

TRADES, TRAINING AND RURAL DEVELOPMENT

1/ TRADES IN THE RURAL ENVIRONMENT

1.1/ The rural environment.

11.1/ Definition.

The rural environment is the natural environment as developed for the purpose of agricultural production broadly speaking – i.e. for both livestock and plant production – by groups of human beings whose economic and social life is entirely or partially based on this environment¹.

It is of course characterized by natural features (topography, climate, soil, water, flora and fauna), but these features are used, modified and transformed by human activity. The rural environment encompasses all of the existing physico-chemical elements and the human community with which they are in constant interaction².

The rural environment is a complex system that, contrary to the clichés about “*the eternal order of the fields*”, is in a constant state of change.

Although the rural environment is primarily oriented towards agricultural production, it involves other activities as well: agriculture-related productive activities (upstream: tool manufacture; downstream: processing of agri-food products) and services (credit, transport, storage, veterinary services, agricultural counselling, etc.), as well as social services (education, health, administration, etc.). Thus, it is also characterized by an extreme diversity of stakeholders.

11.2/ Importance.

Of the 6 billion human beings in the world, 3.2 billion live in rural areas, and this figure is not expected to change much over the next thirty years.

The total working population employed in agriculture amounts to 1.3 billion people, and this figure should remain stable for the next ten years.

Of the 1.3 billion people living under the poverty line, three-quarters live in rural areas³.

11.3/ A complex system in transition.

Rapid urbanization is resulting in longer marketing chains for agri-food products and more extensive processing of food products (the need for better presentation, preservation and reduced volume). Urban consumers are more demanding as to the quality of food products (taste, presentation, preservation, hygiene, health, etc.). Lastly, environmental considerations require that fewer resources be consumed in agriculture, and more concern given to its impact on the environment (conservation of soil, water quality, genetic resources, etc.).

The pace of change in the rural environment has increased with the globalization of economic activity and the restructuring of many countries' economies on market principles, with extensive liberalisation of international trade, the privatization of state-owned enterprises, the reduction of state intervention, the gradual elimination of certain tariff and regulatory barriers, etc.

¹ Bertrand, Georges. *Histoire de la France rurale*. Seuil. 1975.

² Ibid.

³ Gasperini, Lavinia. “From agricultural education to education for rural development and food security: All for education and food for all”. FAO. 5th European Conference on Higher Agricultural Education. Plymouth. 10-13 September 2000.

1.2/ Challenges for the future of West and Central Africa.

12.1/ Population growth.

Taking the countries of West and Central Africa as an example, in 70 years (1930-2000) the population of these countries has increased by a factor of 4 or 5, with a maximum of 11.4 for Côte d'Ivoire!

For example, in Senegal¹:

YEAR	Total population	Urban population	Rural population	Urban/rural ratio
1930	1 400 000	160 000	1 240 000	1/7.8
1960	2 852 000	788 000	2 064 000	1/2.6
1990	7 275 000	3 124 000	4 151 000	1/1.3
2020	17 577 000	11 586 000	5 991 000	1/0.5

The population more than doubles every 30 years, and in Africa the population is extremely young: the average age is 16/17 years, and 45% of the population is under 15 years of age.

Although the rural population is dropping in relative terms, it is rising in absolute terms and will continue to do so for several years.

With falling population growth, it is estimated that the population of Senegal will stabilize around the year 2050, at 46 million inhabitants.

12.2/ Agricultural labour productivity.

Although the majority of Senegal's population is still rural, in the future the rural population will amount to only one-third of the total population.

To feed the population of Senegal, a tremendous increase in agricultural labour productivity is required: in 1930, there were eight farmers to provide food for each urbanite, but in 2020 one-half of one farmer will have to feed one city dweller!

The increase in labour productivity has not kept up with the changing distribution of the population between rural and urban areas, resulting in substantial imports of cereal grains.

YEAR	TONNES
1974	196 000
1980	341 000
1990	534 000
1993	579 000

¹ World Bank. *World Population Projections 1994-95*.

This increase in urban populations and food requirements is gradually bringing the rural world into the market economy.

12.3/ Soil productivity.

Population growth leads to increased pressure on the land and its natural resources. Until the recent past, soil fertility was managed through a production system based on long-term natural fallowing, as required for soil restoration by the operation of nature alone (approximately 15-30 years for one year of production).

Owing to the increased population density in rural areas (Côte d'Ivoire: 4.3 inhabitants per sq. km in 1930, 49.6 in 2000, 73.8 in 2020 – France: 76, 107.6, 114.9), fallow periods are diminishing, there is no longer enough time to restore soil fertility, and the soil is less productive¹.

The increase in population density is also causing deforestation (increasing need for land and firewood), soil erosion (owing to the clearing of vulnerable soils and gully erosion of slopes), depletion of flora and fauna, depletion of biodiversity.

12.4/ Capital productivity.

Raising the productivity of land and labour will require increased use of agricultural machinery and herds. This will in turn require capital, which will not be available for agriculture unless it can be profitably employed there. This is not the case today, as both urban dwellers and agricultural producers who possess some capital prefer to invest it in urban real estate².

This also raises the issues of the provision of economic information and training to producers, and producers' ability to organize in order to optimize and defend their incomes.

13/ Trades in the rural environment

13.1/ "Trades" or "activities"?

If a "trade" is taken to mean a set of occupational activities that call on a relatively homogeneous body of skills and know-how³, are trades in the rural areas of developing countries really "established"?

A 1997 rural survey of 50 families living on the banks of the Mekong, in the Kompong Cham region of Cambodia, revealed the extreme diversity of their activities⁴. Plant crops: rice, maize, sesame, market gardening, fruit farming, mushroom production, etc. Livestock: cattle, water buffalo, hens, pigs, etc. Agriculture-related production and service activities: plaiting of palm leaves and latanias for roofing material and sleeping mats, harvesting palm sap to make sugar, cutting rushes, fishing, tank fish farming, renting out pairs of oxen or motor-driven pumps, making palm wine and vinegar, distilling rice liquor, husking rice, rolling cigarettes, short-term loans, etc. Crafts: carpenter, sawmill operator, wheelwright, trishaw operator, street photographer, marriage broker, bicycle repairman, hairdresser, porter, healer, etc. Wage employment: tractor driver, "tapper" in rubber plantations, teacher, nurse, tobacco kiln monitor, etc. Commerce: sales of spices, pastry, candy, traditional medicines, etc. Thus, each family was engaged in from 4 to 10 very different activities at the same time.

Each of these activities, even when conducted in informal settings (in terms of place, time, social recognition and commercial exchange), requires not only specific technical knowledge and know-how, as well as observance of the moral and ethical rules that govern relations among community members and that make it possible to conduct these activities within the community, but also recognition of a form of identity by the peer group, an identity that provides the essential conditions for production and exchange – that is to say, the foundations of a trade.

¹ Debouvry, Pierre. "Analyse comparée des systèmes locaux de formation agricole : enseignement méthodologique pour la rénovation des dispositifs de formation". Presentation. 20 April 2001.

² Debouvry, Pierre. "Analyse comparée des systèmes locaux de training agricole : enseignement méthodologique pour la rénovation des dispositifs de formation". Presentation. 20 April 2001.

³ Agence Intergouvernementale de la Francophonie. "Lexique". www.francophonie.org.

⁴ Maragnani, Alain, and Jean Metge. Training workshop on "Ingénierie de formation pour le développement" for professors at the Université Royal Agronomique of Cambodia. 30 March-9 April 1996.

13.2/ Change in the nature of “trades”.

The radical changes under way in the rural environment are not without impact on the activities of rural inhabitants: diversification of production to ensure a minimum total income, search for growth niches (new products: market gardening, horticulture, fish farming, organic products), organization of production (soilless production units), marketing (new points of sale: urban centres, luxury hotels, etc.), storage (development of groups of small farmers), search for complementary non-agricultural activities (commerce, services).

In most cases, these changes lead not only to new activities, but also to new occupations¹: stock breeders' agent, farming group manager, credit officer, training officer, agricultural counsellor, etc.

14/ Training, an important dimension of a rural development policy.

The development of agricultural education and vocational training geared towards preparing people for actual occupations and trades is a vital necessity in developing countries, in order to:

- Encourage as many young people as possible to establish themselves in the agricultural and rural sector;
- Expand production systems and learn to manage rural areas so as to ensure a sustainable increase in productivity;
- Encourage producers to organize, which requires them to be creative.

It is necessary to devise new training systems that are suited to both the challenges to be met and the people to be trained. But before designing a new training system, one must be able to assess the situation: the state of current training systems and how well they meet the “requirements”.

2/ TRAINING AND RURAL DEVELOPMENT

2.1/ The issues of training in rural areas.

21.1/ The objectives of training.

The rural areas of many developing countries are confronted with an exceptional situation: they must carry out an agricultural revolution involving increased productivity of land, labour and capital, while preserving biodiversity and the environment, and all this within half a century, a very short period in historical terms. In contrast, the developed countries (North America, Europe) had a much longer period (one to two centuries) to accomplish these tasks, and in a fundamentally different situation, namely the industrial revolution of the 19th century.

These extremely rapid changes raise the problem of the coming obsolescence of traditional knowledge and practices based on low population density and low productivity, and of the need to adapt them to the new conditions for land use. This places systems for agricultural technical education and training in a strategic position: these systems must simultaneously prepare future training personnel, producers and a new generation of agricultural entrepreneurs (producers, service providers, craft workers, etc.).

Studies show that farmers who have received basic training are more productive on average than those with no basic training². *Sustained economic growth can only be ensured if:*

- *The literacy rate of the adult population is below 50% ;*
- *The level of production of human capital (average schooling duration) is above 6 years.*

The freeze on civil service hiring has also profoundly changed farmers' relationship with the school system: schools are no longer places offering the opportunity to rise in social status via access to wage employment – a role which previously made it possible to accept the unsuitability of schools for their environment; rather, they are becoming venues where one can acquire knowledge in order to

¹ Dascon, François, and Jean Laforge. “Analyse des métiers et des emplois agricoles et para agricoles au Cambodge”. 1996.

² Gasperini, Lavinia, *op. cit.*, and articles by François Orivel.

improve one's economic circumstances: how to start up an activity, improve yields, diversify crops, sell one's products in the markets of nearby towns or even the capital city, obtain loans, take collective action, etc. "Training should make it possible to create one's own job"¹!

21.2/ Characteristics of training in rural areas.

Expansion of agricultural education and vocational training is one of the keys to rural development. Unfortunately, rural areas are characterized by greater difficulty of access to education (a higher rate of illiteracy, and a tendency to stagnate in this respect owing to the increased cohorts of children needing literacy training), by more difficult physical conditions (mediocre facilities, overcrowded classes), by curriculum content that is geared more towards the knowledge and skills needed in urban life, etc.

The agricultural training systems set up following independence emphasized long degree-oriented training courses turned towards the "modern" sector (i.e. the public sector and formal enterprises), in order to train the wage employees needed to staff the government bureaucracy and to oversee cash-crop agriculture in order to expand exports.

These training systems – centralized, standardized, slow to change, not focused on local agricultural systems, lacking participation by users (parents, trainees, people already occupied in agriculture) – do not fulfil the expectations of families, young people and people working in agriculture with respect to occupational skills, employment, income and social integration, nor are they suited to the challenge of boosting agricultural productivity with a view to sustainable development².

21.3/ Constraints of training in rural areas.

The changes needed in rural training programmes will have to be effected at a time marked by a substantial decrease in public resources and sustained population pressure. These constraints require rigorous forward-looking management of both human resources and public financing, and the pursuit of diversified training initiatives corresponding to the needs of various groups (farmers, craft workers and traders, literate youth, women, development officers), using methods that are appropriate for these groups (apprenticeship, technical training, continuing vocational training, on-the-job training, etc.) and tailored to specific local situations.

Considering the scale of the problems to be resolved (diversity of the target groups, mass training, adaptability of training courses to local conditions, cost control, etc.), it would seem that the only possible way of responding to this challenge today is through initiatives arising from multiple sources (the state, non-governmental organizations, parents' associations, grassroots groups, professional organizations, etc.).

2.2/ Assessment of training requirements.

22.1/ Training requirements.

An individual's training requirement is defined as the gap between the skills needed to perform a job or other economic activity and the real skills possessed by that individual at a given moment³. This definition, which emphasizes the gap between what an individual knows and what he/she needs to know to exercise an occupation, involves a "confrontation" between its two components: the individual and socially organized economic activity.

On the one hand, training requirements are linked to economic activity and hence to various types of change: technical (new production techniques), economic (change in the prices of intermediate goods, sale prices of products, marketing conditions, etc.), demographic, etc.

But on the other, they depend on individuals, who have their own worldviews, personal plans, etc. One cannot merely determine the amount of training required, from an economic standpoint, to

¹ Workshop on vocational education and training, Bouaflé (Côte d'Ivoire). CNEARC/ENFA/ENESAD. 7-9 July 1999.

² Debouvry, Pierre. "Les enjeux de l'enseignement et de la formation professionnelle agricole". *Le mémento de l'agronome*. 2002.

³ Association Française de Normalisation (AFNOR).

meet a given production target; training requirements cannot be defined without taking account of the individuals who will be the vehicles for this knowledge and will apply it in their trades.

22.2/ Training requirements : for whom and with whom ?

Trades are not fully established in the rural areas of developing countries, in the sense of being activities that call on relatively homogeneous bodies of skills and know-how. As a result, society is not structured around “trades”, with firms, unions, trade councils and trade associations which could provide information on employment, how “trades” are changing, and training requirements with respect to these “trades” or occupations.

Rather, it is structured according to groups of individuals, or stakeholders, “*who participate in an activity and have common interests relating to this activity*”¹: families, clans, neighbourhood organizations, farmers’ groups, age groups (young people, especially with respect to starting up an agricultural activity), genders (women), etc.

In Côte d’Ivoire², for example, rural stakeholders are remarkably aware of the scale and speed of economic, social and cultural change: soil depletion; population pressure requiring the development of more productive, diversified and sustainable agriculture; integration into market processes and the monetary economy; formation of producers’ groups; a lack of jobs in urban areas and an increasing number of young people who attended school in rural villages; increasing demands for agricultural counselling on the part of farmers; and growing awareness that agricultural activity is a genuine “trade” requiring specific skills that can be acquired through training.

An assessment of the training requirements arising from changes in rural occupations requires not only an overall (national or international) approach to economic, technical and demographic change, but also a local approach with the participation of rural practitioners of these occupations. It thus requires a process combining an external assessment with an assessment carried out in consultation with local actors.

22.3/ External assessment.

This is the approach used for both business projects and development programmes, notably where agricultural extension services are concerned. Experts determine macroeconomic trends and deduce from them the constraints on and objectives of agricultural production. Next, “technological packages” are developed, the skills that producers need to acquire are defined, and arrangements are made to transfer them to farmers ...

... at which point it is realized that this does not necessarily work, because individuals and groups of individuals have other goals.

This preliminary step is nonetheless essential, since it allows analysis of the overall context and the provision of information to local actors involved in rural development: information on economic policy, developments on the markets for agri-food products, regional organization and changes in agricultural production systems, etc. (e.g. the study conducted in Côte d’Ivoire).

22.4/ Consultative assessment.

The external assessment must be examined in the light of local actors’ ideas concerning their place and their economic and social future. It will thus not only be enhanced by collective thinking on the subject, but will be shared by all stakeholders. This will make it possible to begin the implementation stage, as the assessment will then become a mobilizing force, since each actor (individual or group) will have been able to build a new conception of its future within the context of the training project.

The consultative assessment itself will involve several steps:

- Presentation of the external assessment to the groups concerned, in such a way as to be comprehensible to these groups. This step should involve widespread, open dissemination

¹ Bernoux, Philippe. “*La sociologie des organisations*”. Editions du Seuil. 1985.

² Brochet, Michel. “*Une expertise partagée pour la rénovation de la formation professionnelle et de l’enseignement technique en Côte d’Ivoire*”. In *Ingénierie des dispositifs de formation à l’international – Quelle démarche ? Quelle organisation ? Quelle offre ?*. Educagri Editions. 2000.

of information concerning the current situation, so as to allow comparison of viewpoints with local stakeholders.

- Proposal of possible solutions within the framework of the various constraints, highlighting the advantages and disadvantages of each solution; it is also through this debate that vague wishes and implicit expectations will take firmer shape as explicit demands for training;
- The demands expressed are then taken into account in the drafting of a fresh assessment, supplemented, modified, restated, defining the key points (strengths and weaknesses), a ranking of training requirements and which training initiatives take priority.

22.5/ The example of Côte d'Ivoire.

A first stage of surveys was conducted to identify the stakeholders concerned by agricultural training and extension services, to make contact with institutional managers and inform them about the process, to define the public to be surveyed and to carry out surveys, through semi-structured interviews with various groups of actors, on the changes under way in the rural environment, the problems encountered and the demand for training – and at the same time, to place this information in its national and international context.

In the second stage, the assessment drawn up on the basis of the information collected by local surveys and country-level analyses was presented to regional workshops at which the various rural stakeholders were represented. The assessment was then discussed and differing points of view debated in small groups, leading to an enriched assessment of the changes occurring in the rural environment and the problems encountered, and to validation of the assessment.

In a third and final stage of consultation among actors, also in small group sessions, the participants outlined proposals for training programmes likely to promote rural development¹.

2.3/ Rural training programmes, national education systems and the role of the State.

23.1/ Basic education is a fundamental right

If basic education is a fundamental right, it is also one of the conditions to the development of rural spaces, populations and societies provided that it reaches a critical mass in order to ensure the literacy of the greatest number of people. Putting training at the core of the rural development processes requires finding original responses in many fields.

- This process of adaptation to local situations requires that programme content be defined through a multi-disciplinary approach in order to understand the way agrarian systems function and how they may evolve, rather than through juxtaposition of scientific disciplines that do not correspond to the conduct of economic activities in the rural environment, as has been the case for programmes determined by the training requirements of government officials.
- This process also requires rethinking of teaching methods, which should be adapted to serve a variety of groups (differentiated by social background, age and sex, preparation for diversified activities, etc.), should have vocational objectives and should use differentiated media that make it possible to reach a broad public.
- Meeting this challenge requires diversified interventions such as : formal education programmes, training measures from non-governmental organisations, parent teacher associations, community-based organisations, professional associations.
- Increasing the involvement of training institutions, resource persons and diversifying ways of action raise the issue of global consistency of rural training and therefore require a clarification of the role of the public authority. Neither as an omnipresent nor as an evanescent actor, the State must ensure access to knowledge for all and quality of training

¹ Maragnani, Alain. Contribution to study sessions on “*Ingénierie des dispositifs de formation 1999*”. Workshops on education and vocational training in Bouaflé, 7-9 July 1999, and Man, 14-16 July 1999 (Côte d'Ivoire). CNEARC/ENFA/ENESAD.

through defining educational policies in relation to the rural development policy, in accrediting training institutions and curricula and in ensuring assessment and certification.

BIBLIOGRAPHY

- FAO. « *Issues and opportunities for agricultural education and training in the 1990s and beyond* ». 1997. <http://www.fao.org/sd/Frdirect/Exref003.htm>.
- GASPERINI Lavinia. « *From agricultural education to education for rural development and food security: All for education and food for all* ». FAO. <http://www.fao.org/sd/EXdirect/EXre0028.htm>.
- DEBOUVRY Pierre, MARAGNANI Alain, WEISS Martin. « *The challenges of farmer training: the example of french-speaking west Africa* ». *Aid Agencies Workshop FAO - UNESCO*. « *Education for rural people : targeting the poor* ». Rome 12/13 décembre 2002