

## EDITORIAL

**The African food crisis and Belgian agricultural research support**

Dr. Eric F. Tollens

We are at a historical turning point in the post-colonial history of official Belgian agricultural development assistance. At last there is a genuine commitment to increase the share of development aid which goes to agriculture: from a mere 4% now in Zaïre to 20% over the next five years, from an overall average of 18% to something approaching double that figure. The following reflections and thoughts are offered on the future of the African food crisis and the role which can be played by those Belgians who are readers of this magazine.

By and large, it seems fair to state that the green revolution bypassed Africa. Sub-Saharan Africa is the only region of the world where per capita food production declined over the past two decades to about 80% of the 1961-1965 average. It is also the only region in the world where the rate of growth of population increased in the 1970s, now approaching 3%. There is not much hope that this massive population growth will taper off. As a result of the world recession and poor economic performance of many African States, poverty is now a major cause of hunger and malnutrition. Even if enough food supplies are available, the poor often do not have the income to buy food, especially in urban areas. Thus, lack of effective demand and insufficient food production and marketing are the major problems in solving Africa's food crisis. This crisis is long term in nature as a result of population pressure, urbanization, poor economic performance of countries and insufficient increase in food production and marketing. There are simply no short or medium term solutions. Of course, Africa is extremely diverse and this overall picture hides important regional differences and achievements.

Traditionally, Belgian agricultural scientists have been very active in applied agricultural research in tropical Africa. The main thrust, of course, was with INEAC in Zaïre, Rwanda and Burundi. With this immense effort, a solid reputation was built up and Belgian agricultural scientists are still highly regarded for their expertise and intimate knowledge of tropical farming systems. Typical in the Belgian agricultural research establishment is its vertical organization, on a crop by crop and a discipline by discipline basis. In colonial times, this yielded tremendous pay-offs, for export crops as well as for food crops. What was thought to be good for the African farmer was extended efficiently and effectively through a dedicated civil service. Much of the post-colonial agricultural research effort supported by Belgium in African countries is still conducted along these lines, highly specialized and vertically oriented. However, the extension service in most African countries is poorly organized, ineffective and incapable of transferring the knowledge available at the research stations. At most, improved seeds and new varieties reach the farmer but the accompanying improved cropping systems and cultural practices which are often so vital to the success of the new technology are mostly absent. It is thus not surprising that many failures are encountered since superior varieties, under unchanged farming conditions, are like white elephants. In the international jargon, the solution to this problem is called "farming systems research". This terminology usually frightens strictly disciplinary trained agricultural scientists. In fact, it is not more than trying to understand how African farmers are farming and why they are doing what they are doing. Once this is achieved, the challenge is then to try to improve, usually in a small way, the way the farmer is farming. This may be through improved varieties but it is more likely to be through improved cultural practices and farm management as a first step. Of course, it is simpler just to replace the seeds by better seeds and leave everything else the way it is. In fact, this bypasses the farmer and ignores him.

At last, I believe the time has come to link traditionally strong disciplinary, vertically oriented Belgian agricultural research support in Africa with competent interdisciplinary talent, working in small teams, trying to understand why the farmer is doing what he is doing and trying to improve on it. This requires a change in set of mind and a new approach to the way we tackle agricultural problems in the tropics. We should have no ill feelings about it since in some way, Belgian agricultural scientists were at the origin of developing a farming systems perspective. In designing the system of "paysannats" as it was done in colonial times, the systems approach was at the core. The relative success it has had and still has is a tribute to creative Belgian agricultural expertise in tropical Africa. But the times have changed and it is time that we change the way we are doing what we did so well.

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