# Methods to be Adopted to Maximise Production and Development of Improved Strains and Plant Materials — Coconut and Oilseeds *

*By*

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1. **The necessity to maximise production:** There is an immediate necessity to increase the production of not only the food and clothing crops but also money and industrial crops. Considering the food crops, emphasis has to be laid primarily on the staple food crops of the region and then on the subsidary food crops to supplement the main crop. Population has been increasing at a rather rapid rate and large quantities of food grains are being imported from foreign countries and therefore foreign exchange and dollars not only to pay for the imported goods but also for the capital goods required to grow more food schemes and for industries, should be found. Therefore the cultivation of money and dollar earning crops like groundnut, pepper tobacco etc. should not be neglected.

2. **Methods to be adopted to maximise production:** The freedom to produce more implies that the necessary facilities should be forthcoming and steps have to be taken to bring into cultivation marginal lands. All and every known method for stepping up production should be made use of judiciously and economically from preparing the soil manuring, sowing, irrigation, control of weeds, harvest, storing and disposal of produce and treatment against pests and diseases. The use of labour saving implements and machinery should be pressed into service. Talking of manures and manuring the necessity of applying adequate quantity of nitrogen to poor soils is of primary importance. The use of green leaf, green manures and composts is stressed. The long, neglected use of human urine, if not night soil, has to be seriously considered and advocated as in China, Japan and other countries. Another subject which has not received the attention it deserves is seed testing, and there is urgent and immediate necessity for a separate seed-testing wing of the Department. The greatest and the most serious limitation of increased production of food and commercial crops, is water. In fact water when and where it is required in adequate quantities is the immediate solution of our problem. Every available source of water-rivers, wells, tanks (storing rain water) should be fully utilized. No water from any source should be wasted or allowed to run off to the sea. Flood water has to be controlled. In this emergency of more production, the problem is primarily that of the hydraulic (water conveying)

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Engineer. He should be given the top most priority in achieving the objective. The latest and the best methods and instruments have to be adopted. Water-divining not only by means of the machine but also by the rod has to be fully made use of in locating water sources.

**3. The Development of improved strains and plant materials:** (i) *General:* Of the various methods that can be advocated to step up production that by improved seed or planting materials is of utmost practical importance. Good seed is a primary pre-requisite of a good crop. Every Specialist practically in every crop has a number of improved strains of quality which have done well in the different zones of the state and which are capable of yielding about 10—30% more than the local. This would mean that if all the local seeds which the ryot sows or plants can be replaced by the improved or Departmental strains, the production can go up by about 10-30 % which is no mean achievement. After all our deficiency is only about 10%. Though there is considerable demand for the Departmental strains and though the crop Specialists have been supplying nucleus seed of improved strains to the District staff during the last several years, the progress made, in general, in replacing the local seed has been slow and much remains to be done. This is because the brunt of the work falls to the share of the Department and there is no private agency to take up the multiplication and distribution of improved strains. This is because proper inducement by way of bonus as in foreign countries etc., is wanting. And in the Department itself the organisation to multiply the nucleus seed given by a specialist, by the District staff does not seem to be effective for various reasons. Now some specialists are operating seed multiplication schemes up to the primary or secondary seed farm stages and further development is passed on to the District Officers. Though this method ensures greater production of improved seeds for sowing in the early stages, the want of continuity of the work by the same staff tells on the results. The seed multiplication work properly belongs to the extension wing and may be carried out right through from the beginning by the extension wing the nucleus seed, the technical help and guidance being provided by the specialist concerned. Though each crop has its special problems to be solved in the multiplication and distribution of the improved seeds, the constitution of a special wing of the Department soley for this purpose is expected to solve the problem. All crops will have to be handled by the wing and the staff should be thoroughly trained in handling the different crops. Or if it is considered necessary that the specialist himself should take up the seed multiplication of the improved strains evolved by him even up to the tertiary and later stages he should be given the facilities of the required land and staff in the various zones of the state.

(ii) *Oilseed Crops:* (As there are other papers on oilseeds giving details it is not proposed to get into greater details here still.) A few

points which should be considered in the context of seed multiplication of improved oilseed strains are presented.

1. **Groundnut:** The seed rate is high and the rate of multiplication is low. It will be therefore necessary to provide large seed farms, about 50 acres, in the primary stages so as to get more seed to start with.

2. **Gingelly:** The seed rate is low and the rate of multiplication is high. As the crop is season and tract bound it will be necessary to organize nucleus seed farms in more tracts than is required for groundnut or other crops. The one at Tindivanam station cannot meet the needs of the different tracts of the State.

3. **Castor:** This is a highly cross polinated crop and with a view to maintaining the purity of the strain, it will be necessary to try only one strain at a particular centre or provide sufficient distance between the blocks of different strains.

4. **Coconut:** There is considerable demand for the Madras material not only in the State but also from the adjoining states and elsewhere, and the number of nurseries should be increased. The seed nuts and seedlings should be very carefully and scrupulously selected. Though there are nine coconut nurseries already functioning in the State with a target of 1,60,000 seedlings, there is need for more nurseries.

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## OBITUARY

The Madras Agricultural Students' Union has lost one of its senior members in the death of Sri C. S. Seshagiri Iyer. It is sad to record that he had his sudden end due to heart failure. The sympathies of the Union are for the members of the bereaved family.

May the Soul rest in Peace!