

Neera Technicians - Innovative 'green collar job' in coconut sector

Deepthi Nair S*

Coconut palm, popularly known as 'Kalpavriksha or tree of life' is characteristically a food supplier from its fruit and inflorescence. India ranks first in the world in coconut production, with a production of 24,397 million nuts from an area of 2.136 million hectares under coconut. Kerala contributes 26.5% of this production from an area of 0.79 million hectares, which contains nearly 18 crore coconut palms. Though the country is proud of this status, the venture into neera has not taken off to a desired level as compared to other major coconut producing countries.

Neera- An innovation which took 112 years

Neera is a sweet oyster white sap obtained by tapping unopened inflorescence/spadix of a coconut palm. It has high nutritive value and medicinal properties, making it a natural health drink. Having realized the potential of neera and its products, the Kerala Government has taken a decision to amend the Abkari rules permitting neera production on a pilot basis by Farmer Producer Organizations (FPOs) and some other institutions vide order G.O.(P) No.27/2014/TD dated 14-02-2014.

Scientific advancements in food processing technology has aided in hygienic extraction and preservation of neera as well as production of neera based value-added food products such as coconut sugar, coconut honey, coconut vinegar and coconut syrup. When intermittent price falls are making coconut



A green collar job is "work in agricultural, manufacturing, research and development (R&D), administrative, and service activities that contribute(s) substantially to preserving or restoring environmental quality. -United Nations Environment Program

cultivation unattractive, promotion of neera is a major development in the agriculture sector. It will be a watershed in the history of coconut farming in the state. It will trigger the agri-food processing industry and will create additional green collar jobs in rural areas.

Economic potential of Neera

The Vice Chairman of Kerala State Planning Board, Dr. K.M. Chandrashekar, had pointed out the

economic potential of neera in his article in Indian Naliker Journal, May 2013. He has suggested that if 50 per cent of the consumer price of Neera is offered to the coconut farmers, 25 per cent to the Neera technician and the remaining 25 per cent is earmarked for processing, packaging and marketing, the outcome is an all-round increase in the income of all stakeholders, which is detailed in the table below.

No. of palms tapped for neera		Volume of neera from 300 days of tapping (MT)	Income from neera (in crores)	Income to farmers (in crores)	Income to neera technicians (in crores)	Tax revenue earned by government due to increase in purchasing power of neera technicians (in crores)
Percentage	Numbers					
1%	18,00,000	5,40,000	5,400	2,700	1,350	405
5%	90,00,000	27,00,000	27,000	13,500	6,750	2,025
10%	1,80,00,000	54,00,000	54,000	27,000	13,500	4,050

* Marketing Officer, CDB on deputation to APCC

If 10 per cent of the palms in Kerala are tapped, the contribution of Neera to the Gross State Domestic Product (GSDP) would amount to Rs. 54,000 crore (with market price of Neera to be at the lowest of Rs.100 per litre). The generation of rural employment through Neera will be around 10 lakhs. The total income to the work force of Neera will be around Rs.13,500 crore. The income of coconut farmers will be about Rs.27,000 crore. About Rs.4,050 crore will be generated as tax revenue to the state through the increased purchasing power of the farmers and workers. There could be roughly 17 per cent increase in GSDP through Neera production. Production of palm syrup, palm jaggery and coconut palm sugar may add more value to GSDP.

A million green collar jobs in coconut sector

Tapping of neera requires a technically skilled person to perform activities such as climbing tree, beating the inflorescence with right force and frequency, cutting and application of disinfectant, wrapping the inflorescence etc in a hygienic manner. So to venture into neera and its value added products there is an immediate need to create a task force of 'Neera technicians'. A technician is considered capable of tapping a maximum of 18 palms a day. If at least ten percent of the total 18 crore palms in Kerala is set aside for neera tapping, it would require 10 lakh neera technicians for tapping. This activity is the first of its kind in India. Thus, this green collar activity in a state alone has a potential to generate a huge employment opportunity. Since this activity demands both physical ability and technical expertise it is ideal for youth to pursue.

Coconut Development Board has taken the initiative of developing a

pool of skilled Neera technicians. This is achieved in two phases, the first phase concentrating on moulding traditional toddy tappers into Neera master technicians through a training conducted at the CDB Institute of Technology (CIT). This training is of duration of two weeks. These master technicians in turn train interested and eligible candidates at their respective company and federation levels. This training is of a period of 42 days, with total time duration of 240 hours. It is open for anyone from any profession belonging to the age group of 18-45 years.

Content and curriculum for training

The training module consists of technical, managerial and practical sessions. Since this is a field oriented activity, practical sessions are given maximum thrust. During these sessions, the candidates are trained to master this art of a neera technician through various activities such as tree climbing, yoga, competitions, educational games etc which will hone their mental and physical well being. In order to make this more effective, individual attention is provided for the trainees by assigning five candidates to one

master trainer for imparting skill. The training provides an individual with real life skills that enables him to improve his/her standard of living. During the seventh and eighth week of training, every neera technician undergoes an on the Job (OJT) training, during which he/she gets paid according to the quality and quantity of neera tapped.

Pilots in Neera technician training in Kerala

Coconut Development Board is conducting neera technician training programme at its CDB Institute of Technology and at SCMS Kochi. Apart from this, some of the FPOs are also conducting neera technician training programmes. The companies which have already built a cadre of neera technicians have begun production of neera on a commercial scale.

Benefits of Neera technician training

As per the Economic Review 2012, Kerala is in fourth position in unemployment level among states in India at 9.9 per cent. However, if the unemployment levels are taken according to the current daily status (CDS) approach, Kerala is in the second position. The



Potential Income to Neera Technicians

	Yield/palm/day (litres)					
	1.5	2	2.5	3	3.5	4
No. of palms tapped	Monthly income earned by a technician (Rs)					
10	11580	13380	15180	16980	19980	22980
12	12660	14820	16980	20580	24180	27780
15	14280	16980	21480	25980	30480	34980
18	15900	20580	25980	31380	37230	43980

report indicates that among the larger Indian states, the unemployment level in the state is the highest in India. According to the live register of the employment exchanges in the state, there are 45 lakh unemployed persons, of which 27.4 lakh are women. When such level of unemployment haunts the state, it means that economy is not strong enough to create new jobs. But the discovery of new green collar jobs as neera technicians has thrown a ray of hope for unemployed people especially youth, in the rural areas, to make

significant improvements in their life.

Possible Reverse Migration from the Middle East

According to latest figures by Ministry of External affairs, 6.5 million Indians are working in the Gulf countries and 3.5 million of them are said to be from Kerala. Majority of them work in low income blue-collar jobs, far away from their homes and families. This is where green collar jobs can bring a revolution in the coconut sector which has a potential to trigger a reverse migration from the

Gulf countries. This green option provides people a luxury of working in their own village, staying with their families and earning as much as, or even more than, they were earning abroad.

Who will be spearheading this movement? – Farmer Producer Organizations

Coconut Development Board has developed a three tier system in order to form a network of coconut farmers of Kerala. This initiative has enabled the formation of Coconut Producer Societies in village level, which are then federated to form Coconut Producer Federations at block level and finally unified into Coconut producer companies at district level. This methodology adopted for network formation ensures that the farmers are the ones who own their company. This group of companies is in immediate need of 10,000 Neera technicians in order to make an initial progress, which in long term promises them a splendid future. This novel idea can be replicated further in all other coconut growing states of India, thereby promoting green collar jobs in the country.

New coconut hybrid -Kalpa sreshta

CPCRI has developed a new coconut hybrid Kalpasreshta (MYDxTPT). The variety showed superiority for higher nut yield of 167 nuts/palm/year, with estimated high copra out turn of 35.9 kg/palm/year or 6.28t/ha copra. The palm shows good tender nut water quality (TSS 5.89° Brix) higher quantity of tender nut water (368 ml/tender nut) and amino acid content of 1.34g/100 ml. The hybrid gives 35.37% more nut yield and 30.29% more copra yield over Chandra Sankara. The palm bears green colour, oval shaped fruits and the dehusked fruits are round in shape. The average quantity of tender nut water is 368 ml. The tender nut water has Na content of about 33.3 ppm and K content of



2081 ppm. The hybrid is found to be high yielding under irrigated conditions. Kalpa Sreshta is recommended for cultivation in Kerala and Karnataka States.