GOVERNMENT OF TAMIL NADU

TAMIL NADU STATE POLICY ON PROMOTION OF ORGANIC FARMING

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TAMIL NADU STATE POLICY ON PROMOTION OF ORGANIC FARMING

1. Scope for organic farming

Organic Agriculture is the oldest form of agriculture on this earth. In India, the traditional knowledge of agriculture which was essentially organic, was nurtured and groomed by millions of farmers over several hundred years and continued to grow systematically without any adverse impact on soil and environment. The traditional system allowed perfect harmony between man, animals, plants and nature. Organic farming, evolved on the basic theoretical expositions of Rodale in the United States, Lady Balfour in England and Sir Albert Howard in India during 1940s. Organic agriculture is the holistic production management system which promotes agro ecosystem health, including biodiversity, biological cycles and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs using agronomic, biological and mechanical methods to fulfill any specific function within the system and avoiding the use of synthetic fertilizers and pesticides to ensure sustainability of agriculture, taking into account that regional conditions require locally adapted systems.

Organic farming aims at production of quality and safe agricultural products for consumption devoid of chemical residues due to the adoption of eco-friendly production techniques and farming systems that restore and maintains soil fertility. It also enhances the biological diversity of plants and animals that helps to maintain the natural ecobalance. Organic farming helps in conservation of finite resources and protection of natural environment so that the needs of people living today can be met without compromising the ability of future generation to meet their own needs. Organic farming relies on natural resources such as crop rotation, crop residues and animal manures particularly vermicompost, legumes, green manure and biological pest management to maintain soil productivity.

The modern industrial input based agriculture introduced during sixties was impressive and practically transformed Indian agriculture from subsistence to surplus generating enterprise. indiscriminate use of chemical inputs over the last four decades resulted in loss of natural habitat balance, loss of soil health, soil erosion, decreased ground water level, soil salinisation, pollution due to fertilizers and pesticides, reduced food quality and increased cost of cultivation, making the farmer poorer from year to year. The consumers’ fear triggered by food scares and technological developments such as genetic modification and food irradiation have been
translated into serious concern about food safety and quality. In addition, public awareness of the irreversible damage done to the environment by practices that lead to soil and water pollution, depletion of natural resources and destruction of delicate ecosystems has led to calls for more responsible attitude towards our natural heritage. Nature provides us with very essence of life. It is time to shift the accent to nontoxic, nonpolluting and eco-friendlier natural habits and habitats. Hence there is a demand in shift from the “resource degrading” chemical agriculture to a “resource protective” biological or organic agriculture. This leads to sustainable development concept as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.

The vision of organic farming in India has necessitated the Government at Central and State levels to recognize the need of change in farming system approach, and initiated programmes to promote organic farming in a big way. Government of India has started Network Project on Organic Farming (NPOF) for promotion of organic farming and also launched the National Programme for Organic Production (NPOP) to provide an institutional mechanism for the implementation of National standards for organic cultivation, accreditation of certification agencies, inspecting agencies etc. The Government has also implemented the National standards for various organic farming activities through the National accreditation policy and programmes. Hence organic farming has to be promoted in a big way to provide quality and safe food to the growing population and also to protect the environmental degradation.

2. Factors driving organic farming in Tamil Nadu: Diverse agro climatic regions in Tamil Nadu favours cultivation of wide range of crops under organic farming for domestic and export market demands. Health consciousness has developed well among consumers to have healthy food free from chemical residues. Premium price for organic products favours farmers to practice organic farming in urban and sub urban areas. There is constantly growing export market for organically produced agricultural and horticultural crops. Therefore involvement of corporate sectors in procuring organic products directly from farmers for both domestic and export markets is very bright.

- Concepts of organic agriculture: The philosophy of organic agriculture is to feed the soil other than the crops to maintain soil health and is a means of giving back to the nature what have been taken from it. Organic farming is a system close to nature wherein problems of farming are managed using local resources alone. The concepts involved in organic farming is based on
principle of proper recycling of natural and on farm resources duly recycling them as inputs, crop rotations and cropping systems, minimizing the use of external inputs. The use of synthetic fertilizers and pesticides should be avoided and to increase and maintain biological diversity among plants and animals and thereby not polluting the soil. Habitat development is the key factor in restoring natural ecosystem to facilitate fauna and flora and to promote natural predators, parasites, etc.

4. Objectives of Organic Farming

Organic farming aspires to a complex mix of agronomic, environmental, agricultural and processing and is based on a number of objectives such as:

- To improve the soil fertility and productivity
- To encourage and enhance biological cycles within the farming systems, involving microorganisms, soil flora and fauna, plants and animals
- To make the farmers to take up crop cultivation with available farm and local resources without relying on external supply of inputs and thus making the low production cost and more profit.
- To use as far as possible, renewable resources in locally organized production systems
- To improve the depleted soils of rainfed ecosystem by addition of suitable organic manures to make them input responsive and better performing even under drought conditions
- To make the environment safe and pollution free and also to protect health of human beings and animals
- Organic farming aims to provide safe and quality food for consumption which contains no chemical residues
- To bring about suitable institutional changes in teaching, research and extension activities on organic farming.

Stakeholders involved in Organic Agriculture: Farmers, Scientists, NGOs, Government officials, Government policy makers, Input dealers, Corporate companies, Exporters, Consumers, tifying agencies, etc., must be involved for the successful implementation in Organic iculture

Steps involved in achieving the principles in organic farming: The steps involved in eving the principles in organic farming are viz., selection of land and conversion, crop and
vareitals selection, mechanical / manual intercultural operations, maintenance of soil health, plant
protection methods through bio control agents, linkages with other farm based enterprises such as
animal husbandry, post harvest management and value addition of organic products and
certification of organic farm products and marketing.

7. Strategies for promotion of organic farming in Tamil Nadu

Strategy I: Identification of potential districts and suitable crops for organic farming
Strategy II. Scientific validation of production technologies including organic inputs
Strategy-IV. Ensuring good quality organic inputs including seeds, planting materials and
other bioinputs
Strategy IV. Role of Animal Husbandry Department in organic farming
Strategy V. Role of Agricultural Engineering Department in Soil and Water Conservation
Practices
Strategy VI. Role of Forestry Department in Organic farming
Strategy-VII: Setting up of model organic farms at Panchayat levels for demonstration
Strategy-VIII: Community supported organic agriculture
Strategy-IX: Value addition to organic products
strategy-X: Training, awareness and capacity building
strategy-XI: Facilitating marketing facilities for organic produces
strategy-XII: Providing financial assistance to organic growers
strategy-XIII: Organic certification system in the State
strategy-XIV: Access to Organic farming cards
strategy-XV: Introducing organic farming as curriculum in educational institutions
strategy-XVI: Creation of on-farm renewable energy units
strategy-XVII: Documentation of Scientific validation of organic farming practices /
strategy-XVIII: Organisational set-up for promotion of organic farming

strategy I: Identification of potential districts and suitable crops for organic farming

Organic farming practices can be followed in all the districts of Tamil Nadu. However
we shall be given to the districts where high value crops that fetch high premium price need to
encouraged. In rainfed agriculture, farmers generally grow crops without application of
izers and pesticides traditionally. Hence there is large scope for organic farming in rainfed
culture. Organic farming area can be selected in areas with crop diversification, reduced
ption of chemical fertilizers and pesticides, availability of plenty of organic source in the
farmers active participation under organic farming practices in large area, farmer’s
uous knowledge on organic farming, export potential of the region for organic produce and
tive activities of Farmer groups, Self Help Groups and NGO’s on organic farming. The crops
mended for organic farming are furnished in Table 1. The potential areas of organic
ation in Tamil Nadu are presented in Tables 2, 3, 4 and 5.
Table 1. Crops recommended for organic farming

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Crop classification</th>
<th>Crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cereals &amp; millets</td>
<td>Paddy, sorghum, cumbo, maize and minor millets</td>
</tr>
<tr>
<td>2</td>
<td>Pulses</td>
<td>Pigeonpea, chickpea, green gram, blackgram</td>
</tr>
<tr>
<td>3</td>
<td>Oilseeds</td>
<td>Groundnut, castor, sunflower, sesame</td>
</tr>
<tr>
<td>4</td>
<td>Commercial crops</td>
<td>Cotton and sugarcane</td>
</tr>
<tr>
<td>5</td>
<td>Spices</td>
<td>Chillies, turmeric, pepper, cardamom, coriander</td>
</tr>
<tr>
<td>6</td>
<td>Plantation crops</td>
<td>Tea, coffee, cashew, coconut, arecanut</td>
</tr>
<tr>
<td>7</td>
<td>Fruits</td>
<td>Mango, banana, guava, sapota and amla</td>
</tr>
<tr>
<td>8</td>
<td>Vegetables</td>
<td>Tapioca, tomato, brinjal, cucurbit, onion, cole crops and leafy vegetables</td>
</tr>
<tr>
<td>9</td>
<td>Medicinal plants</td>
<td>Senna, coleus and gloriosa</td>
</tr>
</tbody>
</table>

Table 2. Food crops potential areas for organic cultivation in Tamil Nadu

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Crops</th>
<th>Potential districts in Tamil Nadu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paddy, Cotton, Millets, Groundnut, Castor, Sunflower, Sesame and Maize</td>
<td>Viluparam, Tiruvannamalai, Kancheepuram, Salem, Krishnagiri, Dharmapuri, Erode, Karur, Perambalur, Thiruchirapalli, Thanjavur, Tiruvarur, Nagapattinam, Pudukkottai, Dindigul, Theni, Ramanathpuram, Tirunelveli, and Kanyakumari districts</td>
</tr>
<tr>
<td>2</td>
<td>Redgram</td>
<td>Cuddalore, Vellore, Salem, Tiruvannamalai, Trichy, Dharmapuri, Pudukkottai, Madurai, Tirunelveli, Coimbatore, Dindigul</td>
</tr>
<tr>
<td>3</td>
<td>Blackgram</td>
<td>Nagapattinam, Thiruvarur, Cuddalore, Thoothukudi and Tirunelveli and Villupuram</td>
</tr>
<tr>
<td>4</td>
<td>Greengram</td>
<td>Thoothukudi, Tirunelveli, Tiruvarur, Nagapattinam, Virudhunagar and Thiruvarur</td>
</tr>
</tbody>
</table>

Table 3. Fruits crops potential areas for organic cultivation in Tamil Nadu

<table>
<thead>
<tr>
<th>No.</th>
<th>Crops</th>
<th>Potential districts in Tamil Nadu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Banana</td>
<td>Tiruchirapalli, Thoothukudi, Tirunelveli, Pudukkottai, Thanjavur, Erode, Coimbatore</td>
</tr>
<tr>
<td>2</td>
<td>Mango</td>
<td>Krishnagiri, Vellore, Dindigul, Theni, Dharmapuri, Madurai, Thiruvarur</td>
</tr>
<tr>
<td>3</td>
<td>Sapota</td>
<td>Tirunelveli, Erode, Karur, Dindigul</td>
</tr>
<tr>
<td>4</td>
<td>Grapes</td>
<td>Theni, Coimbatore</td>
</tr>
<tr>
<td>5</td>
<td>Guava</td>
<td>Madurai, Dindigul, Vellore, Virudhunagar</td>
</tr>
<tr>
<td>6</td>
<td>Anola</td>
<td>Tirunelveli, Sivagangai, Thoothukudi, Coimbatore, Dindigul, Erode</td>
</tr>
</tbody>
</table>

Table 4. Vegetable crops potential areas for organic cultivation in Tamil Nadu

<table>
<thead>
<tr>
<th>No.</th>
<th>Crops</th>
<th>Potential districts in Tamil Nadu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tapioca</td>
<td>Namakkal, Salem, Dharmapuri</td>
</tr>
<tr>
<td>2</td>
<td>Drumstick</td>
<td>Thoothukudi, Dindigul, Karur</td>
</tr>
<tr>
<td>3</td>
<td>Tomato</td>
<td>Coimbatore, Dharmapuri, Salem, Krishnagiri</td>
</tr>
<tr>
<td>4</td>
<td>Onion</td>
<td>Perambalur, Thiruchirapalli, Namakkal, Dindigul</td>
</tr>
<tr>
<td>5</td>
<td>Brinjal</td>
<td>Vellore, Kancheepuram, Theni, Coimbatore</td>
</tr>
<tr>
<td>6</td>
<td>Cabbage</td>
<td>Nilgiris, Krishnagiri, Dindigul</td>
</tr>
<tr>
<td>7</td>
<td>Potato</td>
<td>Nilgiris, Dindigul</td>
</tr>
<tr>
<td>8</td>
<td>Bhendi</td>
<td>Kancheepuram, Vellore, Dindigul</td>
</tr>
</tbody>
</table>
Table 5. Spices crops potential areas for organic cultivation in Tamil Nadu

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Crops</th>
<th>Potential districts in Tamil Nadu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Curry Leaves</td>
<td>Coimbatore, Salem, Thoothukudi</td>
</tr>
<tr>
<td>2</td>
<td>Turmeric</td>
<td>Erode, Coimbatore, Salem</td>
</tr>
<tr>
<td>3</td>
<td>Coriander</td>
<td>Cuddalore, Perambalur, Virudhunagar</td>
</tr>
<tr>
<td>4</td>
<td>Chillies</td>
<td>Ramanathapuram, Thoothukudi</td>
</tr>
<tr>
<td>5</td>
<td>Tamarind</td>
<td>Dindigul, Theni, Coimbatore, Madurai</td>
</tr>
<tr>
<td>6</td>
<td>Pepper</td>
<td>Nilgiris, Dindigul</td>
</tr>
</tbody>
</table>

**Strategy II. Scientific validation of production technologies including organic inputs**

Research programmes on organic farming should be promoted for high value agricultural and horticultural crops in different agroclimatic zones of Tamil Nadu. Traditional / local varieties and improved varieties suitable for organic cultivation should be preserved and validated for adaptability, performance, pest, disease, salt and drought tolerance. Maintain local land races and crop genetic diversity. Eco-friendly indigenous plant protection measures (bio pesticides and bio control agents) may be identified and evaluated for both crops and animals. Identification and popularization of suitable microbial strains is essential for organic farming practices. The use of external inputs from industrially produced organic inputs have to be minimized to reduce cost of production of organic produce and instead encourage utilization of farm waste / crop residues, etc, to grow organic crops. Indian Council of Agricultural Research has published number of documents on inventory of Indigenous technical knowledge in agriculture. Tamil Nadu Agricultural University has to validate the indigenous knowledge scientifically and release for commercial use. Organically produced products should be processed organically to achieve the objective of organic farming. Research on major organic products including tea, spices, honey, jasmine rice, coffee, vegetables, cereals, dry fruits (walnuts, cashew), sesame seeds, medicinal plants, garments made of organic cotton and organic sericulture have to be concentrated and strengthened in different agroclimatic condition of Tamil Nadu. Cost of organic cultivation and returns may be worked out and distributed to farmers. Farmers' participatory approach has to be implemented in research and in implementation organic farming development programmes. Crop production manual exclusively for organic farming practices has to be prepared. The task of quality control can be carried out with establishment of 'Organic Farming Research Centre' living network research in different research stations of Tamil Nadu Agricultural University, Coimbatore.
Specific package of practices have to be developed for organic dairy, organic poultry, organic quail and organic fisheries by the Tamil Nadu Veterinary and Animal Sciences University, Chennai. Screening of native livestock breeds which are locally adoptable and resistant to drought, parasites and diseases have to be carried out. Herbal remedies can be developed for control of disease and parasites in livestock. Pharmacovigilant laboratory has to be established for residue analysis of pesticides, chemicals, etc.

**Strategy-III: Ensuring good quality organic inputs including seeds, planting materials and other bioinputs**

Ensuring good quality of organic inputs viz., quality seed, seedling, planting materials, organic manures, vermicompost, green manure crop seeds, biofertilizers, biocides, biofungicides, biocontrol agents, botanical formulations, etc. should be made available at adequate quantities and at appropriate time. Composting technologies available for various organic wastes should be popularized among the farming community. Farmers have to be facilitated to produce compost from farm waste, leaf litter and bio-degradable waste. Segregation of municipal solid waste and conversion into organic manure to eliminate heavy metals and other toxic ingredients which make it unfit for utilizing it as manure. Financial provision can be made for organic compost production in rural areas / villages / forest areas where good quality compost can be produced to utilize in organic farming. Organic raw material available in the forests can be converted into compost. Mother cultures can be produced and supplied from Tamil Nadu Agricultural University laboratories for quality bio-input generation. In social forestry schemes, promotion of neem and gliricidia plants which in turn serve as green leaf manure crops in organic farming. Financial assistance should be provided to the farmers for establishing integrated farming system in their farms. Bankable projects should be formulated for construction of cattle sheds and biogas plants to effectively utilize cow’s urine and dung. The standardization of bioinputs is very important to safeguard the interest of organic farmers. Production of specialised bioinputs by private companies has to be monitored. The government, NGOs and organic farming groups should be given the role of monitoring in standardization of bioinputs.

**Strategy IV. Role of Animal Husbandry Department in Organic farming**

Farm animals play crucial and key role in organic agriculture as the intermediary between the utilization of crop residues and the fodder produced at the farm and the return of nutrients as manure. Farm animals in the integrated farming system add income through organic meat, eggs and dairy products, as well as draught animal power.
condition and pasture development under rainfed condition is essential to enhance the availability of biomass. Subsidy has to be provided to the farmers towards the purchase of farm animals and to save animal husbandry activities in the State which ensures household nutritional security by providing milk, meat, egg, etc. Promotion of livestock 'Goshala' in villages for taking care of old and unproductive animals is required for dung and urine which contribute for organic farming. Government will support the promotion of fodder and pasture development to enhance the availability of animal feed and fodder, screening of the indigenous and exotic livestock breeds resistant to parasites and diseases, screening of herbal remedies for control of disease and parasites to manage livestock in good health. The organic standards should be followed for organic livestock production for domestic and export markets as prescribed by the European Union, Australia, Japan and USDA’s National Organic Program Regulations.

Strategy V. Role of Agricultural Engineering Department in Soil and Water Conservation Practices

Soil and water conservation practices such as contour bunding, leveling, trenching, scooping, water harvesting, cultivation across the slope, mulching, etc., are extremely useful to conserve the naturally available nutrients at site, conserve soil and prevents soil erosion and conserve the good quality water in situ. Soil moisture conservation helps in higher microbial activity which in turn helps in building up of organic carbon in soil. Government should encourage organic farming on watersheds basis since the Government of India funded schemes on watershed basis for agricultural development. Financial assistance shall be provided to the soil and water conservation measures through ongoing watershed development programmes.

Strategy VI. Role of Forestry Department in Organic farming

Composting of organic raw material available in the forests can be encouraged. Usage of ecofriendly organic manures, biofertilizers, vesicular arbuscular mycorrhiza, and biopesticides can be encouraged in forest areas. Establishment of plantations in and outside the reserve forests, community lands, wastelands, revenue lands, farmlands, homestead avenue plantations and institution plantations to supply green leaf manure. Promotion of maximum foliage producing green leaf manure crops such as neem, vadamayaman and gliricidia for organic matter addition in forestry areas through social forestry schemes. Establishment of organic forestry nurseries of non-timber forest produce, medicinal plants, etc., can be encouraged.
Strategy-VII: Setting up of model organic farms at Panchayat levels for demonstration

Establishing model organic farms at each panchayat / state seed farms / livestock farms can be taken up to demonstrate the organic farming practices and inputs preparation. The criteria for selecting the Organic village / Bio-village are viz., rainfed and drought prone areas /, tribal areas are the priority areas for undertaking organic farming, inclination of the farmers towards practice of organic agriculture; low level of chemical fertilizers / pesticides use; availability of source of organic inputs and current level of organic farming systems adopted by farmers and export potentiality. Promotion of organic farming shall be carried out in cluster based approach which will help in concentrating activities for the targeted group, help in creation of awareness and educating the farmers easily making a quick assessment of demand and arranging supplies, etc. There is need to identify adequate number of committed service providers, who will facilitate for technology transfer to identify farmers and to establish a link between the certification agencies and the farmers. Organic farming practices will be monitored by the extension officials of agricultural / Forest department / Sericulture departments.

Strategy-VIII: Community supported organic agriculture

Micro watershed project on organic farming should be developed. Drip irrigation and sprinkler irrigation should be promoted among organic farmers. Financial assistance can be extended to government and non government agencies to improve soil and water conservation measures. Off season green manuring may be given importance by way of raising green manure crops in the gap of existing cropping systems. On-farm production of organic manures such as compost, green manure production should be encouraged with financial assistance by supply of green manure seeds and construction of compost pits and vermicompost units in the farmers fields itself. Maintenance of organic carbon content is the major limitations in tropical condition to promote organic farming. Crop residues mulch should be encouraged in season and also in off season to reduce the organic matter degradation in soil. In situ composting of crop waste by effective slashing technique and using of microbial strain should be encouraged to increase organic carbon content of soil. In each district at block level twenty to fifty interested potential farmers with nearby lands may be selected in a cluster approach for organic farming. To avoid pollution from adjacent farms all the farmers (organic and inorganic) may be sensitized to follow good agricultural practices and training may be given. Selected farmers may be registered as
the Government. Organic farming add more carbon in the soil through organic manures, green manures and green leaf manures. This will fetch more revenue to organic farmers by way of carbon credit system. Organic growers can be registered for obtaining carbon credit facilities. Necessary correction to be made in crop insurance policy to protect individual organic farmers from yield loss by natural calamities and pest and disease

**Strategy-IX: Value addition to organic products**

Organic farmers can be encouraged in value addition to organic produces through improved processing technologies. Small scale organic food processing units needs to be established to process organic products at district level. Value added products can also be tested at the analytical centre of Post Harvest Technology Centre, Tamil Nadu Agricultural University, Coimbatore, Home Science College and Research Institute, Madurai and Indian Institute of Crop Processing Technology, Thanjavur

**Strategy-X: Training, awareness and capacity building**

Capacity building through training can be done continuously on organic farming to all stakeholders involved in organic farming. Modules / books / video films, posters should be prepared on production technologies and economics of organic farming in different crops. Farmers should be educated on the ill-effects of over usage of inorganic fertilizers and should be encouraged to reduce the usage of synthetic fertilizers and later to stop using it. Educational tours would be arranged for both departmental officials and farmers to model organic farms inside and outside the State. Popularization of organic farming is to be carried out based on success stories, demonstrations and organising Organic Mela’s in all districts. Farmers have to be trained about cost-benefit relationship in organic farming and about export of organic produce.

**Strategy-XI: Facilitating marketing facilities for organic produces**

District functionaries will assist the farmer groups to market their produce locally for marketing the organic products with premium prices. Separate organic markets with all the infrastructural facilities can be created at block level / district level for organic products with premium price so that the contamination with conventional produce is avoided. Corporate Sector Super Markets will be permitted for sale of organic produce and opening of outlets of organic products on commission basis. Direct marketing channels shall be established between organic producers and consumers for domestic and export markets. Organic agro industrial complexes will have to be set up near major towns for linking production, processing and marketing in the form of
integrated system, NGOs shall identify the organic product traders and shall sale/arrange to sail the produce to the one who offers maximum (premium) price to the farmer which is more than the prevailing market price. Organization of melas/exhibitions shall be arranged to popularize organic product marketing. Participation in International Organic Fairs and Exhibitions shall be facilitated to promote organic export markets. Organic Producers Club shall be developed involving corporate companies, farmers, Self Help Groups and NGOs to manage organic markets with government assistance.

Strategy-XII: Providing financial assistance to organic growers
Credit facility may be encouraged for organic farmers group clubs, the graduates, Self Help Group's practicing organic farming and to establish organic input generation units such as organic seed/seedling, vermicompost, vermin-hatchery units, compost, press mud and other forms of generation of organic nutrients through National Bank for Agriculture and Rural Development (NABARD), Nationalized Banks, Co-operative Rural Banks and Commercial Institutes. Subsidy can be provided to organic farmers on equivalent amount basis which is provided for chemical fertilizers as in the conventional farming. Government should provide incentives/subsidy for a period of three years to compensate the loss of produce in the initial years. Distribution of green manure seeds and biofertilizers can be done at subsidized rates to the organic farmers. Encourage the establishment of vermicompost units and vermin-hatchery units with subsidy. Financial assistance through banks with subsidy can be done towards all livestock enterprises since it is the basis for organic inputs and for effective utilization of crop residues. Organic inputs may be exempted from levy of taxes, excise, income tax, etc. Farmers have to be encouraged to produce green manure seeds by providing subsidy to restore soil health. Incentives and concessions would be given for organic processing industries for development of infrastructure facilities and for obtaining ISO (International Organization for Standardization) and other international certification. Composting could be popularized and financially supported under different schemes of Government of India.

Strategy-XIII: Organic certification system in the State
Tamil Nadu Organic Certification Department is carrying out inspection and certification of organic farming activities in the State. Private organic certification agencies can be permitted for organic certification in the State with the approval of Agriculture and Processed Food Products Development Authority (APEDA) which is the nodal agency to promote the Indian organic agriculture and its exports opportunities. Selected farmer groups are to be given training in setting up mini units in the year i.e., once in each season. Farmers practicing
organic farming should be facilitated to register with the organic certification programme.
Department Officers will serve as service provider to liaison between the farmer groups and
certification agency. Organic certification agencies may be approved at district level to monitor
and help the farmers. Group certification should be encouraged especially for small and marginal
farmers for domestic and export marketing. Participatory Guarantee System (PGS) of certification
in small villages can be encouraged as an internal control system for domestic marketing and to
increase the number of registrants for organic certification. In India, the National Programme for
Organic Production (NPOP) provides an institutional framework for implementing standards for
organic production system. This includes certification of organic farms, products and processes
as per National Standards of Organic Products (NSOP). An official blue-green-golden brown
"Indian Organic Logo" is to be stamped to guarantee the authenticity of organic products.
Organic farming standards for organic certification such as International Federation of Organic
Agriculture Movements (IFOAM), Eu Organic farming, Codex Alimentarius (Latin for 'food
code' or 'food book') Standards by the Food and Agriculture Organization of the United Nations
(FAO) and the World Health Organization (WHO), National Programme for Organic Production
(NPOP) in India, National Organic Program (NOP) in USA, JAS System (Japan) and National
Association for Sustainable Agriculture (NASAA) will be taken into account for organic
certification in the State. International Federation of Organic Agriculture Movements (IFOAM),
Eu and Codex Alimentarius food code require that the minimum conversion period for
conventional land to organic land must be three years. Eu and IFOAM and Codex endorse the
weed control methods such as physical and thermal methods. Eu, IFOAM and Codex all three
explicitly forbid the use of genetically engineered organisms and their products. Control of insect-
pests and diseases shall be during storage, preservation and value addition through non-chemical
methods.

Strategy-XIV: Access to organic farming cards
Organic farming cards carrying essential information may be given to farmers who are switching
over to organic farming.

Strategy-XV: Introducing organic farming as curriculum in educational institutions
School level syllabus on organic farming can be formulated and implemented. Establishment of
a kitchen garden and compost yard at all schools in the villages to provide basic knowledge on
organic farming practices among children. Tamil Nadu Agricultural University (TNAU) already
fres courses on organic farming and included in syllabus of all degree programmes. Diploma
course in organic farming at the college level at TNAU has been introduced with the syllabus covering Agriculture and Processed Food Products Export Development Authority (APEDA) and diploma programme at the Indira Gandhi National Open University (IGNOU). TNAU conducts regular Open and Distance Learning Programmes on organic farming.

**Strategy-XVI. Creation of on-farm renewable energy units**

Financial assistance should be extended for installation of biogas plants, vermicompost units, solar energy and wind energy units in organic farms itself.

**Strategy-XVII: Documentation of scientific validation of organic farming practices / activities**

All scientific data will be collected from organic farming and animal health care in Tamil and in English and the same will be documented for popularization of organic farming. Scientific validation of all the organic inputs and practices shall be carried out which are already documented elsewhere in the country to suit local conditions. Documentation of physical methods and biological methods of pest management including botanical formulations and biopesticides will be carried out. Toxin level of organic produces (residues of pesticide and herbicide) will be tested to provide healthy food. Success stories may be broadcasted by media to popularize organic farming practices, domestic and export markets.

**Strategy-XVIII. Organisational set-up for promotion of organic farming**

'Directorate of Organic Farming' will be started by the Government of Tamil Nadu to promote organic farming in the State and to coordinate the various stakeholders from the Government, Universities, Non-Governmental sectors and farmers. A High Level Empowered Committee for promotion of organic farming in Tamil Nadu shall be created to plan and advice the various programmes of organic farming in the State. The functions of the Directorate of Organic Farming shall promote organic agriculture in the State; collection and compilation of information on organic farmers; area of different crops under organic cultivation, production, productivity, etc.; collection of technical information on organic farming from different sources and dissemination of knowledge to field functionaries and farmers; collection of information on national and international organic production standards and dissemination of the same to the field level; gathering information on domestic and export market opportunities for organic produce and enlightening farmers; creation of awareness among consumers on healthy food and environmental impact of organic farming; establishment of a network among organic farmers as
a hub for exchanging and sharing of experience of organic farming practices; coordinate with national and international organization in all matters relating to organic farming; provide a single window access to market, industry and other stake holders; arrangement of training programmes to the department / line departments officials and farmers; arrangement of seminars, workshops, producer / consumers meets at the State and district level; exposure visits would be arranged for both departmental officers and farmers to successful organic farming systems inside and outside the State.

‘Organic Farming Research Centre’ will be set up to carry out the research, education and extension systems to support the Organic Farming Policy and the transition of the State’s agriculture to organic farming involving interdisciplinary scientists. The functions of the Organic Farming Research Centre are development of organic production technologies for different agricultural and horticultural crops; Standardize practices for organically certified seeds; establishment of Information and Communication Technology (ICT) system for organic farming; preservation and validation of native cultivars, local land races and crop genetic diversity suitable for organic agriculture; carry out research on agri-horti-sylvi-pastoral fodder system to establish bio-diversity in the farming involving farmers closely in research design and implementation by working with them in their fields; bankable model schemes on organic farming may be prepared and circulated among the different organic farming functionaries in the State for its adoption and popularization; work on benefit cost ratio of organically grown agricultural and horticultural crops; to serve as the nodal agency for imparting training on organic farming for extension personnel, farmers, Self Help Groups and other State Institutes.