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## The challenges of farmer training: the example of French-speaking West Africa<sup>1</sup>

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The technical farming teaching systems set up in most West African countries after independence to train agricultural development managers are experiencing a deep-seated crisis. New training players have appeared in the rural world in recent years—NGOs, farmers' or village organisations and private bodies—and have implemented new training facilities that are well integrated in the local environment. However, they are often scattered and barely integrated in national policies.

Reflection on the position, role and organisation of training facilities in rural environments seems essential today at a time when international bodies are reaffirming the need for competent, sustainable human resources that are well organised and well equipped at the public, private and professional levels. Analysis of rural development issues is essential for determining lines of development for farmer training.

### 1/ NEW AGRICULTURAL DEVELOPMENT ISSUES

Agriculture in sub-Saharan Africa<sup>2</sup> produces most of the food products consumed, accounts for 34% of the GDP and 40% of all exports of goods, is the main employer of labour (70%) and is therefore an essential source of income for the population. Agriculture is also the main source of raw materials for industry and the main purchaser of simple tools and services (transport), etc. **These features highlight the importance of defining national agricultural policies in these countries.**

After long remaining pertinent, traditional farming systems in French-speaking West Africa now display **increasingly marked signs of obsolescence** with the rapid increase in population densities resulting from an overall increase in population (from 28 million in 1960 to 58 million in 1990), the spread of populated areas caused by accelerated urbanisation (from 12% in 1960 to 32% in 1990), the increasing scarcity of agricultural colonisation areas (e.g. decrease in the areas available, socio-political tension and the monetarisation of land). The population of French-speaking West Africa is in the throes of a demographic change and will probably experience further deep-seated changes in the coming decades (a population of 130 million—54% urbanised—is forecast for 2020). **The intensity and duration of population and urban growth in West Africa are a remarkable illustration of farming sector issues in developing countries.** The population will have increased six-fold in less than 70 years (1930 / 2000) and urbanisation from less than 5% to nearly 50%, with profound changes in the relations between human communities and land, between rural and urban people and between generations, resulting in many challenges.

Agricultural development in West Africa must face major issues, leading to raising the question of the role of professional farmer training courses.

#### 1. The first issue: soil productivity

Increased rural population densities mean that the long natural fallows that formed the traditional basis of soil fertility management are no longer feasible and cultivated fields are increasingly close to each other. This results in the impoverishment of the land and increased risk of the infestation of crops by pests, leading to a tendency for yields to decrease.

For example, the population of Burkina Faso doubles practically every 30 years, rising from 2,800,000 in 1960 to 8,680,000 in 1990. Forecasts indicate a population of 16,330,000 in 2020. During the same period, the population density in rural areas increased from 13.8 to 33.7 per square kilometre. It will be 47.3 in 2020.

## 2. **The second issue: agricultural labour productivity**

Urban growth is resulting in a change in the ratio of urban to rural population. In the case of Burkina Faso, the urban population has increased as follows: 55,000 (1930), 526,000 (1960), 1,952,000 (1990), 6,900,000 (forecast for 2020), an increase in the urban:rural ratio from 1:50 to 1:2.4! Accelerated urbanisation, the stagnation of agriculture and the globalisation of trade are resulting in a strong increase in grain imports. According to FAO, Burkina Faso imports have moved as follows: 9,503 T (1961), 104,086 T (1990), 202,113 T (1998).

With the prospect of the growth of urban populations and changes in the urban:rural population ratio, the average surplus sold by each farmer must increase significantly (doubling or tripling) over the next 20 years if it is wished to maintain the initial food self-sufficiency.

## 3. **The third issue: the productivity of capital in agriculture**

Increased land and labour productivity require the increased use of agricultural machinery and livestock. These two features of operating capital will only develop if they allow—in terms of comparative advantages—minimum profitability in comparison with urban sector investment.

Capital productivity in agriculture raises the question of the capacity of producers to defend their interests via their currently emerging professional organisations.

## 4. **The fourth issue: mastery of the management of rural areas**

The non-reconstitution of the flora and fauna resulting from shorter fallows is also resulting in erosion phenomena and a general decrease in biodiversity. These features can be aggravated by the careless use of mechanisation requiring the grubbing out of cultivated fields and of the use of chemicals (fertilisers, pesticides, etc.) that may cause pollution.

Cultural practices that are not suited to the new context and population shifts generate visible anthropisation of land through the massive, uncontrolled destruction of natural resources.

This is accompanied by profound changes in the management of farmland. Land is changing very rapidly via division and privatisation from being inalienable common property to a market that can generate 'landless farmers'. Most of the countries that are aware of this transition situation are developing new landholding legislation. It is important that the profession should participate in the elaboration of new land law that concerns it directly.

## 5. **The fifth issue: the professional integration of the upcoming generations**

The high proportion of young people (50% of the population are less than 17 years old) resulting from the strong population increase in the past 40 years, induces the question of their professional integration. As the rural sector represents 60 to 90% of jobs and self-employment according to the country, a fair proportion of the 19-24-year-olds, whose numbers will double during the next 20/25 years, are likely to settle in the rural environment.

## 6. **The sixth population: access to international markets**

A large proportion of the agricultural economies of West African countries are substantially integrated in international trade in the cash crops that developed with colonisation. In sub-Saharan Africa, 70% of the export income from agricultural and food products is from 9 products (coffee, cocoa, banana, groundnut, cotton, rubber, tea, sugar and tobacco)<sup>3</sup>. However, '*the world market does not operate in a fair liberal manner*'<sup>4</sup>, with restrictions to access to markets in developed countries (non-tariff barriers), export subsidies in the latter for their agricultural and food products.

Faced with volatile prices for their products and irregular purchasing, producers are wondering and seeking solutions—sometimes desperately<sup>5</sup>.

The constant increase in food imports and especially cereals forms dangerous competition with local products and compromises prospects for the development of agricultural exports. It is important that the profession should participate in the development of these import strategies and in the control of the quantities effectively imported.

**The distinctive nature of African agrarian history induced by the dynamics of its demographic, urban and colonial histories lies in the accumulation of the challenges to be taken up over a very short historical period.**

The conditions for the exercise of the profession of farmer are directly linked with population changes and the extension of the market system and will change increasingly rapidly during the coming 30 years. These profound changes will very probably be too rapid for the rate of self-adaptation of the knowledge of farmers founded on empirical experimental procedures. The rate of production of new 'knowledge, know-how and *savoir-être*' is not high enough to meet the various challenges mentioned in time, especially as the great majority of farmers cannot read or write.

They require the provision of complementary knowledge to enable them—and especially the new generations—to keep up with the rate imposed by the ongoing changes.

## **2/ TRAINING THAT DOES NOT MEET TODAY'S CHALLENGES IN AGRICULTURAL DEVELOPMENT**

The training systems set up after the independences laid emphasis on long courses leading to diplomas and focusing on the 'modern' sector (state sector and large public or parapublic enterprises) in order to train the personnel required for the creation of a state system and to manage cash crops for the development of exports.

The 1990s slump halted state recruitment and deeply disturbed the functioning of agricultural teaching leading almost only to employment in the state sector. Student intake ceased or decreased, teaching staffs were reduced, curricula were not updated, infrastructure and equipment deteriorated and there were no relations with demand and the agricultural research sector. In fact, there is generally **a serious problem of the failure of these systems to adapt to the present challenges of rural development in West African countries.**

Today, higher education in agriculture has generally recovered the previous flows, and sometimes more, in order to respond to the delicate requirements of the integration of new holders of the baccalauréat. An effort is being made in technical agricultural teaching, with varying degrees of success according to the country, to switch to the training of farmers but is running up against problems of unsuitable teaching content and methods. Furthermore, basic vocational training has simply disappeared, or almost so. It must be redesigned with regard to both curricula (objectives, content, volume, duration and links with local knowledge) and systems (levels, operation procedures, learning situations, resources) that can attain a critical mass in a disparate public.

It is true that new training players have appeared in rural areas during the past 10 years (NGOs, farmers' or village organisations, private bodies, etc.) using new training systems: continuing vocational training for farmers, managers of marketing groups and loan groups, support for the installation of young people, etc. Although these new training systems are generally characterised by strong integration in the local environment and the use of active and participative education methods such as alternate training, the search to adapt to the challenges of rural development nonetheless comes up against certain limits:

- **inadequacy of the basic education** that conditions both the vocational training of farmers and their ability to manage responsibilities and the economic and socio-political activities transferred;
- **the implementation of limited actions for 'target' audience** (e.g. heads of farmers' groups, young people out of the school system who return to their village, advisers, etc.), those who are difficult to integrate in the 'mass' training systems of agricultural policies;
- **the lack of co-ordination of these actions within the framework of a national agricultural policy**, insufficient capital and poor overall evaluation of actions.

Basic occupational training is a necessity for ensuring the human development of nations, in particular in West Africa, to prevent an increase in the number of underprivileged persons and their marginalisation in a fast-changing world economy. Unless a rigorous effort is made to prevent this risk, some countries or even certain sub-regions will become pockets of misery, despair or violence that humanitarian aid alone would not be able to reduce.

## **3/ ORIENTATION FOR THE FUTURE**

The contradictions shown between the challenges of agricultural development and the present training systems lead to a number of areas for emphasis:

1. **The need for high-quality basic education** ensuring the literacy of the greatest number. Basic education is a right and also a condition for agricultural growth and for the development of the land, individuals and societies that form the rural world, as long as it attains a critical mass.
2. **The setting up of extremely varied training systems** to respond to both the requirement of mass education for literate or illiterate publics that are extremely heterogeneous (men and women farmers, young adults, development agents) with procedures adapted to each of these publics and particular local situations (apprenticeship, technical training, continuing vocational training, alternating training, etc.).
3. Given the scale of the problems to be solved (e.g. a varied public, mass training, adaption of training to local conditions, rigorous managerial planning of human resources and public funds, cost mastery, etc.), **only interventions of diversified origins would seem able to respond to this challenge today**: interventions by the state, non-governmental organisations, parents' associations, basic groups, professional organisations, etc.
4. In a context in which it is extremely difficult to obtain financial resources, **the setting up of 'classic' technical training in farming cannot be envisaged**. Although a number of 'centres' can be rehabilitated for a limited public (agricultural counsellors, technicians of professional organisations and of businesses), for most of the upcoming generations it must be planned to **complete the educational work undertaken in families, in the social environment and possibly at a primary school** by providing, especially for young people setting up in farming, the possibility of access to knowledge that will complete family and social learning and will enable them to develop the new knowledge and practices associated with it.
5. The problem of the overall coherence of the agricultural training system arises with the multiplication of training bodies, participants and forms of intervention. **The public authorities have the role of ensuring this coherence** by defining the general orientations of the education policy, by guaranteeing access to knowledge for everybody, approving training bodies and curricula, appraising the quality of the training provided and conferring diplomas.
6. It is also essential to **redefine the objective and content of curricula**. Designed to train state officials and consisting of the juxtaposition of scientific disciplines, they do not correspond to professional trades and activities that involve a transverse, integrated approach to the various disciplines.
7. **Teaching methods should be redesigned** as it would be absurd to recommend a single educational method for a framework of heterogeneous publics, multiple operators and adaptation to occupations. The methods must be adapted each time to different audiences, to professional objectives, to varied learning situations and to resources and supports that can reach the broadest possible public.
8. Finally, **these vocational training systems should obviously not be limited to training in 'farming' alone**, even though the majority of the rural population consists of men and women farmers. Three complementary features must be taken into account:
  - in West Africa, there is no strict 'frontier' between the production, processing and marketing of agricultural and food products and also between these and local craft activities services. The survival of a family unit as a whole is based on the diversity and complementarity of activities;
  -

the development of the agricultural sector can only be achieved in parallel with the development of the activities upstream and downstream (supplies, storage, processing, distribution, etc.) and all services (health, education, trade, transport, craft activities, etc.) that contribute to maintaining the population in rural zones;

- finally, all the rural populations must be prepared to be players in their own development, to take their future in their own hands and to be the partners and contacts of the various economic agents and state representatives.

**The question of rural development and food security in West Africa must be addressed taking the following features into account:**

- the importance of the agricultural sector in national development issues;
- the role of agricultural training in national agricultural policies;
- specific and complementary features in the various education systems in rural environments (basic education, general and technical secondary education, higher education, continued vocational training, etc.).

**Endnotes**

<sup>1</sup> This article was written by Pierre DEBOUVRY and Martin WEISS. It was presented at the UNESCO and the FAO seminars « Education for rural people : targeting the poor » (Rome. 12-13 December 2002) and to the international conference « Les réformes de l'enseignement technique et de la formation professionnelle dans l'économie de la connaissance - Défis et opportunités au niveau secondaire » (Paris. 16-18 December 2003).

<sup>2</sup>FAO. 21st FAO Regional Conference for Africa. 'Public Assistance and Agricultural Development in Africa'. Yaoundé. 21-25 February 2000.

<sup>3</sup>Haut Conseil de la Coopération Internationale. '*Les priorités de la coopération pour l'Afrique subsaharienne et le Nouveau Partenariat pour le Développement de l'Afrique (NEPAD)*'. Report. April 2002.

<sup>4</sup>Idem.

<sup>5</sup>At a workshop in Bouaflé (Côte d'Ivoire) devoted to the analysis of training requirements, a theme recurred like a leitmotiv in the various stakeholder groups: '*Can we have explanations concerning the security of outlets?*'. INFPA/CNEARC/ENESAD/ENFA/ANADER. *Projet d'appui à la Valorisation des Ressources Humaines du Secteur Agricole – Atelier de Bouaflé – 7/9 July 1999* ».

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