## THE ACTIVITY OF CIRAD IN CAMEROON



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Cirad, a French organization for agronomical research and international cooperation for the sustainable development of tropical and Mediterranean regions, carries out cooperation activities with more than 100 countries including Cameroon.

**Échanges Internationaux.** What are the specificities of Cameroon with regard to your action?

Denis Depommier / Cameroon has a great agro-ecological diversity and a remarkable agricultural potential. From the cotton-growing savannah in the North of the country, to the rainforests in the Congo Basin in the South, where forest operations and industrial and village-based plantations (rubber tree, oil palm, cocoa, cassava, bananas and plantains) can be found side by side, over the Adamaoua plateaux in the centre, which is stock breeding country, and the mountainous regions in the West (coffee, market gardening, etc.), it is a country with very diversified agro-ecological areas and a high agricultural potential. This sector is

the number one employer of the country with more than 40 % of the active population. It represents more than 20 % of the national wealth and more than 50 % of the revenue from non-oil exports. The wood industry is one of the pillars of the national economy. It represents 30 % of export resources. Finally, on a regional scale, Cameroon represents 50 % of the agricultural economy of Central Africa and generates 70 % of intracommunity agricultural trade in the Central Africa Economic and Monetary Community (Cemac).

## **E.I.** What specifically is the action of Cirad in Cameroon?

**D.D.** / It mainly concern responses to the major development issues and priorities of

agricultural research. The country is not yet totally self-sufficient for its food (80%). There are major disparities from one industry to another and from one area of production to another, which are especially related to the inadequacy of infrastructure, especially roads, with limited access to suppliers and markets and agricultural policies that are still ineffective. To this can be added the effects of climate change, which, in the Sahelo-Sudanian area with a high population density, exacerbate land disputes, which, combined with reduced fertility of the soil, affect yields.

Finally, armed conflicts, mainly in the Far North and the English-speaking Western Region, are having a growing impact on the local and national agricultural economy. Environmentally-speaking, Cameroon, which is well known for its wealth of flora and fauna and which has protected 20% of its territory, sees its forests and biodiversity greatly undermined, due to the spread of agriculture and other land use and the mediocre governance of its forest resources (illicit wood-cutting, poaching, etc.)

As a result, the main challenges of agricultural development to which research must respond mainly concern food and nutrition security, the sustainable management of natural resources (forest, soil, water, biodiversity, fauna, etc.), together with reducing poverty, especially rural poverty, and improving and diversifying the revenues of farmers. To mention only a few major priorities for agricultural research, this is seen in the need to promote and develop agriculture that is not only productive but also innovative, based on the principles of agro-ecology and resilient to climate change, including territories and biodiversity as levers of development.

Another goal is to set up sustainable and inclusive food systems to feed a growing urban population by prioritizing local





products,. Finally, it is necessary to set up competitive agro-industrial industries that have high added value and are sources of jobs (agricultural transformation and forest products).

## **E.I.** What are Cirad's research systems in partnership and its dedicated cooperation tools?

D.D. / In Central Africa, Cirad is involved in around twenty research and education projects, from regional to international, which mostly involve Cameroon and especially its Agricultural Research Institute (IRAD), and universities (Dschang, Ngaoundéré, Yaoundé 1 and 2, etc.). These projects concern all the local issues and priorities mentioned above, and, more generally, the Global Sustainable Development Objectives (SDO).

Cirad's activity concentrates on two partnership processes (PP) which are research and education platforms, bringing together institutional partners and collectives of researchers from the North and South (20 to 30) around a scientific project:

 PP 'Forests of Central Africa', associates ten research institutes and universities in Central Africa, as well as the partners from the North. Through a large portfolio of projects, this process aims at contributing to the sustainable management of forests, by studying the dynamics and operation of forest ecosystems (network for monitoring forest plots associating concession companies and forest departments). The main objects for study are the traceability of the wood that is used, local uses by local people, biodiversity and the sustainable management of fauna, the collection and availability of data (observatory and management tools) and more generally forest governance. To this can be added forest planting projects, fauna breeding and fish farming, contributing to reducing pressure on the forest and fish resources of the country and the sub-region.

• PP 'Agroforestry in Cameroon' studies and promotes agroforestry systems based on cocoa and coffee (arabica), two cash crops that are grown in the more or less dense shade of 'useful' trees, and sources of revenues for a great number of small planters. The process is based on a network of farms that grow cocoa beans in agroforestry systems, making it possible to carry out studies into the dynamics of these systems, appraise their economic and ecological performances and suggest improvements, including the introduction of selected vegetable material (hybrid coffee trees). Other agroforestry systems in dry areas are being studied, to maintain the fertility of soils and diversify and improve the resilience of growing systems. Agricultural research (IRAD), Cameroonian universities and international research centres (ICRAF1, IITA2, CIFOR3) are stakeholders in this PP and its various projects that aim at promoting sustainable production systems.

Major academic and vocational training programmes are an integral part of these processes and projects, which aim at strengthening the abilities of partner institutions. This is especially the case of IRAD, which has recruited several hundred young researchers to be trained.

Finally, Cirad provides recognized expertise in the major agricultural industries, both for food (cassava and plantains, basic food for people, from the varietal and cultural improvement to the qualitative transformation of products) and commercial (cotton, supporting SODECOTON 4 (Société de dévelopment du coton - Company for the development of Cotton), varietal creation, fight against bio-aggressors, fibre technology, support for cotton growers, etc.; dessert bananas - export, support for CDC, and PHP5; and from palm tree to oil - production of healthy and efficient vegetable material and support for industry).

- 1. ICRAF: World Agroforestry Centre;
- 2. IITA: International institute of tropical agriculture
- 3. CIFOR: Centre for international forestry research
- 4. Cotton development Society
- 5. CDC: Cameroon Development Cooperation; PHP: High Penja Plantation, group in the Compagnie fruitière