10. SEED CERTIFICATION AND ORGANIC CERTIFICATION

1. Introduction

Seed is a critical input for long-term sustained growth of agriculture. Timely availability of certified quality seeds with good yield potential continues to be a decisive factor in agricultural production. Farmers in Tamilnadu state are well aware of the benefits of using quality seeds which include foundation, certified and truthfully labeled seeds. In our State, the seed replacement rate is being adopted as per the guidelines of Government of India. In order to achieve the target of doubling the income of farmers, timely availability of quality seeds is given utmost importance.

Concerted efforts are essential in ensuring timely availability of seeds as well as increasing the Seed Replacement Rate (SRR). The National Mission on Seeds has been formulated with a view to upgrade the quality of farm saved seeds and also to enhance Seed Replacement Rate. The Department of Seed Certification & Organic Certification plays the supporting role in the enhancement of Seed Replacement Rate by certifying quality seeds in an increasing trend over the years.

There is also a need to look for synergies with the private sector so that goals set out in the twelfth Five Year Plan mission are achieved. The share of private sector in certified seed production in the state has increased from 34% in the year 1998-99 to 76% during 2011-12. To achieve higher yields and for maximum monetary returns, use of quality seeds is to be encouraged.

The Department of Seed Certification and Organic Certification regulates the quality seed production and distribution in the State, under the provisions of various seed legislations. In order to fulfill these objectives, this

department implements Seed Certification, Seed Quality Control, Seed Testing, Training and Organic Certification schemes.

2. Seed Certification

The functions of the seed certification agency are being carried out by this Department in accordance with the provisions of The Seeds Act 1966 and The Seeds Rules 1968, to maintain the quality of seeds produced in the state. 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).

During the year 2011-2012, the quantity of certified seeds produced was 1.02 LMT, of which 24% was contributed by Government, 2% by Quasi Government and 74 % by private seed producers.

The requirement for quality certified seeds is growing over the years. The contribution by the private agencies in certified seed production is distinctly higher compared to the production by the Government and Quasi Government agencies.

In order to perform the task of seed certification in an effective manner, all the Assistant Directors of Seed Certification have been provided with computers along with internet facilities under the AGRISNET programme during the year 2011-2012.

During the year 2011-2012, 1.02 LMT were certified, as against the annual target of 0.95 LMT of seeds. It is proposed to certify 1.05 LMT of various crop seeds during 2012-2013.

3. Seed Inspection

Seed Quality Control programme is responsible for ensuring compliance with the various Seed Legislations. To ensure the quality of the seeds distributed to farmers in 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 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, legal actions are initiated against defaulters. Apart from this, contraventions of seed legislations are dealt with legal actions.

The Seed Inspection wing is issuing licenses for seed dealers under provisions of The Seeds (Control) Order, 1983. There are 9412 licensed seed selling points in the state. In order to perform the seed quality control functions in an effective manner, all the Deputy Directors of Seed Inspections have been provided with computers along with internet facilities under the AGRISNET programme during the year 2011-2012.

During the year 2011-2012, 64647 seed selling point inspections were conducted as against the annual target of 67500 inspections and 55744 seed samples were drawn for quality check as against the annual target of 65000 seed samples. The quality control wing has unearthed spurious and sub standard seeds of 1356 seed lots, weighing 1165 M.T worth ₹ 553 lakhs. Stop sale orders issued for this lots. Under contravention of seed legislations, 501 cases were filed in the court of law of which 419 cases

were disposed off by various courts in favour of the Government. During the year 2012-2013, it is proposed to make 68000 seed selling point inspections and to draw 65500 seed samples for quality check.

4. Seed Testing

The seed testing laboratories function as confirmation centers for seed quality control and seed certification programmes. For the effective implementation of seed quality control and seed certification programmes, it is necessary to have a well equipped seed testing laboratory. Seed testing is conducted to analyze the various seed standards as fixed by Government of India. 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. At present, there are 29 notified seed testing laboratories functioning in the State.

The genetic purity of a given seed lot is ascertained by conducting grow out tests. 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) besides a Bt testing Laboratory 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) and is participating in the proficiency tests conducted which is prerequisite for ISTA accreditation.

During the 2011-2012, all the 29 seed testing laboratories have been provided with computer facilities under NADP at a cost of ₹ 21.58 Lakhs. Further, seven existing seed testing laboratories, the DNA finger print laboratory and the Bt toxin testing laboratory have been provided with latest and advanced equipments under this scheme at a cost of ₹ 90.95 Lakhs. The genetic purity testing farm at Kannampalayam, Coimbatore has been provided with a storage godown, the inner wall of the open well has been constructed and the existing irrigation facilities have been strengthened at a cost of ₹ 26.00 Lakhs under NADP scheme. It is proposed to further strengthen the existing seed testing laboratories by purchase of equipments under NADP scheme at a cost of ₹113.17 Lakhs during the year 2012-2013.

During the year 2011-2012, a total number of 88017 seed samples were analyzed as against the annual target of 86000 seed samples. It is proposed to analyze 86500 seed samples during the year 2012-2013.

5. Training

The field level functionaries in this department are being suitably trained and oriented to perform the different functions such as field inspections, seed processing, seed sampling, seed testing, and in seed legislations. To promote quality seed production and distribution, 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 sale of quality seeds, seed storage and on the regulatory aspects of seed legislation.

Under ATMA scheme, training programmes are proposed to be 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 2011-2012, as against the annual target of 41800 persons to be trained, a total number of 43970 persons were trained. It is proposed to train 44000 persons during the year 2012-2013.

6. Organic Certification

Organic farming system rely upon crop rotation, crop residues, animal manures, off- farm organic wastes, mineral bearing rocks and aspects of biological pest control to maintain soil productivity and tilth, to supply plant nutrients and to control pest and diseases.

Organic Certification is a labeling term with written assurance that denotes products that have been produced in accordance with organic production standards and certified by a duly constituted certification body or authority.

Organic agriculture is based on minimizing the use of external inputs, totally avoiding the use of synthetic fertilizers and pesticides. Organic agricultural methods are used to minimize pollution of air, soil and water. Organic food handlers, processors and traders adhere to standards to maintain the integrity of organic agricultural products. 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 2007-2008 to carry out inspection and certification of organic production system in accordance with NPOP (National Programme for Organic Production) norms. Tamil Nadu Organic Certification Department is accredited by Agricultural and Processed Food Products Exports Development Authority (APEDA), 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 2011-2012, 29062 acres of land have been registered, under organic certification as against the annual target of 30000 acres. This includes 209 individual farmers possessing 7972 acres of land, 26 groups containing 6127 farmers holding 20392 acres and 27 corporate farms holding 698 acres. During 2012-2013, it is proposed to register an area of 30500 acres under organic certification.