated area of Rajasthan, more than 70% area is rainfed. The production is uncertain due to erratic behaviour of monsoon, so farmers tend to not use costly chemical inputs like fertilizer, pesticides, weedicides, etc.

• In Rajasthan, consumption of plant nutrients through fertilizers is 51.7 kg/ha (37.2 kg N + 13.7 kg P₂O₅ + 0.8 kg K₂O) in year 2012-13, which is low as compared to national consumption of 128.3 kg/ha (84.5 kg N + 33.5 kg P₂O₅ + 10.4 kg K₂O) which facilitates for easy conversion to organic farming in Rajasthan.

• In a nutshell, due to minimal use of fertilizers, insecticides, and pesticides and minimal occurrence of insects, pests and diseases, much of this area is close to being organic by default. With concerted efforts, this can easily be converted into certified organic.

• The State’s economy has undergone a considerable transformation in the recent past with growth of manufacturing and services sectors. However, agriculture, with over 60% of the State’s population dependent on it, continues to play an important role. Agriculture, including animal husbandry, contributes about one-fourth to the State’s Gross Domestic Product. Growth of the agriculture sector therefore has an important impact on State’s economy.

• Because of its strategic location the state has good market access. 8,380 sq km of its area falls in the NCR, which has a substantial sale of organic food products and consumption. There is excellent rail, road & air connectivity from the state to all parts of the country.

• As per estimates of the planning commission, about 15% of total cropped area can be brought under certified organic cultivation in the country. Rajasthan has a potential to convert 5% of total cropped area (~10 lakh hectare) very easily under certified organic in the niche areas of seed spices, medicinal and herbal plants, fruit and vegetables and arid crops in next 5 years.

• Moreover, several crops grown in Rajasthan have tremendous export potential e.g. Psyllium Husk, Coriander, Cumin, Fenugreek, Ajwain, Sesame, Amaranth, Olives, Garlic, Henna, Kinnow, Amla, Soybean, Wheat, Maize and Pulses. Since the market for organic produce of these crops is expanding, efforts to convert large areas under organic can yield rich dividends for its farmers.

• Tribal farmers in Southern Rajasthan (Udaipur, Banswara, Dungarpur,
Pratapgarh, Sirohi, Rajsamand, Chittorgarh and Bhilwara) have good natural resources and default natural cultivation practices and therefore offer good scope of organic production to get benefit from international organic agricultural market through backward and forward institutional and stakeholders linkages. Forest areas of tribal dominated districts of Rajasthan have good scope of wild collection under category of non-cultivated organic agriculture.

- Farming systems in Rajasthan essentially integrate crops with livestock, and about 20-30% of income in farming system is contributed by livestock. Therefore, adoption of organic farming management practices is easy in improved farming systems.

8. Vision
Given the above potential and context, Rajasthan has the following Vision for the growth of the Organic sector as defined through this Policy.

a. Doubling of farmers Income through sustainable agriculture development
b. Positioning Rajasthan as an ideal organic producer & exporter
c. Sustainable rural development through imbibing modern & innovative organic farming methods & models.
d. Establishment of brand “Organic Rajasthan” as one of the best and most reliable brands.

9. Objectives
To evolve a robust Organic Policy, the following objectives have been borne in mind:

a. Inclusive Development of Agriculture and Animal Husbandry as Organic: Growth of agriculture, animal husbandry and organic agriculture are mutually inclusive and recognition shall be accorded to this fact. Farmers can be motivated to keep enough livestock to prepare on-farm inputs that can fulfil the nutrient demand of soil in organic farming.

b. Facilitating environment for organic farming: Congenial environment for organic farming shall be created through policy development, adequate infrastructure creation, capacity building and support services.

c. Making organic farming remunerative for farmers: To make organic farming contribute towards doubling farmers’ income, the state shall work towards establishing strong forward and backward linkages. Also, conservation of natural resources on the farm to prepare inputs and discouraging use of chemical insecticides, pesticides and fertilizers shall reduce the cost of cultivation for farmers.


e. Development of organic agribusiness: Efforts will be made to attract entrepreneurs towards organic sector for establishing marketing channels, value addition of organic produce, developing organic villages, taking up organic agri-tourism, etc.

10. Goals

a. Long Term Goals: Establishment of organic farming institutions, training centres, NABL accredited labs, export of organic products from Rajasthan and brand building.

b. Medium Term Goals: Development of organic villages in concentrated cluster mode with value chain infrastructure, rural employment, establishment of processing units and farmer entrepreneurship.

c. Short Term Goals: Identification of key crops for the state, area of operation, cluster formation, organic grower group formation, registration for organic certification.

11. Policy Interventions
Based on the opportunities and potential for expanding the scope for organic farming in the State, specific interventions would be required for bringing greater consciousness and promoting the culture of organic cultivation in the State. The State would put in place mechanisms for the following:

a. Organic Seed and Planting Materials

- Seed and planting material is one of the most critical input for farming. In an organic farming system, the seed/planting material should be organically produced and grown. Thus, the required quantity of seeds of cereals, pulses, oilseeds, etc. would be grown and produced locally to ensure chemical-free seeds by adopting seed villages or organic seed blocks.
In case of seeds that cannot be produced locally and are brought from outside for organic cultivation, the companies will be required not to treat them with chemicals.

Production of organic certified seeds will be encouraged through technical support and incentives. Additional incentive would be provided to organic seed processing plants.

Certified organic seeds will contain the “seed certification tag” as well as “India Organic” logo to ensure the quality and production. Additional premium would be provided on organic seed production of the following categories:

- Breeder Seed
- Foundation Seed
- Certified Seed

Infrastructure for seed production like seed testing laboratories, seed processing units, etc. would be strengthened to cater to the needs of farmers.

Planting material for Garlic, Henna, Kinnow, Amla, Oranges, Ber, Pomegranate, Guava, etc. would be produced locally under supervision of the concerned department and plantations will be developed in the organic way.

GMO seeds would not be permitted in organic production systems.

Establishment of seed villages to meet the requirement of organic seeds and planting materials would be encouraged.

b. Regulations on Chemical Inputs

- Phased restriction on sale and use of chemical inputs such as fertilizers, insecticides, pesticides, fungicides and weedicides, commensurate to the implementation of the Organic Farming Policy in the region would be ensured.

- Sale and use of chemical inputs shall be regulated through necessary legislation, and a prescription-based system shall be enforced, which shall ensure that pesticides are sold only on a case-to-case basis after obtaining prescription from the Agriculture Supervisor (Department of Agriculture, Government of Rajasthan).

- Sale of chemical inputs to children, pregnant women and non-farmers shall be prohibited.

- Ecologically sensitive areas with rich biodiversity and natural resource base (e.g. water bodies), shall be declared as Chemical Input-Free Zones.

- Periodical analysis of water, soil, milk and crops shall be conducted at the district level, where pesticides continue to be used, and the data would be made public to increase awareness.

c. Promotion of Organic Inputs

- Farm production of organic inputs shall be promoted by providing subsidies for infrastructure like rural compost, enriched compost and vermi-compost units, Phosphate Rich Organic Manure (PROM) & other biodynamic preparations.

- Use of other sources of plant nutrients like bio-fertilizers, green manure, untreated bone meals, fish meals, rock phosphates and soil amendments like dolomite would be encouraged.

- Key focus crops for the state shall be identified (some of the key crops include Psyllium Husk, Coriander, Cumin, Fenugreek, Ajwain, Amaranth, Soybean, Wheat, Garlic, Henna, Kinnow, Amla, Olives, Sesame, Maize, Pulses) and village clusters for the same shall be developed for production, certification of organic products and shall be declared as Bio-villages to establish model organic farms.

- Integrated pest management (IPM) practices shall be encouraged and biopesticides, local botanicals, biodynamic farming and adoption non-pesticidal pest management shall be promoted.

- Rishi krishi, panchagavya krishi, zero budget farming, zero tillage farming, natural farming, biodynamics farming, nateuco farming, Jaiva Krishi, etc. which are cheap and farm resource based shall be encouraged.

- Incentive or financial assistance will be provided to registered ‘Gaushalas’ on sale of cow urine for preparation of inputs for organic farming.

- Organic farmers would be incentivised at par with the conventional farmers who receive subsidy for agricultural inputs. Subsidy can be provided for organic inputs like rock phosphate, gypsum, pit compost, NADEP compost, PROM, bio-fertilizers and bio-pesticides on qualifying the certification...
parameters by a certification body.

d. Animal Husbandry and Feed & Fodder
   - Animal Husbandry is an integral part of farming system, and in organic farming, it has the vital role to play as cow dung is the primary source of composting/plant nutrients.
   - Rearing of one bovine animal per acre for organically cultivated land would be encouraged. Farmers/groups with indigenous cows will be given preference under various schemes for organic production in the state.
   - Increase in cattle population, particularly cows, would be encouraged, as this supports plant protection and nutrient requirement of crops and improves soil condition besides supplementation of income of farmers.
   - All animal products including meat, eggs, milk and milk products would also be organic as far as possible for which restricted chemical products would not be fed to the animals.
   - Installation of feed plants would be encouraged where local resources are utilized to produce organic feed.
   - Animals would be provided with balanced organic green and dry fodder, mineral mixture (natural) and pure drinking water.
   - Area under fodder plantation would be increased to generate sufficient quantity of fodder to meet the requirement.
   - Vitamins, medicines and minerals would also be taken care of. Use of only permissible medicines, vitamins and minerals, preferably Ayurvedic and Homeopathic, would be encouraged.

e. Organic Quality Assurance and Traceability
   - The State Government will create simpler and cost-effective mechanism for certification of organic produce as per market requirement.
   - Quality of produce will be assured through implementation of strict ICS system and establishment of residue testing labs in state at divisional levels for easy testing.
   - Suitable financial incentives for testing of produce shall be provided and organic inputs at subsidised rates will be made available to farmers. Involvement of industry/industry associations on PPP mode will be encouraged.
   - Traceability of the products either under PGS or third party certification system will be maintained through appropriate mechanisms. For third party certification “Tracenet” software developed by APEDA has been applied to monitor the production and its trade, carrying the data from registration to commodity transaction, while in PGS, NCOF has launched “PGS India portal” where database of the farmers and their products is uploaded for their easy access. Farmers can switch to third party certification if they are interested in export.

f. Certification
   The State will have dual quality assurance system involving both, third party certification and participatory guarantee system. Certification fee will be reimbursed or subsidy will be provided by Government of Rajasthan.

Third Party Certification:
   - Regulatory Body: Agricultural and Processed Food Products Export Development Authority (APEDA) is implementing the National Programme of Organic Production (NPOP). Under the NPOP, documents like National Standards, accreditation criteria for accrediting inspection and certification agencies, have been prepared and approved by the National Steering Committee.
   - State Organic Certification Agency: Rajasthan Organic Certification Agency (ROCA) is established by gazette notification of Government of Rajasthan duly accredited by APEDA for NPOP as well as NOP-USDA standards. The third party certification work will be carried out by ROCA for the registered area under organic policy framework.
   - Internal Control System development and grower group formation: The work of ICS development will be carried out by selected NGOs, FPOs, SHGs, etc. having credibility and enough past experience. Local self help groups having long experience would also be involved in the process of ICS development so that, at a later stage, local farmers would be able to take over the job. Local educated unemployed youths would be trained by creating livelihood schools and generating employment in the process of ICS development.
Registration of organic grower group members, their training, monitoring of field activities, documentation, procurement and marketing functions will be performed by the ICS. The certified products from the grower group have international recognition and scope for export as well.

Participatory Guarantee System (PGS)
- As per IFOAM, “Participatory Guarantee Systems” are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange. Regulation of PGS is done by National Centre for Organic Farming (NCOF). Implementation of PGS is initiated by registration of Regional Council (RC) under NCOF. Dy. Director, Agriculture (Extn.) Z.P. of respective districts of the State are registered as RC by NCOF for managing PGS. Under RC local resource persons (LRPs) are registered, those having the duty of cluster formation, documentation, monitoring and online data updation of farmers and their products. Products certified under PGS have the scope of being traded in domestic market only.

g. Infrastructure Development
Input Production Units
- A major problem in organic farming is the arrangement of organic input or its on-farm production. Establishment of units for input production will be facilitated through the policy to aid production of adequate quality and quantity of organic inputs and their continuous supply to the farmers. Existing input production units will be incentivised and strengthened.
- Bio-fertilizers are the cheapest source of plant nutrients and about 15-20 percent of nitrogen requirement can be met through the environment using local strains of Azotobactor, Azospirillum, Rhizobium, etc. which are more effective than strains from outside. Production of Zinc, Iron and Phosphorous solubilizing bacteria would also be encouraged. For this, the existing bio-fertilizer production capacity would be enhanced and supported.

Strengthening of IPM, Soil and Residue Testing Laboratories
- IPM has a vital role to play in control of pest and diseases in organic agriculture. The existing IPM laboratories would be strengthened and upgraded so as to enable monitoring and surveillance of pests & diseases and release of bio-control agents. Besides Trichoderma, other bio agents would also be produced and released for control of diseases.
- Soil health management and monitoring of organic carbon, heavy metals and pesticide residue is very important in organic farming system and therefore the existing soil testing laboratories would be strengthened to increase the capacity.
- The State will put in place, a mechanism for establishment of NABL accredited pesticide residue testing, soil testing and IPM labs at regional level. Services established under the Policy regime would be provided on discounted rates to the farmers. The mechanism will also incentivise input material, input manufacturing units and processing & packaging units for organic produce.

Storage, Processing and Packaging units
- To fulfil the long term goals of the Policy and to encourage exports, setting up of processing and packaging units will be facilitated. This would help in managing perishable organic products and support brand building through proper packaging and labelling.
- In view of the difficulties in dispatch and arrival of raw organic products in the national and international markets, processing and packaging facilities will have an important role to play. High value potential crops of Rajasthan like Psyllium Husk, Coriander, Cumin, Fenugreek, Ajwain, Amaranth, Soybean, Wheat, Garlic, Henna, Kinnow, Amla, Olives, Sesame, Maize, Pulses, medicinal and herbal plants need value addition facilities such as grading, cleaning, slicing, drying, grinding, packaging, etc. The processing plants would meet the NPOP and other international standards of organic certification.

Common Facility Centres (CFC) for processing of organic produce will be promoted and incentivised. Incentives would also be provided for establishing common facilities and service centres for FPO, registered cooperative societies, etc. which have a minimum of 30% registered organic growers as members.
- Establishment of storage, processing/value addition units, transport chain
and organic mandis will be encouraged for growth of organic sector.

h. **Training and Capacity Building**
   - To achieve the Organic Policy goals, a large scale training programme and orientation will be required for farmers as well as officials. Developing manpower with scientific knowledge, who shall then work on the capacity building of farmers will be essential. Capacity building of farmers, officers and scientists will be facilitated through exposure visits and institutional trainings.
   - Awareness on organic farming and underlying practices would be provided through workshops, conferences, seminars, fairs, etc. For this purpose, adequate provision for physical facilities and support will be provided.
   - Development of Centres of Excellence to provide trainings to farmers and encourage dissemination of technology through farmer field schools.
   - Agricultural Universities and other institutes will be encouraged to launch Training programme, research development programmes, diploma and certificate courses in organic agriculture, especially covering areas like development of package of practices, input management, certification and inspection, supply chain management, marketing, etc.
   - Training of extension functionaries, organic input dealers (shall also work as a promotion initiative) and creating farmer to farmer training network shall be facilitated.
   - Awareness programmes will be launched to educate farmers, consumers and civil society as a whole about the usefulness of organic farming.
   - Development of a repository and database of organic farmers and organic products. State level web based data system shall be considered.

i. **Research and Technology Development**
   - As organic farming differs from conventional agriculture, research facilities and separate package of practices would be developed for organic agriculture.
   - Standardization of technology and package of practices as per various agro climatic zones of the state through State Agricultural Universities (SAUs), Adaptive Trial Centres (ATCs) and other institutional framework.
   - Development of nutrient management protocols with crop rotations, mixed farming, on-farm input management with locally available resources.
   - Development of organic compliant plant protection measures.
   - Development of appropriate machinery & tools (minimum tillage/zero tillage) for organic farming.
   - Validations and documentation of indigenous knowledge system in organic farming, conservation and seed production as practiced by farmers in the state.
   - Identification, development and documentation of suitable post-harvest practices (storage, processing and value addition) in organic farming.
   - Setting up of organic farming research centre, organic farming diploma/certificate courses and incorporation in study curriculum in agriculture education system from school to university level.

j. **Marketing of Organic Products, Brand Building and Consumer Awareness**
   - Exploration and development of proper market linkages is essential for which a separate Marketing Cell would be established with all required facilities and manpower.
   - All the products - raw or processed - for sale as organic would be given a brand name with the “Organic Rajasthan” logo. Brand would be promoted at national and international levels through trade fairs, exhibitions, etc.
   - Proper tie ups with the retail outlets and wholesale markets in metro cities will be facilitated for sale of organic products of Rajasthan.
   - Areas producing organic crops with specific identity and recognition (Nagaur-Methi, Jhalawar-Oranges, Harauti-Green Coriander, Psyllium Husk and Cumin from western Rajasthan, etc) will be developed with suitable branding and geographical indication application shall be facilitated.
   - Awards and recognition to farmers, processors, marketers and technical, extension professionals will be instituted. SHGs, women’s groups and farmer producer organizations (FPOs) will also be encouraged through such recognition.
   - Agro ecology tourism will be promoted through farm/urban centres establishment with innovative and nutritive recipes from organic produce.
   - Development of “Organic Rajasthan” brand and logo.
   - Celebration of State Organic Day every year.
• Expand the earmarked “Krishi Upaj Mandi” shops for organic products further.
• Discounted rates of Mandi Tax on sale of organic produce.
• Provision of additional subsidy on export of organic products/commodities.
• Organic produce should attract a premium price, even during government sponsored procurement drives.
• Supply of organic food to mid-day meal, Akshay Patra and circuit house, etc. would be encouraged.
• Development of sale points at Saras parlours, Universities, Krishi Mandis, co-operatives, government department canteens, Hospitals and Hostel counters.
• Instituting organic farmers awards at panchayat samiti level, district level and state level.
• Weekly “haats” shall be organized at various places to attract the consumers.
• A state-level consumer awareness program will be taken up to drive the sales of organic produce within the state. This shall build on the awareness as well as trust of the consumers to purchase organic products.

12. Implementation of Policy

To implement policy and programmes of organic farming in the State, the following are proposed:

a. Constitution of Technical Committee

The following departments of the State Government and agricultural universities shall work under one umbrella for the promotion and implementation of the organic farming programmes in the State.

• Department of Agriculture
• Department of Horticulture
• Department of Animal Husbandry
• Department of Forest
• Department of Agriculture Marketing
• University of Agricultural Sciences in Rajasthan State.

A State level technical committee will be constituted under the chairmanship of the Additional Chief Secretary/Principle Secretary for monitoring and implementation of this Policy; ensure co-ordination among various departments and organizations concerned with organic farming, and also management of budget allocation and its utilization.

b. Mission mode approach: For effective implementation of the Policy, a mission mode approach will be adopted.

c. Compact area approach: Area for implementation will primarily be selected based on key crops, suitability to agro climatic zones and niche areas of the state.

d. Phasing: The Policy shall be executed in a phased manner keeping in view goals of Policy and the availability of resources.

Initially 40,000 ha. area will be covered for organic farming supported under different schemes and the area will be increased slowly, year after year. The certification work for such areas will be done by State Government certification body.

e. Period of operation: The Policy will be applicable for a period of 10 years from the date of its launch.

f. Policy Review: Policy will be subject to review from time to time as per need with prior approval of the Government.

g. Programme implementing agency: To look after the implementation of the Organic Farming Policy programmes in an integrated manner under governing mechanism, a separate executive cell/wing/agency under any existing department/agency duly supported with manpower and finances will be constituted/earmarked.