

Coconut research at Cirad

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Abstract

CIRAD, the French Agricultural Research Centre for International Development, is an organization working for the sustainable development of tropical and Mediterranean regions. CIRAD has one main objective: to build sustainable farming systems capable of feeding ten billion human beings by 2050 while preserving the environment. We work with our partners in southern countries to generate and pass on new knowledge to support agricultural development. CIRAD has a network of partners on three continents, and of regional offices, from which it works with more than 100 countries. CIRAD has been working for more than 70 years on the coconut supply chain with our main partners in Africa, Pacific and Asia. Today, a pool of 15 researchers are still working on this plant. The CIRAD strategy is to do collaborative research in order to support the coconut sector in its strategic development. CIRAD is working on collaborative projects in order to:

1. **Replant** and replace old trees with proper planting material
2. Preserve the **biodiversity** in genebanks (to address new market trends, climate change...)
3. Decrease the **biotic pressure** (LYDs and insects) and increase **productivity** in the field (fertilizers, inter-cropping...)
4. Improve the **quality** of products (efficient and safe dryers, controlled conditions and duration of storage, innovative process to stabilize coconut water) – (sanitary issue)
5. Encourage **diversification** of products and participatory certification systems. This will increase farmers' and processors' revenues and create jobs in rural areas.

CIRAD recently signed a MoU with ICC (International Coconut Community) in order to facilitate the collaboration between the research organization and the member countries of this international association. The institution did also sign a MoU with the Government of French Polynesia on specific actions to be done to preserve and characterize local coconut varieties. Moreover, some CIRAD projects were described such as the CIDP project in the Pacific, the consultancy for the Government of Ivory Coast to prepare the transfer of the International Coconut Genebank for Africa and Indian Ocean in collaboration with CNRA, COGENT and TIRPAA/FAO and the biological control of biotic stress in Timor Leste. The future of the coconut oil sector is in (i) replanting now with good and certified seedlings, (ii) using available biodiversity to diversify varieties and products commercialized by farmers/processors, (iii) proposing labels in combination with (iv) innovation in production and processing. All these actions, and others to create on social and environmental aspects, can be opportunities to ensure the sustainability of the coconut supply chain.