

## **10. SEED CERTIFICATION & ORGANIC CERTIFICATION.**

### **1. Introduction**

The agriculture sector needs utmost attention and priority in order to meet the growing demand for food grains. “Seed” is the most important input, which determines the performances of all the other inputs used in crop production. Use of genetically pure quality certified seeds continue to be the decisive factor in sustaining the growing income of the farming community.

The increase in the total production of certified seeds has an important role in the adoption of better seed replacement rate in the State. Continuous use of farm saved seeds among the farmers leads to the reduction in the yield and quality of the agricultural produce. Hence, it is essential to promote the awareness in the use of quality certified seeds, there by enhancing the seed replacement rate (SRR) and discourage use of the farm saved seeds in full, among the farmers. Timely availability of quality certified seeds have to be ensured to achieve the target of doubling the food production and tripling the income of farmers.

The total quantity of certified seeds has increased steadily over the years, and a record production of one lakh and two thousand metric tones of certified seeds was achieved during the year 2011-12. Out of this, the private sector contributed 74% of the certified seeds. The Department has been encouraging the participation of private sector producers to take up certified seed production in Millets, Pulses and Oilseed crops to fulfill the gap between the availability and requirement of quality seeds in these crops.

The Department of Seed Certification and Organic Certification implements Seed Certification, Seed Quality Control, Seed Testing, Training, and the Organic Certification programmes for the welfare of the farmers of the state.

The focus of the Department is to

- Ensure availability of quality seeds.
- Encourage participation of private seed producers in certified seed production.
- Create awareness and training on use of Quality seeds.
- Strict enforcement of Seed Act and Seed Rules.
- Encourage and create awareness on Organic certification among farming community.

## **2. Seed Certification**

The Seed Certification wing performs the functions of the seed certification agency which are carried out in accordance with the provisions of The Seeds Act 1966 and The Seeds Rules 1968. Seed certification is a regulatory process to secure, maintain and make available seed qualities such as germination, physical purity, genetic purity and seed health as prescribed under the Indian Minimum Seed Certification Standards (IMSCS).

In the recent years, the quantity of seeds certified under paddy crop contributes to the major share to the tune of 89 to 91% of the total quantity of certified seed produced. There is a need to increase the certified seed production in crop seeds of Millets, Pulses, Oil seeds and vegetables. Concerted efforts are being taken up by this Department, for the involvement of more number of private seed producers to take up seed certification under crops of pulses, oilseeds and vegetables. The Department has further planned to coordinate with the Department of Horticulture and

plantation crops in order to increase the certified seed production in vegetable crop seeds.

During the year 2012-13, 80851 M.T of seeds has been certified. It is proposed to certify 1,10,000 M.T of various crop seeds during 2013-14. To ensure effective field inspection and timely reporting by the field functionaries besides speedy communication of seed testing results, use of ICT in the department will be promoted.

## **3. Seed Quality Control**

Besides giving thrust on the production side, a mechanism is also essential to monitor and regulate to ensure distribution of quality seed material before it used for sowing by the farmers. The basic objective of the seed quality control wing is to implement the various seed legislations and to maintain supply of quality seeds to the farmers of the state.

The seed quality control wing regulates the sale of seeds in accordance with the provisions of The Seeds Act 1966, The Seeds Rules 1968, The Seeds (Control) Order 1983 and The Environment (Protection) Act 1986. The Seed Inspection wing is issuing licenses for seed dealers under provisions of The Seeds (Control) Order, 1983. At present there are 8597 licensed seed selling points in the state through which 1,36,126 MT of various kinds of seeds are annually distributed to the farming community.

The seed quality control activities involve inspection of the seed selling points at regular intervals and drawing of seed samples for quality check from seed lots kept for sale. The samples are analyzed in the notified seed testing laboratories. Based on the results of the analytical reports, actions are initiated against sub standard seed lots.

Contraventions of seed legislations detected by the department are dealt with legal actions.

During the year, 2012-13, 66068 seed selling point inspections were conducted and 56963 seed samples were drawn for quality check. The quality control wing has unearthed sub standard seeds of 1096 seed lots, weighing 910 MT worth at ₹412 lakhs. These seed lots were prevented from being sold to the farmers. Under contravention of seed legislations, 237 cases were filed in the court of law of which 183 cases were disposed off by the various courts in favour of the Government.

It is proposed to make 68500 seed selling point inspections and to draw 66000 seed samples for quality check during the year 2013-14. It is proposed to strengthen the seed inspection wing of the Department for effective implementation of the Seed Quality Control duties.

#### **4. Seed Testing**

Seed Testing is essential for the effective implementation of Seed Certification and Seed Quality Control programmes. Seed testing is conducted to analyze the various seed standards as fixed by the government of India. At present, there are 31 notified seed testing laboratories functioning in our State. Seed testing facilities are available in all the districts except Chennai, Ariyalur, and Tiruppur. The seeds are being tested for germination, physical purity, moisture, seed health and for admixture of other distinguishable varieties. The certified seed samples received from the seed certification wing, the official samples received from the seed quality control wing, and the service samples sent by the farmers, seed dealers and seed producers are tested in the notified seed testing laboratories.

Grow out tests are conducted to ascertain the genetic purity of a given seed lot. Genetic Purity tests are conducted for crop seeds, where it is a pre requisite for seed certification and also for the samples received from the seed inspection wing.

Genetic purity tests are conducted at the grow out test farm of this Directorate, functioning at Kannampalayam (Coimbatore). A Bt testing Laboratory is attached to this Directorate for analyzing Bt toxin. A DNA finger print Laboratory functioning in this Directorate, carries out tests to obtain quick genetic confirmation of crop varieties. The seed testing laboratory at Coimbatore is a member with ISTA (International Seed Testing Association) from the year 2007, and is participating in the proficiency tests conducted which is prerequisite for ISTA accreditation. The Seed Testing Laboratory Coimbatore is in the process of getting accreditation from ISTA.

During 2012-13, all the 29 seed testing laboratories, the DNA finger print laboratory and the Bt toxin testing laboratory have been strengthened with latest equipments under National Agriculture Development Programme (NADP) at a cost of ₹113.17 lakhs. During the year 2012-13, a total number of 90706 seed samples have been analyzed, as against the annual target of 86500 seed samples. During 2013-14, the seed testing activities will be strengthened by equipping all the seed testing laboratories and the Grow out Test Farm at Kannampalayam with required infrastructure facilities.

#### **5. Training**

The training wing of this Department conducts training programmes to the field level functionaries of this department to perform the different functions such as field

inspections, seed processing, seed sampling, seed testing, and in seed legislations. Training programmes are also conducted to the seed producers, seed growers and to the seed dealers with regard to seed certification procedures and seed legislations. The following training programmes are organized by the training wing of this Department.

**5.1 Orientation Training:** Training is given to the newly recruited technical officers of this Department on seed certification procedures, field inspections, identification of crop varieties, processing, sampling, tagging, and procedures involved in seed testing and seed quality control.

**5.2 Refresher Training:** The already positioned technical officers of this department are trained on the latest techniques on seed production, seed testing and seed inspection.

**5.3 Training to Seed Producers:** Training is given to seed producers on seed production to improve quality seed production.

**5.4 Training to Seed Dealers:** Training is given to the seed dealers on the purchase and sale of quality seeds, seed storage and the regulatory aspects of seed legislation.

During 2012-13 under ATMA scheme, training programmes were conducted to the seed producers and seed dealers at a cost of ₹57.25 lakhs to improve their technical competence in seed production and distribution.

During the year 2012-13 as against the annual target of 44000 persons to be trained, a total number of 49250 persons were trained. The training programmes will be continued during 2013-14.

## 6. Organic Certification

Organic Agriculture means a process of developing a viable and sustainable agro eco system which can achieve sustainable productivity without the use of artificial external inputs such as chemical fertilizers and pesticides. Sufficient quantities of biodegradable material of microbial, plant or animal origin should be returned to the soil to increase its fertility and the biological activity.

Organic Certification is the procedure by which a written assurance is given by the certification department that clearly identified production or processing system which conforms to the specified requirement. The primary objective of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people.

Tamil Nadu Organic Certification Department (TNOCD) was established in the year 2007-08 to carryout inspection and certification of organic production system in accordance with NPOP (National Programme for Organic Production), which was launched by Government of India in the year 2000 and notified in October 2001 under the Foreign Trade (Development and Regulation) Act 1992 (FTDR Act). Tamil Nadu Organic Certification Department is accredited by APEDA (Agricultural and Processed Food Products Exports Development Authority), New Delhi, Ministry of Commerce and Industry, Government of India.

The accreditation number allotted to Tamil Nadu Organic Certification Department is NPOP/NAB/0019. Organic Certification carried out by this Department is on par with standards of European Union. Tamil Nadu Organic Certification Department also imparts free training to registered organic farmers on National Standards for

Organic Production, and Tamil Nadu Organic Certification Department Standards.

During the year 2012-13, 22878 acres of land have been registered under Organic Certification. This includes 203 individual farmers possessing 6809 acres of land, 19 groups containing 5931 farmers holding 15802 acres and 22 corporate firms holding 267 acres. During 2013-14, it is proposed to register an area of 31000 acres under Organic Certification.