

Quality in Coconut Cultivation

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Several initiatives of Coconut Development Board in making drastic changes in coconut sector in the recent years have attracted national and international attention. Beyond the allotted task of implementing developmental schemes, Coconut Development Board (CDB) is trying to change the conventional concept and carry real time benefits at the door step of the coconut growers. Steps taken in this regard as listed below have started to show impact.

The first step in this regard was adopting cluster approach in implementing demonstration in coconut cultivation technology for productivity improvement in farmer's field.

There was acute shortage of Quality Planting Materials (QPM) in coconut. Special attention was paid to improve the situation and about ten lakh coconut QPM is now produced every year in the eight Demonstration cum Seed Production Farms of CDB located in various coconut growing states. The

gap between need and availability is substantial and much more need to be done in this regard.

Lack of skilled climbers were a serious problem felt by the coconut farmers. CDB developed the concept of 'Friends of Coconut Tree' (FoCT) and started training rural unemployed and under employed youths in palm climbing, coconut management and micro entrepreneurship. Till 20th May 2014, 25,621 FoCTs were given training by the Board.

The year 2014-15 was declared as the 'Year of FPOs'. CDB initiated the formation of three tier FPOs (Farmer Producer Organisations) among coconut farmers about three years back. As on 23rd May 2014, there are 4989 Coconut Producer's Societies, 458 Coconut Producers Federations and 17 Coconut Producers Companies are formed under the initiative of CDB.

CDB was declared as Export Promotion Council for coconut and coconut products except coir. Export of coconut & its products was

stagnating for years around Rs 500 crores per year. By the end of the year 2013-14, export value of coconut products have reached Rs 1,235 crores.

Priorities under 'Technology Mission on Coconut' (TMoC) were reoriented towards processing of coconut products and by products. This change has brought in about Rs 300 crore investments in coconut processing sector during the last three years.

Kerala, one of the major coconut growing states in India was suffering from slow decline in area under coconut and reduction in production and productivity due to large scale prevalence of disease (root wilt) advanced, senile and old palms. Successful implementation of the scheme, Rejuvenation and Replanting throughout the state, after completing implementation in three districts on pilot basis, has brought in cheerful re-look towards the crop among the farmers.

Currently CDB is trying to open up alternate lines of product range



in coconut sector based on neera. Neera from coconut and its products is not a new concept but the sector was in need of a revisit totally from a new angle. Change in neera tapping policy, developing new protocol for tapping, restrict fermentation, developing technologies for neera as refreshing drink and developing various neera based products initiated by CDB are likely to make coconut cultivation very attractive among the farmers.

Looking ahead from the innovative activities as above, CDB now want to focus on the quality aspects in the coconut sector. Quality of coconut products as well as quality in coconut farming needs attention. Since formation of FPOs among coconut farmers has made substantial progress, it was felt imperative that implementation of 'Good Agricultural Practices' (GAP) will help the coconut farmers progress along with the pace of the time and the trend.

Quality in cultivation

Food and Agricultural Organization uses Good Agricultural Practice (GAP) as a collection of principles to apply for on-farm production and post-production processes, resulting in safe and healthy food and non-food agricultural products, while taking into account economical, social and environmental sustainability.

GAPs principles can be summarized as - clean soil, clean water, clean hands and clean surfaces. To be effective, these principles must be applied to each phase of production like field selection, pre-planned field preparations, production, harvest, and post-harvest operations.

"Clean soil" involves taking steps to reduce the possibility of introducing microbial contaminants into the soil, particularly via manure

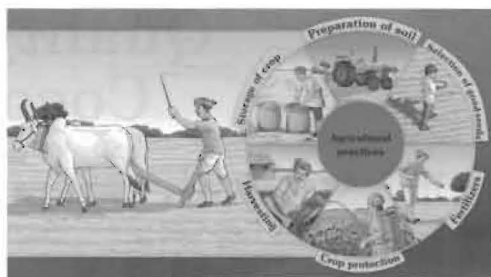
and other animal excrements. Suggests use of properly composted manure rather than allowing domesticated animals and their fresh dung in production fields to reduce the possibility of faecal contamination.

"Clean water" entails making sure all water used in washing, cooling and processing of farm produce is of drinkable quality. If ice is needed for packing it should also be made from drinkable water. Ground and surface water sources need to be protected from runoff and animal contamination. Water used for irrigation and foliar applications also needs to be free of human pathogens. Regular water quality testing may be necessary, particularly for surface water sources.

"Clean hands" applies to workers and the use of good personal hygiene in the field and packing house. Providing washing facilities for customers at U-Pick operations is also an important consideration.

"Clean surfaces" means ensuring that all packing bins, work surfaces, storage areas, and transportation vehicles are properly washed and sanitized on a regular, often daily, basis. Farm equipment should also be routinely cleaned and sanitized.

Record Keeping : An essential aspect of GAPs procedures is accurate record keeping. While keeping records is an important part of any farm operation, it can become critical in case of food safety issues. If food-borne illnesses do occur, records help to trace back the produce to the point of original. Growers who document their GAPs procedures, in such case would be in a position to provide evidence through kept records that their farm is an unlikely source of the outbreak.



INDGAP

Indian GAP takes into account sustainable supply of produce of desirable quality. Implementation of INDGAP is voluntary and non-discriminatory to the grower. There are two basic modules in INDGAP.

- a) All farm base module
- b) Crop base module

So far crop based modules were developed for fresh fruits and vegetables, combinable crops, tea and green coffee. CDB has planned to initiate steps to develop INDGAP for coconut. Critical points for coconut farm activities will have to be identified which the coconut growers or grower groups will have to comply for getting the coconuts produced by them certified. INDGAP certified coconuts will have adequate assurance about safety of the produce and thus greater market value. WTO agreement poses many challenges but at the same time also offers tremendous worldwide market opportunity for Indian agricultural produces. This market opportunity can be realised only by making our agricultural produce internationally competitive in quality and food safety.

It is essential to incorporate concept of globally accepted GAP within the frame work of commercial production for long term improvement and sustainability. It is a particularly opportune time to promote GAP in coconut sector when second generation reform is going to impact Indian agriculture in a big way.