

Achievements, Actions, and Resolutions @ 75

Hon'ble Prime Minister of India, Shri Narendra Modi during the launch of *Azadi ka Amrit Mahotsav* made a clarion call reiterating the significance of five pillars as a guiding force to savour the elixirs of independence. The *Amritkal* defined during the occasion, echoes in more than one way in the realm of coconut research. It is the 75th year of the Regional Station of ICAR-Central Plantation Crops Research at Kayamkulam, Kerala; 50th year of ICAR-CPCRI Research Centre, Kidu, Karnataka, and 50th year of All India Coordinated Research Project on Palms (AICRP on Palms). This Special Issue of Indian Horticulture has been planned to highlight the research accomplishments and to place on record the future priorities. The contributions of researchers and technical personnel in bringing up this special issue deserve appreciation.



Institutional research on coconut (*Cocos nucifera* L.) started in India with the establishment of the four coconut research stations in 1916 in the erstwhile South Kanara district of Madras Presidency (presently the Kasaragod district in Kerala). In the Travancore state (now Kerala state), an Agricultural Research Laboratory and a field station were established at Kollam and Kayamkulam in 1937 to tackle the coconut disease, now known as root (wilt), prevailing in that region. In 1945, the government constituted the Indian Central Coconut Committee (ICCC) and the Kasaragod and Kayamkulam establishments were brought under it as Central Coconut Research Stations (CCRS) during 1947 and 1948, respectively. The foundation stone of CCRS, Kayamkulam was laid on April 24, 1947 by the then His Highness Marthanda Varma, Elaya raja of the princely state of Travancore. Post-independence, the research and development of coconut was under ICCC till 1966. Then the research component was brought under Indian Council of Agricultural Research with the establishment of Central Plantation Crops Research Institute in 1970 with Kasaragod as its headquarters and Kayamkulam as Regional Station (RS).

The chief mandate of the Kayamkulam Regional Station is to conduct research on management of pests and diseases. The Station was a pioneer in utilizing bio-control agents for the control of pests and diseases. Management practices specific to root (wilt) disease (caused by phytoplasma with no effective control measure) and farmer participatory breeding programme for evolving root (wilt) disease resistant coconut varieties are the major achievements of Kayamkulam RS. Recently the RS has developed an acoustics-based red palm weevil detector, customized fertilizers (Kalpa Poshak and Kalpa Vardhini) and achieved plantlet regeneration from immature inflorescence coconut. Above all, the societal outreach of technologies at farmer's doorstep through Farmer-FIRST programme, *Mera Gaon Mera Gaurav* activities linking scientists-village and farmers are exemplary achievements of the Station.

The platinum jubilee celebrations of ICAR-CPCRI, RS, Kayamkulam, termed as *KALPA VAJRA*, commenced on April 24, 2022 with a *Kisan Mela*, inaugurated by Sri P. Prasad, Hon'ble Minister of Agriculture, Government of Kerala. A coffee table book depicting the Journey of the Regional Station and milestones of 75 years of activities was released on the day, which is science history travail along with the nation's independence. Commemorative cover and My Stamp were released on August 12, 2022 in the presence of Ms Shueli Burman, Chief Post Master General, Kerala Circle. Workshops on strengthening of Farmer Producer Organizations (FPOs) and advances in microscopy and *Kalpa Sangamam*, a meeting of yesteryear employees are the other activities conducted as part of *KALPA VAJRA*.

To serve the farming community better, the Kayamkulam Research Station will strengthen research programmes on coconut tissue culture, coconut (root) wilt disease resistance breeding and bio-control measures against pests and diseases.

All India Coordinated Research Project (AICRP) has dual mandate of developing location-specific technologies through multi-location trials and coordination among State Agricultural Universities and State Departments of Agriculture/Horticulture. The AICRP on Palms was established in 1972 with its headquarters at Kasaragod. The crops included in the network programme are coconut, oil palm, arecanut, palmyrah and cocoa. AICRP on Palms has 28 centers at present—15 centers are conducting research on coconut, six on oil palm, four on arecanut, four on palmyrah and seven on cocoa. The coordinating centers are located in 14 states and one union territory covering 13 SAUs/SHUs, one CAU and four ICAR Institutes. Various publications, viz. Success stories across the states, improved varieties emanating from the project and management of arecanut leaf spot disease are being released. A mobile app, e-Kalpa, for field data collection was integrated with Central Server and is also being launched to mark the 50th year of AICRP on Palms. The future plans include generation of more climate resilient, location-specific technologies in mandate crops and cropping systems.

Production of quality planting material devoid of pest and disease incidence is a challenge in perennial tree crops. To meet this requirement, a seed farm was established in 1972 in a secluded area extending 120 ha inside the forest land in Western Ghats at Kidu, near Subramanya in South Kannada district of Karnataka. Later in 1998, part of the areas in Kidu seed farm was earmarked for the establishment of The International Coconut Gene Bank for South Asia (now for South Asia and Middle East, ICG-SAME). In 2001, the seed farm was upgraded to a Research Centre. The Research Centre, Kidu continued to be a source of planting material in coconut and arecanut for farmers from different parts of the country. At present, nearly 75,000 coconut planting material and 4 lakh arecanut planting material are being made available to the farmers annually. Important field experiments conducted in the Kidu Research Centre include spacing trial for coconut, development and evaluation of soil and water conservation measures and land use systems for sustainable crop production and variability in content and composition of coconut oil due to genetic and environmental factors.

Developing a farm in midst of wild forest land was a herculean task. Besides connectivity, the location was lacking other amenities like hospital and school during the initial years. Wildlife-human conflict was another issue encountered during its development. The efforts of late Dr R. V. Pillai who camped at Kidu for land leveling and planting and abled support from late Dr P. M. Kumaran, and late Dr Damodaran are cherished here.

The Golden Jubilee year celebrations of the Kidu Centre started on 10 January, 2022 and farmers training programmes are being conducted every month. A mega *Kisan Mela* with an expected participation of over 5000 farmers and five-day Agri-Expo are other major events planned as part of the Golden Jubilee year celebrations of the Centre.

When the nation is celebrating its 75 years of independence, Indian agriculture sector too has an unparalleled developmental trajectory reflecting extraordinary resurgence and resilience. Once stigmatized by inefficiency, dependency and deprivation, it has schematically changed the fortunes and turned out as a 'bread basket'. For many commodities, India is the world leader in production. Nevertheless, dwindling farm income remains a major challenge. How can we upgrade our farmers to entrepreneurs in the wake of agriculture reforms that is ensuring the farmer freedom to grow, choice to sell, and evade the exploitations? Further, we should strive for a system that is internationally competitive and assures equity, inclusiveness, and sustainability. This seems to be more relevant with plantation crops. At ICAR-CPCRI, we work in synergy with R&D initiatives of other institutions through effective functional linkages and cross-disciplinary approaches to achieve self-reliance in coconut, arecanut and cocoa. When our mother land completes 75 years of independence, we reinstate our responsibility and commitment to provide farmer prosperity and welfare.

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