

WEST AFRICAN FUTURES

SETTLEMENT, MARKET AND FOOD SECURITY



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Looking at the world from a different viewpoint is always helpful. Not because that viewpoint might reveal a hitherto unknown reality or hidden truths, but because it can provide both points of contention and inspiration from which policies should be drawn. The Members of the Sahel and West Africa Club have given their Secretariat the task of facilitating this type of thinking on the basis of factual and independent analysis. In 2010, they requested that a regional study be conducted which would be both retrospective and prospective and which would focus on two determinants of food security: settlement and the regional market.

The work presented here is the result of the lengthy assimilation of a very extensive body of research, combined with in-depth discussions and debates within an ad hoc working group. On certain points, it is also the result of original research.

In the following paragraphs, readers will find an analytical summary that has no other aim but to encourage them to read the entire book. If the judgments put forward here seem somewhat blunt, that is because we believe that being so is necessary to stimulate debate – which is, after all, the Club's mission.

Regional policies flying blind

The objective of all West African agriculture and food security policies is to feed a fast-growing and increasingly urban population. But are these policies truly capable of integrating these dynamics and their implications? Our general answer to this question is no. Not because policy makers lack lucidity – in fact, they are fully aware of the demographic challenge – but because they face two major constraints.

First, the dynamics at work are so fast-moving that problems change much more quickly than do the solutions to them. ECOWAS defined its agricultural policy about 10 years ago; since then, the population has grown by a third, adding another 67 million people to the total. The divisions between rural and urban, agricultural and non-agricultural, formal and informal have shifted. The international environment has also changed

significantly. This highlights the importance of developing permanent mechanisms for monitoring and policy adjustment. Among other things, this entails a complete overhaul of statistical indicators, which today are partly

Deprived of essential information about the dynamics at work, West African agriculture and food security policies are to some extent flying blind.

“blind”, incapable of capturing the realities crucial to managing realistic and hence effective food security strategies. The absence of harmonised and hence comparable data at the level of West African countries and regional organisations on an aspect as important as population – whether total, urban or rural, agricultural or non-agricultural, or formal or informal – is astonishing. Likewise, the lack of data relating to household food consumption or regional trade, on which policies have to be based, is unacceptable. Throughout this study, readers will find robust arguments and surprising examples that demonstrate the widening gap between the reality and the prism through which we currently try to observe this reality. As a temporary alternative, a coherent, retrospective and prospective database, together with methods that may be helpful to hands-on professionals, is proposed by the authors, at least until the shortcomings of existing statistical systems are addressed.

Second, although agricultural policies stress the importance of demographic variables, their actual formulation is not based on a comprehensive analysis of the challenges of the latter. We therefore looked at population (i.e. the number of people) and settlement (i.e. the geographical distribution of people) no longer as two elements among others, but as the starting points for analysis. To do so, we have to place our analyses within a broad vision of development based on a human geography approach in which settlement recomposition is the key element of development. Settlement dynamics generate the economic concentration that is necessary for growth, but such dynamics also create risks and inequalities, notably strong spatial and social disparities. The aim should therefore be to benefit from economic concentration, which is manifest in a high intensity of production and trade, by assuring, through appropriate policies, that individual well-being is not only a function of location. This conceptual approach is not a panacea; it underestimates, for example, the part of economic geography that is still directly dependent on natural endowments. However, it sheds new light on a phenomenon hitherto little documented in Sub-Saharan Africa, opens up new prospects, and paves the way for new means of analysis and action.

Despite being one of the world's top agricultural performers, West Africa nonetheless suffers from unacceptable levels of chronic food and nutritional insecurity.

Growth and exclusion

The number of people living in West Africa has increased fourfold over the last 60 years. When a population grows quickly, it “reacts” by a settling differently across space. Geographical mobility goes hand-in-hand with the high population growth phases of a demographic transition. No counter-example exists in history.

This phenomenon explains why regional migrations are not only very large in scale, but also very “smart”. Regional migrations constantly adapt to economic opportunities, policies and instabilities. It also explains why the number of people living in cities has risen by a factor of twenty over the same period, whereas the rural population has increased by a factor of only two-and-a-half. The implications for agricultural geography, market dynamics, income distribution, social attitudes, and food consumption habits are considerable. Few places in the world have changed so much within such a short time.

West African agriculture has risen to the challenge of population growth, taking off in the mid-1980s after two decades of stagnation or regression. Over the past 30 years, agricultural production has risen much more quickly than population, resulting in an increase in food supply in the area from 1 700 to 2 400 kilocalories per person per day. Food dependence on the rest of the world has not increased: it was 20% in 1980 and remains about the same today (in kcal/capita/day). Rice imports have increased by only 3.5 kg per capita in 30 years, and have actually decreased when measured per capita of the urban population.

These achievements, which could have been even greater if Liberia, Sierra Leone, Chad, Côte d’Ivoire and other countries were not enduring extended periods of conflict or instability, should be credited to West Africa’s farmers, traders, transporters and processors. They have shown themselves capable of responding to a sharp and steady rise in demand from growing numbers of non-food producing consumers. In 1950, nine households out of ten consisted of farmers. In 2010, this ratio fell to five out of ten. A decreasing proportion of the population therefore had to feed the other (the fast-growing part of the population). This achievement was based on a steady improvement in farm labour productivity that, having declined for many years, has risen by an impressive 2.6% annually since 1980. Yields also increased, although not as vigorously. This increase in productivity is an unsurprising feature, for as long as land is easily accessible and hence inexpensive, farmers prefer to increase their production by extending land under cultivation.

Also as a result of these trends, the prevalence of undernourishment has fallen by 45% in 20 years. The countries that have made the greatest progress share common

features, including growing agricultural productivity, rising incomes, little vulnerability to natural disasters, an improved human development index, declining debt levels, and social and political stability.

However, many West Africans have been left behind. Ten percent of the population, 30 million people, still suffers from chronic undernourishment or malnutrition. These

Agricultural and food policies must target the entire informal sector, both rural and urban.

people can most commonly be found in the households of farmers excluded from the market, of agro-pastoralists and pastoralists over-dependent on livestock under threat from recurrent drought, and of poor workers in the popular economy. Structurally vulnerable, these people, who are often women and children, are incapable of withstanding repeated shocks caused by drought, floods, crop-destroying pests, economic crises and conflicts.

Tackling the causes of the marginalisation of the most vulnerable involves understanding the dynamics that are profoundly changing West Africa's economic and social geography.

Spatial integration and social diversification

Urbanisation is the most important of these dynamics. Having risen very rapidly, urban growth slowed in the 1980s as a result of the economic crisis and the structural adjustment programmes that followed. It then continued at a slower but still steady pace. Urban growth is not limited to large agglomerations. A network of small and medium-sized towns has emerged. Between 1950 and 2010, the average distance between cities of over 10 000 inhabitants has been divided by three, from 111 to 33 km. The urban network thus provides the framework for the spatial organisation of the West African economy. It is transforming rural areas, with which it constructs integrated trading and market spaces. The changes are striking.

Eight-four percent of the rural population now lives within a 90 km radius of an urban centre of at least 50 000 inhabitants. Urbanisation creates an expanding outlet for agricultural production. The up-stream activities (inputs and services) and down-stream activities (marketing and processing) of agricultural production have further sustained the development of networks of small and medium-sized towns and big cities alike.

The rural economy is changing, although available statistics do not give an accurate sense of the scale of this change. Due to a lack of data, all rural households are often likened to agricultural producers and all urban households to consumers. This leads to diagnostic errors in which the number of producers is substantially overestimated and

their productivity significantly underestimated. Based on our estimates, the total population of West Africa in 2010 was evenly divided between agricultural producers and non-agricultural producers, while parity between urban and rural dwellers had not yet been reached. The majority of agricultural producers remain in the countryside, but non-agricultural producers now account for 25% of the rural population, and urban areas comprise a significant number of food producers. Looking at the picture in terms of the urban versus rural divide is no longer relevant. Doing so divides the real.

It is surprising to find in the same analysis the need to "work on value chains", which include all actors regardless of the environment in which they operate, and to "focus policies on agricultural production and rural markets"; you cannot do one thing and its opposite at the same time. These value chains irrigate integrated social and economic spaces where, from producer to consumer, a multiplicity of urban and rural actors interacts according to the same logic: that of the "informal sector". The vast majority of farmers, stockbreeders, fishermen, traders, transporters and craftsmen, both rural and urban, work in the "popular economy" (another term, more appropriate in our opinion, for the informal sector). They constitute the "social fabric" on which agricultural and food policies should focus without discrimination.

Food policies must therefore be taken out of the sole sphere of rural or agricultural development. The proportion of urban dwellers in the population suffering from chronic food insecurity is likely to increase in the future simply because they comprise a growing share of the total population. Planning and developing towns and cities to foster the popular economy and increase the income it generates, as well as facilitating commercial activities and informal food processing (fewer roadblocks, less red tape, more appropriate legal forms, etc.), must be prioritised in policies enhancing resilience to food insecurity.

Market access

If everyone produces what he or she consumes, little or no trade exists. The market emerges and grows with the division of labour, which is possible only if the population agglomerates. By concentrating, people specialise, and sell other people what they do not produce themselves. The dynamics of urban and rural concen-

The market provides two-thirds of food supplies. Improving its functioning should be the priority of food and nutritional security policies.

tration in West Africa illustrate this and explain why markets have become the main source of households' food supplies – providing between 60% and 80% of food, depending on the country. Although this process is broadly virtuous, it also causes inequalities that explain

many of the problems of access to food, both in rural and urban areas.

Sixteen percent of West Africans live in low-density areas more than 90 km from an urban centre of 50 000 inhabitants or more. However, remoteness is not measured by distance alone. A farm may be situated a few dozen kilometres from a town, but five or ten kilometres from the road that leads to it, without a track to get to the road. In such areas, a programme to develop income-generating activities, whether agriculture, craftwork or trade, has little chance of success. In 2000, the World Bank estimated that fewer than 40% of the rural population had access to a road or track. *Politicians thus have to be encouraged to continue and step up their efforts in developing the required communication and marketing infrastructure.*

Connection to roads and the market is obviously not enough to allow people to escape poverty. These are, however, important elements. Variations in the degree of poverty across farming and rural households are more closely linked to proximity and ease of access to markets than to agro-ecological factors.

For the rest, a farmers' decision to invest in selling a planned surplus of production depends on the level and stability of income. These decisions are also closely correlated to the risks incurred. These risks are linked to production conditions (drought, pests, etc.), inter- and intra-annual price variability, and to the lack of social safety nets and insurance mechanisms. The always difficult trade-off between risk and opportunity explains why the investment needed to develop market-oriented production develops only gradually.

Making the market more efficient must therefore be a primary concern. It is a feature of all current policies. However, too often this objective is limited to a notion of market in the sense of a physical location and its actors, who are the traders. This limited interpretation influences the analysis and restricts the scope of policies. It fails to take into account the interactions among many variables and players. The market should be understood as all interlinked activities from the producer to the consumer, including planting, harvesting, transporting, storing, processing and distributing. All too often, policies still tend to divide the reality into producers who produce, traders who trade, processors who process and so on, thereby ignoring the value chain that links them and has considerable influence in determining how effective they are. Understanding that it may be much more important for a producer to be able to sell than to know how to produce is essential. Many unsuccessful agricultural projects can be attributed to the failure to take such aspects into account.

Better access to information by all actors is an important component of more efficient markets. A producer who

knows what prices are can sell for 20% more. The widespread use of mobile phones has significantly improved this situation. Producers wanting to invest in the production of a planned surplus certainly need to know what products the market wants, in what quantity and what quality, where, when, and at what price.

The regional market and consumption overlooked in food security strategies

Mostly informal, regional trade in agricultural produce is reflected only marginally in statistics. As a result, this trade is officially very small or even non-existent.

The study's analysis of the West African maize market shows the outlines of a very different reality, although it is difficult to quantify regional flows precisely. Five million tons were marketed in 2007, eight times more than that marketed 25 years earlier. The quantity marketed is, unsurprisingly, increasing more rapidly than the quantity produced. Substantial volumes flow towards the coastal conurbation of Nigeria, Benin, Togo, and Ghana, which alone consumes 2.5 million tonnes. The share of interstate trade cannot be evaluated at this stage, although it is undoubtedly significant.

The food balance sheets used to forestall food shortages are both conceptually and statistically at odds with the reality.

The lack of data on regional trade combines with the lack of information on consumption to produce food crisis prevention and management tools of relative reliability. The FAO estimates the food supply available for human consumption for each country, which, in the absence of regular and consistent surveys, is treated (by default) as consumption. The food supply available for human consumption is calculated as production minus a set of variables, including postharvest losses, animal feed, stock variations, imports/exports, seeds, etc.

As emphasised by the FAO itself, these shortcomings result in inaccurate evaluations of the food situation. For instance, a survey in 2003 in Burkina Faso shows that the official figure for food supply per person per year was overestimated by 20% for sorghum and 15% for maize, and underestimated by 25% for rice. Many other examples show that the food balance sheets used to prevent food shortages are, both conceptually and statistically, disconnected from reality.

Imagining the introduction of comprehensive and permanent systems to capture all regional trade is unrealistic. Aside from their high costs, such systems could turn into another opportunity to set up roadblocks and collect additional informal taxes. Also conducting household food consumption surveys each year in all the countries and across all existing social and economic situations is unimaginable. Any such ambition would also run into a major obstacle: national definitions of urban and rural and agricultural and non-agricultural populations vary. Yet these categories are essential to calibrate the surveys and ensure comparable results.

The data collected and produced in this study (regarding spatialisation of different population groups on a regionally harmonised basis) have opened some new prospects. Combined with spatial information on production systems, agro-ecological zones and distances to markets, the data could help generate a representative sample of households for the entire region. Based on such information, consumption surveys could be conducted at regular intervals. The selection of relevant information to be collected, which must necessarily be executed on a small scale and in a transferable format, must be considered with respect to the information already available, especially regarding prices, to contribute to the setting up of a multidimensional information system on food security.

The consumption data thus collected will help give a fairer approximation of regional trade in food balance sheets.

Incorporate population policies into long-term food security strategies

The region currently has 300 million inhabitants. Population growth is slowing. How many West Africans will there be in 20 or 40 years’ time? The United Nations’ low variant projection indicates that the answer is 435 and 600 million respectively. However, this is a low hypothesis, which implies a proactive population policy and assumes a very rapid decrease in fertility, more rapid than an extrapolation of the current trend indicates. Demographic growth could, in fact, be much greater, with the population reaching 470 million by 2030 (30 million more than the low variant) and 700 million by 2050 (100 million more).

These figures are merely indicative. However, they show that depending on which path the region takes, its prospects are significantly different. Any lag in the decrease in fertility will slow the development process and raise uncertainty on the future of food and nutritional security.

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To accompany the rapid demographic transition it needs, the region will have to commit more resources to population policies and, in some cases, take a more ambitious stance. It will have to draw on short- and long-term solutions, ranging from the spread of modern contraception methods to encouraging the use of traditional methods to using the media to inform people about the advantages of lower birth rates, etc. The region will also have to tap into education significantly. These measures will allow as prompt as possible a benefit from the demographic dividend, which contributes to development in general and to food security in particular.

Although the slowdown phase of the demographic transition has begun everywhere, the study underlines that coastal countries are more advanced in the transition than Sahelian countries, urban centres more than rural

areas, and densely populated areas more than remote ones. Urban populations lead rural populations by more than a decade in terms of fertility decline. The emergence and development of urban centres of all sizes helps to spread new attitudes towards family size in all settings by reducing the distance from urban households to households in the countryside. Economic concentration and the densification of population settlement also accelerate social and cultural change.

Consequently, long-term strategies to end chronic food and nutritional insecurity must take a constructive attitude toward a greater concentration of the rural population and toward urbanisation. The promotion of resilient food systems, today centred on rural areas, must henceforth explicitly include urban centres. Managing them more efficiently and encouraging commercial activities, crafts, the agri-food industry, and urban and peri-urban agriculture is crucial. The latter may particularly provide families with greater food security as well as an extra source of income, and shorten the chain between producers and consumers.

The future of farming

The agricultural population is likely to level out at around 130 million between 2010 and 2050. In contrast, the total population will double, and the non-agricultural population will triple. The agricultural population will predominantly be in rural areas and, to a lesser extent, in and around urban centres. From a technical perspective, the coming decades could see a genuine agrarian revolution.

Family farms, which account for 80% of all farms, have until now ensured a large part of agricultural production by adapting to changes in demand. In the medium term, the general production system is unlikely to be very different from one based on family farms of varying sizes. In the long term, however, the transformation process of production systems is likely to follow patterns observed elsewhere, as in Asia, Latin America, or Europe. These patterns are characterised by an increase in the average size of holdings and the simultaneous concentration of food production.

Based on past trends, the study gives a picture of the use of agricultural land in 2050, with an average farm size of 9 hectares. The largest 10% of holdings will have an average size of 33 hectares and cover 38% of the total land area. At the other end of the distribution, 10 million holdings will be of fewer than 5 hectares. Such a distribution is not incompatible with a family-farming based system, as long as it is not regarded as equivalent to manual agriculture. On the contrary, farming systems will specialise, mechanise and gradually intensify.

Most small farms will be located in areas well-connected to markets. They will specialise in high-value crops or

activities (fruit and vegetables, poultry, etc.). Their yields will have to increase very significantly, partly to offset the high cost of land in areas close to urban centres. Small and remote farms, however, will have few incentives and face more constraints in integrating the process of specialisation, intensification and income creation.

Average-sized holdings will sustain the trend toward more specialisation and intensification of production

Larger and more specialised farms are not incompatible with continued family farming.

systems. Using credit and accumulated assets, they will follow a logic of expansion by increasing land areas and capturing new markets, including the regional market.

A new feature will be the emergence of a small number of very large farms. Extensive agricultural production of this type, often on farms of several thousand hectares, will focus on food staples, especially cereals, aimed at processing industries (brewing, flour-milling, etc.) and large distributors.

Anticipating and supporting changes in agricultural systems

The take-off of agricultural production from the mid-1980s onward should be credited to the dynamism and creativity of all actors in the value chain, including producers. They have benefited from the opening up of the market economy, but at the same time they have had to contend with an institutional and regulatory environment that is not geared to the entrepreneurial modernisation of family farming. This environment needs to be adapted and simplified to prepare for the necessary changes, in particular increased specialisation, wide adoption of soil fertility management techniques, intensification in terms of input use, and mechanisation. In a nutshell, agricultural entrepreneurs must be enabled to invest and prosper.

Agricultural investment ought to be a regional great cause. Otherwise, growth will be less strong, less equitable and less sustainable.

However, today farmers are mostly governed by laws and regulations devised for businesses in the modern sector. Flexible legal frameworks that no longer act as a disincentive are needed for ultra-streamlined administrative procedures and participatory anti-corruption measures (administrative streamlining being in itself one way of combating corruption). Equally important are policies that stimulate lending and access to credit. In many countries, especially French-speaking ones, competition between lenders is weak or non-existent in some areas. The sector needs to be opened to more players to improve

banking services for the private sector (including the “informal” sector), reduce interest rates, and enhance the range of financial services offered. The creation of information offices would bring greater transparency to lending. *West African governments must get down to the job of designing and implementing integrated frameworks for agricultural investment.*

Investment is also linked to land security. Regardless of the modalities, land security substantially determines farmers’ capacity to respond to market signals by investing. This is a complex and highly political issue, and an area in which states are particularly jealous of their sovereignty. However, regional action can help them exchange best practices and frame appropriate policies. Regional action of this nature must also ensure that land laws comply with community texts and principles, especially freedom of movement and establishment.

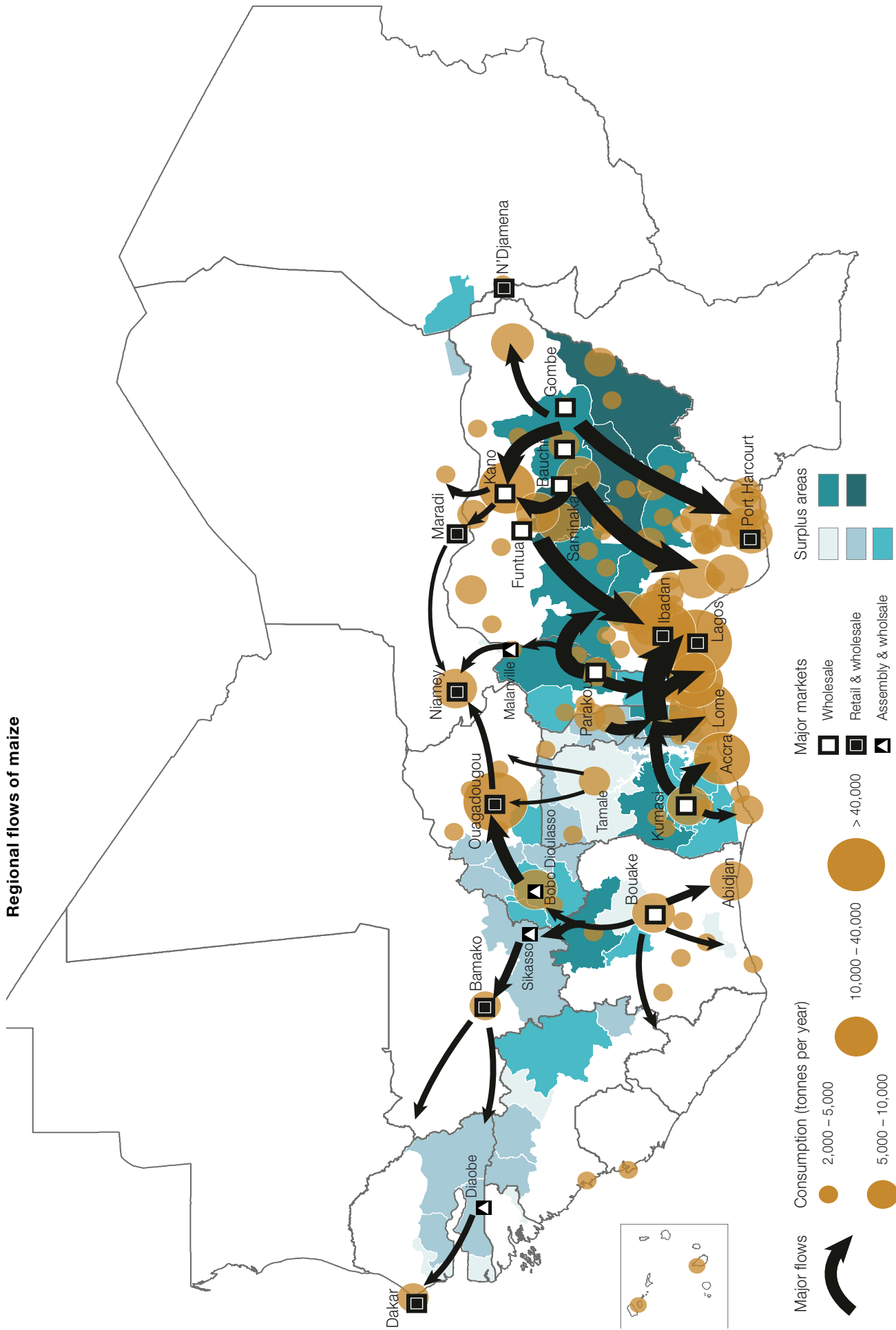
Because of the varied pace at which the considerable agrarian changes noted above will occur, they will give rise in the future more than in the past to new opportunities and significant migration flows within the region. At the macro-regional level and in the long-term, and subject to necessary investments (infrastructure, equipment and training), it is reasonable to suppose that neither labour nor natural resources (land and water) will be limiting factors in production and food security, as long as the necessary adjustments are able to take place and migration within the region is not obstructed.

This highlights why regional dialogue on the rights and obligations of West African farmers in their community areas must be a priority, especially in terms of access to land. At stake is the pursuit of agricultural growth and the prevention of conflict. In 2004, the principle of a regional land charter was adopted at the highest level. The project, which aims to apply to the domain of land tenure the principles of freedom of movement and establishment of people, is currently at a standstill. It is vital to return it to the agenda for discussion as soon as possible, given that the process will inevitably be long.

Promoting entrepreneurship and agricultural investment ought to be a “regional great cause”. Otherwise, even if the West African agricultural community takes up the food challenges of the 21st century, it will do so less-vigorously and less-sustainably, with land degradation posing a constant threat, and in a less-egalitarian fashion, with the persistence of an unacceptable fraction of poor farmers.

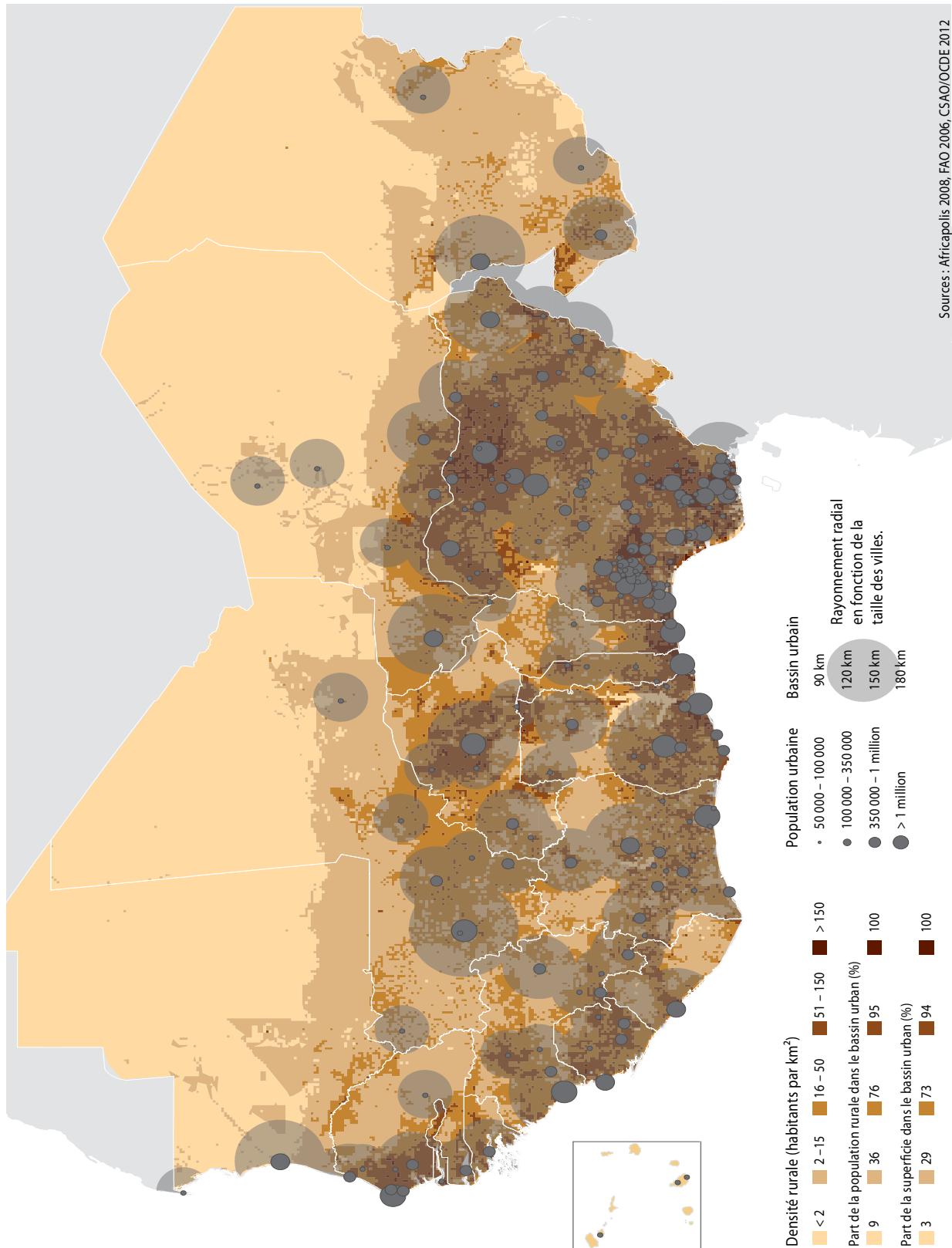
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Regional flows of maize



Sources : FEWSNET (2012), FAO AGROMAPS (2012), Bricas et al (2009), West Africa Trade Hub 2011, SWAC/OECD 2012

Density, distance and markets



Sources : Africapolis 2008, FAO 2006, CSAO/OCDE 2012

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