

Insist on quality of coconut seedlings for better yield and revenue

Dear Coconut farmers,

Farmers across the globe are very careful in selecting quality seeds and seedlings for perennial crops. Better production and productivity are guaranteed by ensuring best quality planting materials in perennial crops. Farmers of previous generations were very particular in identifying best mother palms in their locality to collect seed nuts to produce good quality seedlings for coconut cultivation. Subsequently research centres in ICAR institutions and state Agriculture Universities started bringing out good quality seedlings through their centralized nursery systems. As seedlings from such institutions started coming in, farmers slowly neglected local mother palms. The demand for seedlings went up and the availability stagnated which in turn resulted in scarcity of planting materials. As many government-sponsored schemes started distribution of seedlings free of cost or at subsidized rates, many farmers started procuring and planting such seedlings without looking into its quality and variety. The inertia in verifying the quality of the planting material, particularly its variety and disease resistance might be a reason for the declining trend observed in coconut productivity since the last two decades in some states. Progressive coconut farmers in Tamil Nadu, Karnataka and Andhra Pradesh have started the cultivation of coconut only after ensuring the quality of coconut seedlings. It is a basic fact that seedling quality ensures better yield. This is essentially true in the case of coconut. By planting the best quality coconut seedlings, manifold increase in yield is possible. By ensuring quality planting material, potential yield of coconut can be enhanced much more as it is a crop with yielding potential for 50 years. Thus, quality coconut seedlings can ensure a 500 fold increase in revenue in the life span of a palm, provided it is the very best variety.

With the onset of monsoon, farmers are running around for coconut seedlings. Before procuring and planting seedlings, these factors need to be kept in mind. Unlike other crops, rapid multiplication techniques are yet to be made successful in coconut seedling production. When we analyse the reason for the low profile of coconut farming in traditional areas, farmers usually tell many reasons such as drought, glut in the market price, fluctuation in coconut price, pest and disease attacks etc., But they are seldom bothered about the quality of planting materials used. It is estimated that only less than 5% of

the farmers insist on using quality planting materials. It means that more than 95% of the farmers are simply procuring and planting seedlings without ensuring its quality and genetic make-up. As has been pointed out by an agriculture expert, 'neglectomania' is the main disease that has greatly affected the coconut sector. Major reason for the increase in production and productivity of plantation crops like mango, grapes, orange, apple, rubber, nutmeg, cardamom etc., is the quality of the seedlings used for planting. Planting varieties conducive to the agro climatic and soil conditions augment the production and productivity of the crop.

Considerable area suitable for coconut is available in traditional and non-traditional areas in our country. Lack of quality seedlings is one of the limiting factors in expanding cultivation of coconut in non-traditional areas. Given the technical and financial support along with quality seedlings, it would be easy to expand the cultivation of coconut in non-traditional areas in the central and north eastern states. Farmers in Namsai district of Arunachal Pradesh have to travel 1000 km to Abhayapuri in Assam to get good quality coconut seedlings! Ensuring availability of seedlings in such states through local production would be conducive for speedy expansion of coconut cultivation.

Production of planting material has been one of the thrust areas of the Board since its inception. The Demonstration Cum Seed Production (DSP) Farms of the Board are established with this prime objective. Presently Board is having nine DSP farms in different agro climatic conditions across the country. These farms cater to the need of quality planting material in the respective regions. On an average, one lakh seedlings are annually produced and supplied from these farms. But this is not enough to cater to the requirement of coconut farmers in many states. Proposal for establishing DSP farms in West Bengal and Tripura are under consideration. Government of Arunachal Pradesh has also come forward to offer land free of cost to the Board for setting up a new DSP farm in their state. In order to bridge the gap between demand and supply of quality seedlings, Board is also extending financial assistance for establishing 'nucleus seed gardens' with the long term objective of making available planting materials. Support to state governments is also given for establishing 'Regional Coconut Nurseries'. Farmer

Producer Organizations (FPOs) in coconut sector need to come forward in a big way to avail themselves of this opportunity and establish maximum seed gardens. In a way, we expect Farmer Producer Organizations to play a more proactive role in producing quality seedlings in their area of operation.

We need to make use of modern scientific and technological advancements for producing early bearing, high yielding and disease resistant planting materials in coconut. We are lagging very much behind in developing exact copies of mother palms through tissue culture and bio technology tools. Since 2013, Board is making continuous efforts through ICAR institutions, Agricultural Universities of major coconut producing states and Central Plantation Crops Research Institute for taking up networked research in rapid multiplication techniques in coconut planting material production. Joint efforts of the Agricultural Universities of major coconut producing states, other research institutions in private and government sector and seed production companies are required for making this possible on an early date. In crops like nutmeg, cardamom and pepper; there are cases of farmer driven research and development of high yielding, disease resistant varieties through continuous trials and evaluations. Many cases are reported with success in transferring preferred qualities of mother palms to next generation seedlings. Thus many new varieties are evolved in these crops.

Our farmer collectives need to identify 'super palms' from their areas which are high yielding, disease resistant and having more than three times yield than the average productivity in their area. When average palms are yielding 60-80 nuts, we need to identify palms that can yield more than 300 nuts per year and shows resistance to common diseases. Such mother palms need to be listed and documented for future seedling production. Such 'field research' in farmer's fields need to be encouraged and supported. Farmer Collectives have to start identifying such 'super palms' having three times more the productivity than the average productivity and subject them for further continuous observation and monitoring their output for further research. Through self-pollination we can ensure genetic purity and seedlings from such nuts need to be preserved for further research. Each Coconut Producer Company need to develop a list of such mother palms and produce seedlings from them as per the local demand.

It is necessary to bring in structural changes in cultivation to ensure fair and steady income in coconut sector in future. Agricultural experts in agriculture

departments and agricultural universities will educate you on how to plant and grow coconut seedlings and how to undertake plant protection operations. But they are not asking you the 'purpose for which you are cultivating coconut'. Are we planting coconuts only for producing coconut oil and copra or to generate more value through the production of value added products? Coconut is having diversified uses other than making copra and coconut oil. As has been done in the past, we should not plant 100% tall variety palms, which take rather a very long period to start yielding. It is vital for the future of coconut sector to plant varieties which are location specific, suitable for tender coconut, for neera production and for producing value added products like virgin coconut oil, coconut milk, coconut milk powder, coconut milk cream, desiccated coconut, coir fibre, activated carbon etc. Hybrids, especially DXT varieties are the best varieties for the purpose. In future, we need to plant minimum 25% hybrid seedlings and 25% dwarf seedlings. Farmer collectives need to concentrate on producing such planting materials for the use of their members.

In the last issue of Indian Coconut Journal, we had published the case study of a young educated farmer Mr. Raammohan from Tamil Nadu who has developed a new hybrid variety called 'Ramganga'. Such research need to be undertaken at Coconut Producer Federation or Company level. It is envisaged that the Farmer Producer Companies in coconut sector would bring in drastic changes in the production of high quality planting material in future.

As on date, 8823 Coconut Producer Societies, 555 Coconut Producer Federations and 28 Coconut Producer Companies are formed in coconut sector. Around 9.3 lakh coconut farmers are part of this three tier system. We hope that these FPOs will take up coconut farming in a more serious manner, will formulate projects and will adopt positive and progressive strategies for ensuring better future of Indian coconut sector. I call upon the member farmers and leaders of Farmer Producer Organizations to work as an effective team for creating positive changes in coconut sector, for bringing in better prosperity to coconut farmers in the country and to make us the world leader not only in production and productivity but also in processing for value addition and exports

With regards,



T K Jose
Chairman