

MAFE Methodological Note 5

Migrations between Africa and Europe: Rationale for a Survey Design

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SHORT ABSTRACT

The aim of this paper is twofold. It first presents the scientific objectives of the MAFE project, briefly pointing up the limitations of the existing literature in four domains: patterns of migration, determinants of departure and return, migration and family changes, migrants' economic integration and re-integration. The paper then presents the methodological principles of the MAFE survey design and the choices made to produce a new dataset containing information on the four aforementioned topics. In short, the MAFE project is based on comparable, longitudinal (retrospective), multi-level and multi-topic data on three African flows (Congolese, Ghanaian, Senegalese migrants). The surveys are multi-sited, with fieldwork conducted in both origin and destination places. Beyond the MAFE project, the paper highlights the classical problems in survey methodology facing all data producers in the domain of international migration, and advocates a more (self-)critical approach in this field of literature.

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1. INTRODUCTION

International migration from sub-Saharan Africa to Europe constitutes a major concern in Europe for both public opinion and policy makers. Africans now form a major component of what has been called Europe's "new" immigrant population. Attempts to reach Spanish territory in Ceuta and Melilla in 2005, and the flotilla of boats bringing would-be migrants to the Canary Islands in the 2010's, generously covered by media, have drawn attention to African migration to Europe and elicited a rapid response from EU countries in the form of new policy measures. The informal meeting of the EU Heads of State and Government at Hampton Court in December 2005 launched the so-called "Global Approach for Migration", with a special focus on the African region (COM/2006/735 final). International migration also constitutes a key issue in the dialogue between EU and ACP countries, on the basis of Article 13 of the Cotonou Agreement (Kabbanji, 2010). Yet the scope, nature and likely development of sub-Saharan African migration to Europe remains poorly understood. In spite of its visibility in public discourse, African migration remains today an understudied research area, as acknowledged by various scholars (Lucas 2006; Grillo et al. 2008; Hatton et al. 2003). Common wisdom is rarely corroborated by scientific evidence, while policy measures are often formulated without a clear understanding of the underlying causes, consequences, mechanisms and dynamics of African migration. It is widely recognized that the dearth of quantitative data in Sub-Saharan Africa, especially individual and longitudinal data, is the major cause of this situation (Salt 2001; Lucas 2006; Cross et al. 2006).

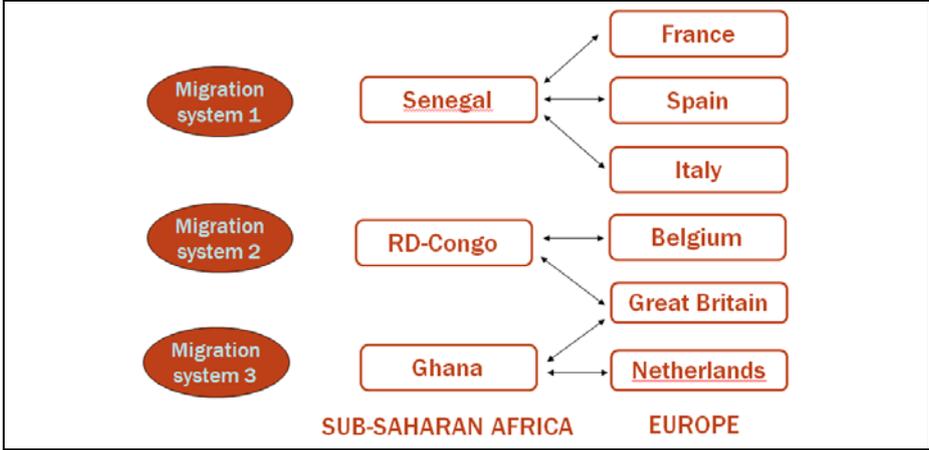
The MAFE project aims to overcome this lack of understanding by collecting unique, comparative and representative data on the characteristics and behaviour of sub-Saharan migrants. The objective of this paper is to present the methodology used to produce this new data, in accordance with the scientific objectives that were primarily defined to fill the knowledge gap relating to African migration. Quite ambitiously, the MAFE data are expected to provide fresh and reliable information in four domains: (1) the changing patterns of African migration; (2) the determinants of migrant departure and return; the changes associated with international migration (3) in the economic domain and (4) in the family field. Questions and hypotheses related to these domains are detailed in the second section of the paper.

The creation of a new quantitative dataset on African migration is the cornerstone of the MAFE project. In total, nine countries are involved in the project (Figure 1 and Box 1), with surveys conducted in 3 origin countries in Africa (Senegal, Ghana, Democratic Republic of Congo) and 6 destination countries in Europe (Belgium, France, Italy, The Netherlands, Spain, UK). Overall, more than 4,000 household questionnaires were successfully completed in Africa, and more than 5,400 individual questionnaires both in Africa and in Europe, among current migrants, returnees and non-migrants. The MAFE data are strictly comparable: almost exactly the same questionnaires were used in all countries. They are longitudinal (with individual questionnaires to record life histories with modules on migration, education and occupation, family, etc.) and multi-level (linking individual histories to family and other contextual data). Finally, the data are transnational since the survey took place both in origin and destination places. The methodology was first applied to Senegalese migration in 2008 (MAFE-Senegal project, with data collected in Senegal, France, Italy and Spain), and later (2009-2010) to Congolese and Ghanaians (with data to be collected in Congo, Belgium, UK

for MAFE-Congo; and in Ghana, UK and the Netherlands for MAFE-Ghana). The third section of the paper details all these methodological choices.

The overall idea underpinning the MAFE project is that migration should not be seen only as a one-way flow from Africa to Europe. We rather hypothesize that return migration, circulation, and transnational practices are significant and must also be understood in order to correctly design migration policies. Hence the project denomination: “Migration *between* Africa and Europe” (and not “*from* Africa *to* Europe”). In this sense, the project challenges two common assumptions. The first assumption is that African migration is primarily an immigration movement to Europe, as if there were little or no spontaneous return migration from Europe to Africa. The second assumption is that once people arrive in Europe, they are here to stay and sever all ties with their home country, in spite of qualitative evidence that African migrants have an increasingly transnational way of life (Grillo et al. 2008). Based on a transnational design, the MAFE project will assemble quantitative evidence to assess whether these common assumptions are realistic or not.

Figure 1. Countries involved in the MAFE project



Box 1. Justification for the choice of countries involved in MAFE

The three African countries (DR Congo, Ghana, Senegal) were chosen for two reasons. First, their migrants constitute three major “new African diasporas” (Koser 2003): according to OECD data, they represent three of the four largest sub-Saharan populations in Europe. Second, they offer contexts that will allow interesting comparisons: they have different histories, and especially different colonial backgrounds; their political situations are very diverse (with a very stable country, such as Senegal, and a post-conflict country such as Congo); official languages also vary; and finally, the three countries differ in their ecological and economic conditions. As a result, migration histories and current patterns are quite different.

In Europe, MAFE includes both old host countries (Belgium, France, Netherlands, UK) and new ones (Italy, Spain) with quite contrasting contexts. The former have started to apply more restrictive policies towards African migration, while the latter practiced large-scale regularizations until the 2000s in a context where migrants were needed to fuel labour-intensive regional economies.

For each African origin, one of the destination countries corresponds to the former colonial power (UK for Ghana, France for Senegal, Belgium for Congo). The other destination country(ies) were chosen because of the contrasts they offer in terms of receiving settings (language, integration and migration policies, work opportunities, etc.), in a context where the ties between former colonies and their former metropolises have weakened (Black et al. 2003; Hamilton 1997; Zlotnik 1996).

2. MAFE OBJECTIVES

The design of a survey is inevitably determined by leading scientific questions or hypotheses. In this section, international migration theories are first mobilized to justify the transnational approach that feeds all the questions raised in the MAFE project as well as all the methodological choices. The following sections present the four main scientific objectives of the project, in line with the limits of current knowledge. They consist in (1) a description of the changing patterns of migration, (2) an analysis of the factors and conditions determining African migration flows, a study - at the individual and family levels - of changes due to international migration (3) in the economic field and (4) in the family domain.

2.1. The theoretical background of a transnational methodology

The scientific objectives and the methodological choices of MAFE are characterized by a transnational perspective, in the sense that the project is interested in the various forms of migration (departure, return and circulation), rather than simply in migration from Africa to Europe, and in the development of transnational practices, i.e. practices that exist simultaneously in several countries. This approach is based on three theoretical perspectives (migration systems, transnationalism, and new economics of labour migration) that emerged in the 1990s to overcome the limitations of the previous theories that were characterized by (1) a unidirectional approach (migration from developing countries to developed countries) and (2) a point of view centred on the destination countries.

Migration systems. An "international migration system" consists of a particular set of receiving countries and a set of destination countries that are strongly linked to each other by large and stable migration flows, in addition to economic, political, social, cultural, historical ties (Kritz and Zlotnik 1992). Contrary to previous theories on international migration that were mainly interested in explaining departure, the migration system approach considers the entire spectrum of population movements (permanent, temporary, circular, etc.) to analyse the interactions between different types of flow. In line with this approach, MAFE is an attempt to understand the Afro-European migration system through the analyses of three African sub-systems (Congo, Ghana, Senegal).

Transnationalism. The concept of transnationalism is an alternative perspective to the dominant approach in migration studies that focuses on movements from developing to developed nations (Glick Schiller et al. 1992). Rather than viewing migration in terms of one or a few discrete moves, transnationalism conceptualizes migration as a continuous flow of people, goods, money and ideas that transgress national boundaries and, in so doing, connect different physical, social, economic and political spaces. Authors using transnationalism argue that new forms of human mobility have emerged because airplanes, telephones, satellite technology, faxes, and computers make movement and communication between large distances possible with much greater frequency, speed and regularity and on a much larger scale than was possible in the past (Vertovec 2001). Various definitions of transnationalism have been proposed, reflecting the different disciplinary backgrounds of the scholars it has attracted. Basch et al. (1994) define transnationalism as "the processes by which immigrants forge and sustain multi-stranded social relations that link together their societies of origin and settlement." (1994, p.7). Vertovec emphasizes the importance of people within networks by focusing on the "multiple ties and interactions linking people or

institutions across the borders of nation-states" (1999, p.447). Portes et al., in an economic view, delimit the concept of transnationalism to *occupations and activities* that require sustained contacts over time across national borders (1999, p.218). Since the 1990s, there has been a burgeoning of transnational studies. But empirical studies have, for the most part, been qualitative in nature and few attempts have been made to quantify transnational migration processes on a broad level (Mazzucato 2007). The MAFE project aims to bridge this gap.

New Economics of Labor Migration (NELM). NELM theories are in strong contradiction with the neo-classical approach to international migration. While the latter argue that people move permanently to raise and maximize their wages in destination countries, the former contend that people move on a temporary basis to achieve their targets, as a prerequisite to returning home. While neo-classical economists interpret return as a failure, if not an anomaly, NELM theorists view it as a success story, if not a logical outcome (Cassarino 2004). These contradictions stem from a difference in the levels of analysis (individual vs. household or family). As Stark argues, the NELM perspective "shifts the focus of migration theory from individual independence [...] to mutual interdependence" (Stark 1991, p.26). In short, the NELM view is that people move not only for themselves but to provide to their family with economic security and purchasing power in contexts of market failure in the home country (Taylor 1986). This strand of literature partly explains the MAFE project's interest in analysing return migration and migrants' relationships with their home countries. The project nevertheless aims to overcome certain limitations of this approach, which are shared by the neo-classics (Cassarino 2004). Both theories explain why and when the decision to migrate takes place, but there is no reference to where migrants actually go. One of the MAFE objectives is to bypass this limitation by studying the African migrants' destination choices.

2.2. A description of the changing patterns of migration

The first objective of the MAFE project is to provide quantitative evidence on descriptive aspects of African migration to Europe that are not covered by official data sources and yet are key to assessing the impact of policy measures affecting international migration. A key dimension of the MAFE data is to provide retrospective data which can be used to study migration trends and not only patterns of migration at the time of the survey. The project aims to cover three aspects: (1) the socio-demographic characteristics of migrants, (2) the routes of migration from Africa to Europe, and (3) the patterns of return migration and circulation.

Migrants' socio-demographic characteristics. A first set of analyses covered by MAFE concerns the migrants' socio-demographic characteristics (educational levels and skills, age, etc.) and how they change over time, in a context where very little statistical information is available. The analyses will consider gender aspects in particular. Various studies indicate a feminization of African migration to Europe, notably as a result of family reunification. There is also increasing anecdotal evidence of the independent migration of women (Adepoju 2004). Data on the gender dimension of migration - especially on "autonomous" female migration - are lacking, however. MAFE could provide quantitative insights in this matter.

Routes of migration. A second range of analyses to which MAFE data can contribute concerns the routes taken by migrants from Africa to Europe, and within Europe. Preventing illegal migration is a priority in the European agenda. Although cooperative management is sought with the origin

countries, the enforcement of external border controls is the major tool of this policy (COM/2005/621 final). Research in migration management is scarce but some results suggest that this type of action is not really effective. Clandestine entry is thought to be relatively small-scale among undocumented migrants. Significant numbers enter legally and overstay their visas, and rejected asylum-seekers who do not leave the country are another major category of undocumented migrants (Collyer 2006; Düvell 2006). Furthermore, interception statistics indicate that migration itineraries shift over time, in response notably to tightened controls and changing policies in transit countries (Düvell 2006; Väyrynen 2003; Alscher 2005; Carling 2007). Itineraries may also change in response to visa policies in transit countries. (Brewer et al., 2006). Migrants' routes appear to be quite complex. While trans-Saharan and Atlantic itineraries have caught the attention of policy makers and researchers (Collyer 2006; de Haas 2006; Hamood 2006; Van Moppes 2006), some migrants follow other complex routes (some Congolese, for instance, travel through South Africa or Angola to reach Europe by air. See: Sumata 2002). All in all, the current literature gives only an impressionistic view of the routes taken by African migrants. Although some information on the way they enter Europe and on the changes in their legal status over time was collected for some African countries in the Push-Pull project in the 1990s (Schoorl et al. 2000; İçduygu et al. 2001) more recent and detailed data are not available. MAFE will provide new quantitative evidence on the routes used by sub-Saharan migrants' to enter Europe. The objective of the project is to tackle three aspects of the migrant trajectories: (1) how the travel is organized (who decides and pays for the migration, what modes of transportation are used, whether smugglers or traffickers are involved or not, whether trips are made alone or not, etc.); (2) the itineraries used to reach the EU (means of transport; transit countries; length of the trip...); and (3) the extent of mobility within the EU (especially in relation to seeking asylum or other forms of legal status). The analyses could show the extent to which stricter controls at European borders during the last decades have encouraged African migrants to reshape their routes to Europe (new paths, longer trips, etc.). Furthermore, analysis of circulation inside the EU could shed light on how migrants exploit the opportunities available in different countries (thanks to specific national policies) for obtaining documents, jobs, etc.

Return migration and circulation. Standard migration statistics are not suited to studying migrants' comings and goings (Box 2). As a result, return migration has so far received little attention in the literature despite its considerable significance for policy (King 2000; Dustmann 1996). Scattered figures indicate, nevertheless, that return from Europe is not a marginal phenomenon. In Switzerland, 63% of the 1981 immigration cohort returned home between 1981 and 1989 (Dhima 1991). In Germany, 21% of the migrants included in the first wave of the German Socio-Economic Panel (GSOEP) had returned within 6 years (Schmidt 1994). More specifically, in Belgium, between 1970 and 1990, the mean annual number of entries of Congolese nationals was around 1,500 and the number of departures was around 1,200. Even though out-migration is not the same thing as return migration, these figures suggest that the Congolese migration is not simply a one-way flow towards Europe. It appears, however, that return migration tended to decrease during the 1990s, at least for some African groups such as Congolese or Ghanaians (Black et al. 2003). Several types of return must be distinguished: (1) assisted return (through national or multi-lateral programmes aimed at supporting migrants' return), (2) forced return (expulsion of undocumented migrants, including rejected asylum seekers), and (3) autonomous or spontaneous return. The first and second

categories actually represent very few migrants. Although rejected asylum seekers are supposed to leave the country where they made their application, it seems that a high proportion of them do not move (Hatton, 2004). Regarding assisted return programmes, that have been quite largely studied, they never have a massive impact (IOM 2004). The bulk of return migration is thus voluntary, but very little research has been devoted to this question. The MAFE project objective is to shed light on this type of movement by providing new evidence on the scale and the drivers of this flow. Furthermore, it aims at documenting the question of migrant circulation on which qualitative research has given interesting insights (see, for instance, Macgaffey et al. 2000 on the circulatory strategies developed by the Congolese), but on which quantitative evidence is rare (Constant et al. 2003) despite growing interest among scientists and policy makers (Adepoju 2006; Hugo 2003; Vertovec 2007). We expect to find evidence that return migration (from Europe to Africa) has been a significant phenomenon for many years, that it is not necessarily related to policy incentives (programmes encouraging return or expulsion) and that it is strongly correlated with the legal status of migrants. In addition, we expect to find that circular migration is increasing but also that it is concentrated among migrants with specific skills and characteristics - mainly skilled workers, traders, documented migrants. These analyses are of crucial interest for policy makers in a context where temporary migration is believed to be a pathway for improving migration management in Europe.

2.3. An analysis of the factors determining African migration flows

As stated by Lucas (2006; p.358), "the literature on the determinants of migration in Sub-Saharan Africa is very extensive", but "most of the literature looks at internal migration". By comparison with the theoretical advances and the volume of literature on other parts of the world, the quantitative analysis of the determinants of African international migration, especially to Europe, appears to be a relatively neglected field of research. MAFE aims at contributing to bridge this gap.

Advances in the theories of international migration. Analysis of the determinants of migration has long been dominated by an economic approach in which the migration decision is framed within a cost-benefit calculus. Various macro-economic indicators such as bi-national wage gap, unemployment rate, exchange rates, inflation and so on have been mentioned as factors underlying varying propensities to migrate internationally. However, it has become quite clear that they cannot fully account for the circularity of migration nor its generalization over time (Portes et al., 1989; Massey et al. 1997). Interestingly, research based on micro-data has demonstrated the multi-level character of the decision-making process and revealed how tightly the factors explaining migration are interwoven. For instance, human capital appears to be a major determinant of migration. But its effect on the propensity to migrate depends not only on the level of education but also on other individual factors, such as the migrant's legal status (Taylor 1987; Borjas 1993), his/her age, sex, family status at migration, the timing of migration, and the availability of social networks (Cerruti et al. 2001); and on contextual variables, such as the extent to which education is transferable across borders and rewarded at destination (Friedberg 2000), the characteristics of the labour market and income distribution in the sending and host countries (Portes et al. 1985; Zhou et al. 1989; Borjas et al., 1991, Chiswick, 1999), and the admission policy in the immigration country (Chiswick 1987; Borjas 1993; Reitz 1998). In sum, there is increasing recognition that international migration is not a single individual event but rather a dynamic social process that is guided by

structural opportunities in sending and receiving societies, the extent of migration networks, and macroeconomic conditions (Massey et al. 1997). In this line, the New Economics of Labour Migration (NELM) have analysed international migration as a household survival strategy, and have put forward the idea that an ideal trip to a foreign country is one that does not last very long and that allows the migrants to return to their home communities (Stark 1991).

Factors of migration out of Africa. In the existing reviews of literature, authors agree on four main drivers: demographic pressure, economic difficulties, ethno-political conflicts and ecological deterioration (Lucas 2006, Adepoju 2004). But actually, there are very few empirical analyses to support this broad framework. Hatton et al. (2003) provide one of the rare pieces of evidence on the factors of international migration out of Africa. Using aggregate data, they show that the rate of out-migration is positively correlated with the economic growth in the country of origin, the size of the gap between real wage at home and abroad, and the share of population aged 15-29. Lucas (2006) underlines the numerous limitations of this kind of macro-analysis and advocates new analyses based on micro datasets, a requirement to understand the process of migration decision making. Van Dalen et al. (2005) provide a unique contribution on the drivers of African emigration at the micro-level, using the data of the "Push-pull" project. But, their results are about migration intentions and not actual migration. All in all, the existing literature on the determinants of African international migration is characterized by two gaps. Firstly, there is a missing link between micro and macro-level of analyses. While theories on international migration have highlighted the multi-level character of the migration decision process, studies on African migration remain either micro or macro, do not link these two levels and do not explore meso levels (household, community, region). Secondly, quantitative works on African international migration are focused on out-migration and never consider return migration, although international migration theories (especially the NELM) and empirical results in other parts of the world have shown the significance of temporary migration. The aim of the MAFE project is thus to provide new data in order to document the multiple facets of African migration (departure, return, circulation) and to explore the multi-level nature of the migration decision process (individual determinants; household economic resources, i.e. poverty in absolute or relative terms, size and strength of networks and changing macro-economic and policy conditions in both origin and destination countries).

2.4. A study of the economic changes due to international migration

The third objective of MAFE is to document some of the socio-economic changes driven by international migration, at the individual and household levels, looking as often as possible at both ends of the Afro-European migration system. In other words, the objective is to study the education and labour careers of migrants in order to analyse the payoff of the migrants' skills, first, when they arrive in Europe and, second, when they go back to their country. These questions coincide with major concerns of policy makers whose objectives are: (1) within Europe, to maximize the benefits of migrants' human capital in order to stimulate growth and productivity (in line with the Lisbon Agenda); and (2) in Africa, to use (returning and circulating) migrants as key actors to promote the development of their country of origin (policies for 'co-development').

Integration in destination countries. Both traditional academic discourse and popular conventional wisdom assume that, over time, immigrants will progressively integrate into the market of their

country of destination. However, it is by now well known that the foreign-born population is at an economic disadvantage compared to natives. Immigrants have higher unemployment levels, jobs of lower quality and receive lower earnings than the native-born population (Alba and Nee 2003). Within the European Union, African migrants clearly exhibit dramatically lower employment rates than EU-nationals or migrants from other origins (Commission of the European Communities, 2004). Furthermore, studies have pointed to the 'brain wastage' of African migration, with skilled professionals being employed below their level of qualifications once they arrive in Europe (Stillwell et al. 2004). Researchers have argued that the economic difficulties experienced by immigrants are partly explained by their human capital at arrival in the host country (van Tubergen, 2006). A substantial part of the foreign-born population has little command of the official destination language (Bean and Stevens 2003), and has obtained educational qualifications in the home country that are not equally valued in the host country. Some studies point also to the possibility that racism may be at play in receiving-country labour markets. More generally, it is hypothesized that institutional differences between receiving countries also affect immigrant integration, since large differences exist between destination countries (Inglessi et al. 2004). The difficulty with drawing definitive conclusions is that almost no datasets exist in which migrants' last employment before migrating is recorded, nor do we have data with accurate estimates of years of schooling completed in migrants' home countries. This is a gap that MAFE aims to fill by collecting migrants' trajectories and contextual data able to describe the context of reception in the various countries. These data will serve to explore the following questions. To what extent are African migrants able to exercise their profession in Europe? If not, what are the barriers? To what extent do their experiences differ from one destination country to another or from one origin country to another?

Re-integration in home countries. The last decade has seen an upsurge of literature on links between migration and development. This includes attention from academics (Van Hear et al. 2003; Lucas 2006; De Haas 2010), the EU (COM/2005/390) and the UN (GCIM 2005). Although much of this remains focused on specific issues such as remittances and the brain drain, policy-makers also often assume that returnees are actors in development through their capacity to invest in productive areas. Although this topic has generated a certain amount of research on Mexico or North Africa, evidence remains rare south of the Sahara, where researchers have rarely compared returnees with non-migrants, so the specific effect of migration remains unclear. Relatively little attention has focused on the extent to which migrants really do gain improved skills and qualifications whilst abroad, or on the challenges of re-integration (but see Ammassari 2004). The MAFE project thus intends to shed new light on some still unanswered questions. How do returning migrants become reintegrated in local labour markets? Have they improved their skills and qualifications while they were abroad so that they are more able to find wage employment or to become entrepreneurs? On the contrary, has their stay abroad had a disruptive effect, for instance, because their social networks shrank during their absence?

Transnational practices. Some have called for researchers and policy-makers to view re-integration in much the same light as integration - in other words, it is often just as challenging for those returning to their home country to re-integrate as it is for migrants to integrate in host countries (Black et al., 2004). The MAFE project aims to reflect this literature by treating integration and reintegration as conceptually similar, consistent also with the view of some scholars that the path

of migrants increasingly involves “simultaneous incorporation” in both sending and receiving contexts (Levitt et al., 2004). In this context, social and economic mobility within the host society may translate into investments and projects that enhance both living standards and status in both sending and receiving environments. The MAFE project intends to examine the extent to which African migrants are engaged in transnational activities. Do they invest in Africa while living in Europe? Who are the beneficiaries: themselves, their family or their origin-community? What are the determinants of these investment behaviours? Does it hamper integration in Europe? Does it facilitate re-integration in Africa? These analyses will allow us to assess whether international migrants have become major actors in the development of their origin country, as assumed by co-development policies.

2.5. A study of family changes due to international migration

The fourth and final scientific objective of the MAFE project is to analyze the interactions between migration and family trajectories in order to study the socio-demographic changes brought about by international migration.

An under-researched topic. Although a significant fraction of contemporary international migration takes place in the context of family chain migration, as suggested by the high number of migrants admitted for family reunification in Europe (especially in the old immigration countries), international migration has rarely been studied from a family perspective (Kofman 2004, Grillo et al. 2008). Various reasons have been put forward to account for such an omission in the academic literature: neglect of the role of the family in economic theory, the interpretation of migration as transactions between individuals and states (Vatz Laaorussi 2001; Zlotnik 1995), its association with female migration and dependency rather than with work and autonomy (Kofman 1999), and the lack of statistical data to track the recomposition of family groups across time and space (Coleman, 2004). By bringing new data that covers family movements, MAFE aims to overcome this data shortage in order to contribute to a broader understanding of the relationships between migration and family formation or transformation. So far, the literature produced in the “migration and family” field has largely consisted in a comparison of migrants and natives within receiving societies (integration approach). This view has been expanded in recent studies, in line with the transnational approach. The remaining challenge is to bring quantitative methodology into this perspective.

Integration approach. Marriage patterns and fertility levels have often been viewed as indicators of migrant integration. In most developed receiving countries, marriage and parenthood are frequently postponed and divorce is common (Dykstra et al. 2006), whereas migrants usually come from more traditional backgrounds, in which a young age at marriage and childbirth (especially for women) is preferred and divorce is less accepted (Valk, 2007). A key question in the literature is therefore: to what extent are migrants different from natives in terms of family formation (marriage, divorce, childbearing)? It is generally acknowledged that African migrants have lower rates of fertility than their co-nationals in the country of origin, but higher rates than natives (Bledsoe et al., 2007). This convergence towards receiving society trends is explained by a set of well-established theories: disruption, adaptation, assimilation, selection (Kulu 2005). African migrants are also associated with the image of large (sometimes polygamous) “traditional families”, with a hierarchical organization.

However, various studies have shown that migrants' marriage patterns do not conform to these expectations. For instance, De Valk et al. (2001) show that marriage is less common for migrants from some parts of Africa, like Ghana; and that, if marriage occurs, it is at a relatively later age, and that divorce is more common among migrants than among the Dutch. In France, another example, it appears that single-parent households, headed by women, are quite frequent among the Senegalese (Genereux 1997). It is argued that this can be explained by the difficulty of the migration process, the different institutional context in the destination countries (where the welfare state allows people to be independent from their families) and the break-up of marriages originally contracted solely for the purpose of receiving a residence permit. This last hypothesis raises the issue of the role of family-related events in migration strategies, a question recently tackled in transnational studies of African migration.

Transnational studies. Recent research has shifted the approach of "family and migration" studies from a destination-centred perspective to a bi-focal viewpoint in order to better understand, on the one hand, the interactions between family formation and migration strategies and, on the other hand, the functioning of transnational families. Recent research has looked at how migration impacts family structures, and has demonstrated the existence of transnational families, of which some members are in the receiving country and some are in the sending country. Pessar and Mahler (2003) identify many of the ways families seek to 'be family' in the transnational context. Parrenas (2005) shows how mothers try to 'mother' via phone calls and gift packages. Mazzucato (2005) highlights the double family commitment of some Ghanaian migrants regarding child rearing: while they may be concerned with their children's schooling in the receiving country, they may be responsible for funding the education of another child in their extended family in the sending country. Bledsoe et al. (2006) explain how migration forces polygamous families to find innovative arrangements. The "Transnational vital events" project asked "how people [African migrants] distribute their temporalized vital events -especially birth and marriage- across international boundaries" with the hypothesis that the timing of these events is related to the migrants' quest for legitimacy in European destination countries (Bledsoe 2004). Although this research project initially aimed to use both qualitative and quantitative approaches, its main results rely on socio-anthropological investigations because of the lack of appropriate quantitative data.

The MAFE project provides new data for a systematic analysis of migration and family trajectories. More specifically, two questions are of special interest in the project. The first concerns family arrangements and the ways they are affected by migration. Looking at who lives where within families (wife and husband in the same country or not, children with or without parents), MAFE makes it possible to assess the significance of transnational families vs. (re)unified families and to study the factors that encourage migrants to relocate their whole family in the destination country. The second question concerns the influence of international migration on reproductive practices. Do the migrants adopt new childbearing practices? In sending countries, do families with current or return migrants exhibit lower fertility? In destination countries, do they develop specific family formation strategies to gain legitimacy (rights to settle and to circulate, access to social security, etc.)? Put in other terms, the question would be: do policies in destination countries affect reproduction among immigrants?

All in all, there is a recurrent pattern in the state-of-the-art relating to MAFE's four topics of interest: more often than not, studies adopt the viewpoint of either the receiving or the sending societies. Only recent studies have attempted to bypass this problem by adopting transnational approaches. While they have put forward new ideas on the functioning of international migration, the policy impact of these studies remains weak because they use qualitative methods and are thus unable to show the quantitative extent of transnational practices. As a result, African migration continues to be seen mainly as a one-way flow towards Europe, as if there was no return and a breaking of all ties with the home country. The ambition of the MAFE project is to gather new quantitative evidence to test the veracity of these common wisdoms. The range of questions raised in the scope of this project is large. However, a single survey, whose design is based on previous successful experiences, can be carried out in various countries in a comparative manner in order to achieve all the project objectives. The creation of a new dataset on African migration is clearly a prerequisite to producing analyses capable of addressing the policy challenges of international migration in Europe.

3. METHODOLOGICAL PRINCIPLES

First and foremost, the MAFE project aims to fill a gap in quantitative data availability on African international migration (Box 2). By doing so, its ambition is also to contribute to advances in survey methodology on international migration, building on the previous experience of key studies. First, the "Mexican Migration Project" (MMP), which is a major longitudinal dataset that provided numerous insights into patterns and consequences of Mexican migration to the United States (Massey 1987)¹, inspired two major features of the general project design: (1) its transnational sample, with data collection taking place in both origin and destination countries and (2) its retrospective nature, with the collection of quantitative life histories. Second, the various experiences of life event history surveys in Europe and in Africa have specifically provided inspiration for the design of MAFE event history questionnaires (Antoine, Bonvalet, Courgeau, Dureau, & Lelièvre, 1999; Poirier, Dabiré, Le Jeune, Piché, & Wane, 2001). Third, the project "Push and Pull Factors of International Migration", a large Eurostat-funded project in the mid-1990s collecting data from selected countries in West Africa, the Mediterranean region and Europe, provided inspiration in matters of sampling strategy (Groenewold & Bilsborrow, 2008)². Taking stock of all these experiences, the MAFE project methodology is based on three methodological principles: (1) a multi-focal view of international migration; (2) longitudinal, multi-level, multi-topic and comparable data; (3) transnational samples. The following sections detail the rationale for these principles and show how they were implemented to produce new quantitative data on migration between Africa and Europe.

¹ For more information on MMP, see: <http://mmp.opr.princeton.edu>

² The 'Push and pull' project simultaneously conducted comparable surveys in Ghana, Senegal, Morocco, Egypt and Turkey, as well as in Spain and Italy (1996-1997). It was primarily intended to analyse the causes of departure from Africa to Europe and thus does not adopt a circulation perspective. For more information on the Push-pull project, see: <http://www.nidi.knaw.nl/web/html/pushpull/>.

Box 2. The dearth of data on international migration

Substantial efforts have recently been made to harmonize the methods used to measure stocks and flows of international migrants within, from and to Europe (Poulain et al. 2006), and large datasets have been built to assemble census data from various countries in comparative frameworks³. Still, as emphasized by Salt (2001, p.4), “much of the current debate about actual and potential international migration into Europe, especially from the East and South, has been limited by the patchy availability of up-to-date, unambiguous and consistent data on stocks of foreign population and flows of international migrants”. The various limitations of data on stocks and flows need to be noted:

- Data are rarely comparable from one country to another simply because European countries each have their own definitions of migrants;
- Within a single country, the comparison of various sources often reveals significant discrepancies. For instance, the number of Congolese migrants living in the UK varies significantly between sources. According to the OECD (2005), around 8,500 Congolese documented migrants were living in the United Kingdom circa year 2000, compared with 30,000 migrants according to a recent report by the IOM (2006).
- For obvious reasons, official data sources generally do not include undocumented migrants (except in some rare cases, such as Spain). For instance, 18,000 Ghanaians were officially registered as living in the Netherlands in 2003, while 40,000 Ghanaians registered to vote with the Ghanaian embassy in The Hague for the 2000 presidential elections.
- There is no measure of out-migration from Europe, except in a few countries with population registers or large panels.

All in all, the counting of stocks and flows of migrants in Europe is imprecise due to incomplete and deficient data recording by the various data registration systems, differences in definitions used by these systems, and, last but not least, the limited scope of the data collected on migrants. These limitations are particularly severe for data on sub-Saharan African migrants (Lucas, 2006; Hatton, 2004), preventing meaningful research on the determinants of African migration and on the socio-economic changes associated with migration (IOM 2006).

3.1. A multi-focal view of international migration

The very first problem raised by the design of surveys on international migration is the definition of international migration itself and the adoption of a strategy to choose appropriate respondents. Basically, international migration refers to a movement from one country to another. This very simple definition raises two problems. First, it suggests that international migration can be viewed from the origin country or from the destination country. In the first case, the information is collected among origin households. It can give insights on the effects of migration on families in home countries, but it also means that questions regarding the migrants are answered by proxy respondents and not by the migrants themselves, which can affect data quality. Second problem: this rough definition calls for refinements, especially regarding the duration and/or the reasons for travel. Business trips or holidays, often of short duration, are usually not considered as migration. Statistical offices of international organizations (such as the United Nations or the European Commission) recommend registering only migrants who stay 12 months at least in a country where they were not born. Such a time restriction makes perfect sense for counting immigration in destination countries, but it might not be appropriate for specific surveys on international migration. Indeed, to understand the rationales of international migration, information on short stays might be important. For instance, it can be hypothesized that people who frequently travel for business or leisure are less likely to migrate out of their origin country for a long period since they can enjoy being abroad without changing their place of residence. The reverse hypothesis is also valid: short trips may help to prepare a longer stay. These contradictory hypotheses are not just scientific speculation; they are of policy concern because they can inform visa policies. However, without data to study the inter-relations between short and long stays, it is not possible to confirm one or other hypothesis. Considering these various problems, the MAFE strategy is to adopt a comprehensive approach where migration is viewed (1) from the viewpoints of both the

³ See, for instance, the databases from the Migration Policy Institute, the OECD, or the Development Research Centre on Migration, Globalization and Poverty.

migrants themselves and of their “origin households” and (2) from both short- and long-stay perspectives. All in all, the MAFE project thus adopts a multi-focal view of international migration. We will now examine the mechanisms of these various views.

Migration from two viewpoints (proxy vs. migrant)

The MAFE survey uses two types of questionnaires: a household and an individual questionnaire⁴. Answers to the individual questionnaire are given by the migrant him/herself, and answers to the household questionnaire by a unique respondent who is usually the household head. The household respondent is thus a proxy asked to remember information on individuals who are not living with him/her. Who are these individuals?

Even though questions about migrants are commonly asked to origin households in surveys on international migration, there is no standardized methodology: each survey adopts its own approach to define the migrants to be included in the household questionnaire. Some define them on the basis of social obligations and expectations, as was the case for the Push-Pull project that registered “those who are presently residing elsewhere but whose principal commitments and obligations are to that household and who are expected to return to that household in the future or whose family will join them in the future”⁵. Others use residential criteria, as the NESMUWA surveys that registered individuals who had previously lived in the household for at least 3 months and who had been living abroad for at least 6 months at the time of the survey (Bocquier, 2003). And others use family relationships, such as the MMP that registers all children of the household head, whatever their place of residence (in Mexico or abroad).

Unlike these previous surveys, the MAFE project adopts a mixed approach and includes in the household questionnaire the following individuals, in addition to the household members⁶:

1. All children of the head living out of the household, whatever their place of residence (including those who are deceased);
2. All persons living abroad and who are partner, mother or father of one of the household members⁷;
3. All other persons who are living abroad, who are relatives of the household head or his/her partner and who have been in regular contact with the household over the past 12 months.

When working with this kind of “household” data, it is essential to keep in mind two important facts. First, the persons belonging to these three categories are not - by definition - “members” of the household that declared them, since they live out of it. In particular, the international migrants

⁴ Questionnaires are available on the website of the MAFE project: <http://www.mafeproject.com/>. They are designed to suit all respondents, whatever their migration status (migrant and non-migrant households or persons). Specific modules are dedicated to the experience of international migration (see Box 3 and Box 4).

⁵ Note that this reference to the future household is conceptually problematic. Indeed, the concept of household refers to the group of people who live together in a residence, under the authority of the head, *at the time of the survey*. At another time, the group may be different (with members disappearing and new members arriving), the head might change, as well as the place of residence. The reference to the future is thus not clear at all when talking about a household: does it refer to the group, the place or the head?

⁶ In MAFE, the household is classically defined as a group of individuals who live together and share partly or totally their resources to satisfy their essential needs (housing, eating). To be considered as members of a household, individuals must have been living there for at least 6 months or must intend to live there for at least 6 months.

⁷ Note that there are differences between MAFE-Senegal, MAFE-Congo or MAFE-Ghana regarding this category of migrants declared in the household questionnaires. In MAFE-Senegal, only the living-abroad partners of household members were systematically registered. Mothers and fathers of household members were registered only if they contributed to the domestic economy (thus entering into the third category). On the contrary, in MAFE-Congo and MAFE-Ghana, living-abroad parents of household members were systematically registered.

of the household dataset should not be considered as household “members”. Second, these three categories of persons form a very heterogeneous population. Some are international migrants living abroad, while others live in the origin country (some of the heads’ children). Some are systematically registered wherever they live, including in the home country (heads’ children), others are registered only if they live abroad on the grounds that they have close relationships with some household members (partners, parents), while -finally - other relatives (of the head or his/her spouse) are registered because they contribute to some extent to the domestic economy of the surveyed households. Depending on their research question, the users of the MAFE data should decide who they want to include in their analyses, whether they want to look at only the actual members of the households, or only at the international migrants, or any specific group. For instance, if the intent is to strictly compare people who out-migrated with people who did not, it might be wise to restrict the analyses to the heads’ children since they were systematically registered, whatever their location (in or out of the household, in or out of the home country, still living or already dead). The MAFE project does not claim to set clear boundaries in the definition of international migrants from African households. It rather provides data users with a variety of groups that may be included or excluded from the analyses as required.

Since information on the migrants is reported in the MAFE household questionnaires by proxy respondents, questions regarding their migration experience are of limited scope, when compared with the much more detailed individual questionnaire (Box 3 and Box 4). The household module on migrants' experience includes the following variables: date of first and last departure and return, place of first and current destination, motive for last migration and help received from household members for this departure, legal status at the time of the survey. All in all, these variables serve MAFE’s agenda to study the relationships between Africa and Europe by documenting the flows of money and goods⁸ and the flows of people in both directions (departure and return). In this household questionnaire, the registration of international migration is limited to stays abroad of at least 12 months. In the individual questionnaire, the MAFE project uses a much more comprehensive approach to international migration.

Box 3. MAFE Household Questionnaire - List of Modules

- | |
|---|
| <ul style="list-style-type: none">A. Identification of household members and of the household head’s personal network (socio-demographic characteristics)B. Migrants’ experienceC. Transfers received by the household from its international migrants within the last 12 monthsD. Migrants’ contacts (only in MAFE-Senegal)E. Household’s housing and assets |
|---|

⁸ Note that flows of money and goods are recorded in only one direction (from migrants to their “origin households”, i.e. to the households that report their existence), even though it has been established that origin household may also be providers of money and goods for migrants at their destination (Mazzucato 2008).

Box 4. MAFE Life Event History Questionnaire - List of Modules

| | |
|---|--|
| A. Partnerships | K. Visits (business or leisure trips) out of the origin country* |
| B. Children | L. Citizenship* |
| C. Housing | M. Asylum* |
| D. Education and occupation | N. Work permit* |
| E. Investments in assets and business | O. Residence permit* |
| F. Migration attempts* | P. Money transfers* |
| G. Long and short (transit or interrupted) stays out of the origin country* | Q. Association participation* |
| H. Return trips to the origin country (more than a year)* | |
| I. International migration of friend or relatives (migration network) | |
| J. Return trips to the origin country (less than a year)* | |

* Modules directly related to the international migration experience of the interviewee or of his/her social circle.

The variety of international migration experiences

Since the individual questionnaire is filled in by the individuals themselves, it can contain more detailed and reliable information than the household one. The MAFE individual questionnaire thus describes international migration experiences in depth and in breadth. "In depth" because it registers the whole migration history of individuals from their birth until the time of the survey, thus allowing for the description of complete trajectories, including circular movements or complex routes from the origin country to the migrant's final destination. "In breadth" because the individual questionnaire registers all types of movements, including long and short stays abroad (i.e. of more or less than 12 months) and also migration attempts.

In the questionnaire, short stays include four kinds of travel: business trips, leisure travel (holidays), transit and interrupted stays (when the migrant intended to stay in a country but was finally forced to leave). The two last categories are considered as being part of a migratory project, through which the individual intends to change his/her country of residence. All stays considered as part of a migratory project (i.e. transit and interrupted short stays, in addition to long stays) are fully described in specific modules that include questions on the organization of each journey (with information on the precise route, on who decided, who paid and who accompanied the respondent, etc.), on conditions of integration in each destination country (legal status, language knowledge, use of public services, etc.), and on the relationships with the home country during each migratory episode (personal investments in durable goods, money transfers to relatives or friends, participation in associations, community investments).

The MAFE life event history questionnaire does not only register actual migration. It also contains a module on migration attempts, i.e. attempts made by the respondent to reach a migration destination, but without success at the time of the survey⁹. These plans go beyond mere intention

⁹ Unfortunately, only failed attempts are thus captured in the survey: the questionnaire does not record attempts to go to a country which were finally successful.

because the respondent has taken practical steps to move (applied/obtained for a scholarship; requested/obtained official papers; saved money; participated in the Green Card lottery, etc.)¹⁰.

These detailed descriptions of migration experiences are broadly based on the MMP questionnaires. However, the questioning has been substantially changed because migration between Africa and Europe is much more complex than migration between Mexico and the United States for two reasons. First, while Mexican migrants head almost exclusively to one destination country, African migrants have a variety of destinations to be taken into account in the description of the actual or intended routes. And second, while Mexico and the US are separated by a unique border, African and European countries are distant from each other, so that migrants' routes can be much more complex than a single border crossing.

All in all, the MAFE individual dataset offers a large set of information on various kinds of international migration experiences. In any case, the broad range of MAFE data opens the floor for methodological investigations. For instance, new analyses could be undertaken on the reliability of information obtained through proxy respondents by comparing the information given by the household respondent on individuals declared in the household questionnaire and the information given by the individuals themselves in the individual questionnaire¹¹. This would potentially shed a new light on data quality issues in matter of international migration.

3.2. Comparable, Longitudinal, Multi-level & Multi-topic Data

The various scientific objectives of the MAFE project call for a comparative approach. For instance, to understand the determinants of departure from a given country, those who left (and potentially returned) must be compared with those who never out-migrated. To study the factors of return, the migrants who came back home must be compared with those who remained at destination. To analyse the effects of international migration on the economic or family trajectories of individuals, those who moved abroad must be compared with those who did not, etc. This imperative of comparison is well established in the literature (Bilsborrow, Hugo, Oberai, & Zlotnik, 1997; D. S. Massey, 1987; Rallu, 2008) but raises tremendous methodological problems. First, the need to compare migrants with non-migrants or returnees means there is a need to compare people who live in different countries. This raises sampling problems, to which we will return in a following section, but it also raises conceptual difficulties because social experiences differ across countries, as do the tools usually used in surveys to describe the interviewees' positions and experiences. Second, the comparison of migrants with non-migrants or returnees raises a time issue. Comparing these groups at the time of the survey makes no sense. To understand the factors of departure, for instance, the situation of migrants just before their departure must be compared with that of non-migrants at the exact same time, which means that time-varying information is needed for all. In the following sections, we present the approaches adopted by the MAFE project to address these various problems. Three issues are discussed in detail: (1) How should time-varying information be collected? (2) Beyond data describing migration, what other types of data are needed to achieve the

¹⁰ For further discussion on the record of migration attempts, see Cora Mezger's work with the MAFE data.

¹¹ Non-migrants and return migrants who responded to the individual questionnaires in African countries are all included in the household datasets. In addition, part of the Senegalese sample of migrants in Europe (who also answered the individual questionnaire) overlaps with the sample of individuals included in the household dataset in Senegal. Comparisons can thus be made between the responses obtained from two different respondents on some variables that are similarly included in both questionnaires.

MAFE project scientific objectives? (3) What is the best way to produce data that are comparable across space and time?

Longitudinal Data

Most of the MAFE research questions call for dynamic analyses that require time-specific data. It is necessary to explore the patterns of circulation (the comings and goings of the migrants, the routes they use), the causes of migration (departure and return), as well as the socio-economic effects of international migration at the individual or household levels. For instance, to explore the impact of migration on family changes, we need to know the time of migration and to have time-specific information on marriage or fertility after migration (Anderson 2004). Two options are possible to satisfy the objective of assembling time-specific data: either a panel survey involving repeated observations -over time- of the same households and individuals, or one-off collection of retrospective data. The first option was not feasible for the MAFE project. Time and resources did not allow us to construct a panel of sufficient length to understand changes over the medium term. Furthermore, repeating data collection on transnational samples, including mobile and potentially vulnerable persons (such as undocumented migrants), raises tremendous practical and methodological problems. The MAFE project is thus based on retrospective data collected in 2008, 2009 and 2010.

Some retrospective questions are included in the household questionnaire (e.g. years of first departure and return). But the bulk of the retrospective information is included in the individual life event history questionnaire which is designed to collect life histories in a very standardized way. From this point of view, the MAFE project is similar to the MMP that also collects whole life histories on a yearly basis¹², but it also differs from it since the MAFE questionnaire includes written questions that have to be read by the interviewers, while the “ethnosurvey” methodology allows the interviewers to phrase the questions themselves¹³. The design of the MAFE life event history questionnaire is largely inspired by previous experience of life event history surveys in France and in Africa (Antoine et al., 1999). It includes two separate tools: an “Ageven” grid (Box 5) and a book (Box 6). The grid is a useful tool to date each event of interest, “Ageven” being an acronym for Age-Event (Antoine, Bry, & Diouf, 1987). During the interview, the interviewee can refer either to a calendar year (left-hand column), to his/her age (column 1), or to other events to reconstruct his/her history in detail. For instance, the birth date of the first child (column 2.2) can make it easier to recall the date of residential change (column 3.1), and vice versa. Once events are dated, they are described in detail in the book. For instance, each partnership (represented in a column) is described through 11 questions/variables (Box 6).

¹² Bilsborrow et al. (1987) suggest another method for collecting retrospective information on both migrants and non-migrants using proxy respondents. For migrants, the information is collected only among those who have been away for less than 10 years. Socio-demographic characteristics are informed at the time of departure. And for comparative purpose, non-migrants characteristics are collected for just the 5 years preceding the survey.

¹³ Questionnaires of the MMP are available on: <http://mafeproject.site.ined.fr/>

**Box 5. MAFE Life event history Questionnaire
Excerpt of the Ageven Grid (Family and Housing Histories)**

| YEARS | 1. AGE | 2. FAMILY HISTORY | | 3. HOUSING HISTORY | | 1. AGE |
|-------|--------|-------------------|--------------|-------------------------------------|--------------|--------|
| | | 2.1 PARTNERSHIPS | 2.2 CHILDREN | This dwelling is situated in which: | | |
| | | | | 3.1 TOWN OR VILLAGE? | 3.2 COUNTRY? | |
| 2009 | | | | | | |
| 2008 | | | | | | |
| 2007 | | | | | | |
| 2006 | | | | | | |
| 2005 | | | | | | |
| 2004 | | | | | | |
| 2003 | | | | | | |
| 2002 | | | | | | |
| 2001 | | | | | | |
| 2000 | | | | | | |
| 1999 | | | | | | |
| 1998 | | | | | | |
| 1997 | | | | | | |

**Box 6. MAFE Life event history Questionnaire
Excerpt of the Book (Module on Partnerships)**

| Questions | P-01 | P-02 | P-03 |
|--|---------------------------------|---------------------------------|---------------------------------|
| 101 - No. of the partner/spouse <i>See the GRID</i> | _ _ | _ _ | _ _ |
| 102D - 102F - Start and end years of the relationship <i>See the GRID - if ongoing cross out the end year</i> | _ _ - - _ _ Start - End | _ _ - - _ _ Start - End | _ _ - - _ _ Start - End |
| If the relationship ended 103 - Type of dissolution (see GRID) 1 - Separation or divorce 2 - Partner deceased | _ | _ | _ |
| First name of the partner/spouse <i>Information not retained in data entry</i> | | | |
| 104 - Did you marry him/her? 1 - Yes 2 - No -> 106 | _ | _ | _ |
| 105 - In which year did you get married? | _ _ | _ _ | _ _ |
| 106 - At the beginning of this relationship, your partner/spouse was: 1 - Single, never married 2 - Married 3 - Separated/Divorced 4 - Widowed | _ | _ | _ |

Once the data have been collected and entered, they are arranged in the form of thematic person-period files. For instance, in the file on the description of partnerships, each individual is mentioned each time he/she has a new period of partnership. Each partnership is entered on a separate line and is described by the variables (in column). Methods of longitudinal analysis - mainly event history or sequential analysis - need to be used to take advantage of these retrospective data.

Multi-topic & Multi-level Data

A total of 17 modules are included in the life event history questionnaires (Box 4). Twelve of them concern the experience of international migration by the interviewee or by people of his/her social circle. Five other modules are dedicated to the interviewees' family life (histories of partnerships and parenthood), housing and economic histories (education and occupation, investments in assets and business). These thematic modules are common to almost all life event history surveys (except the module on investments, present in the MMP questionnaire but absent in the French and African life event history surveys). With regard to the objectives of the MAFE project, these modules present a double interest. First, they offer dependent variables (e.g. having a child, getting married, investing in a business, etc.) that can be affected by migratory experience, thus making it possible to study the socio-demographic and economic consequences of international migration. Second, they provide explanatory variables to study the determinants of international migration.

The theoretical literature has clearly established that migration decision-making cannot be understood at the individual level alone (D. S. Massey et al., 1993). Beyond personal determinants, migration also depends on family factors and is also affected by institutional and structural factors operating at community, regional, national and even international levels. For this reason, the MAFE project includes multi-level data. Both questionnaires include information at both individual and family levels. It must be underlined, however, that including family-level information in a life event history questionnaire is a challenge. Collecting life histories with time-specific information on the individuals themselves is already complicated. Obtaining retrospective information for others is all the more challenging¹⁴. Beyond the interviewee's own family history (above described), what is the family-level information contained in the MAFE life event history data? It comprises two domains of special interest for the study of the determinants of international migration: (1) the composition and level of well-being of each household where the interviewee has lived (which, for instance, allows to test -to some extent- the theory of relative deprivation¹⁵); and (2) a description of the interviewee's migrant network at each point in time (which allows to test social capital theories related to migration)¹⁶.

Beyond the family-level, a contextual database has been compiled to reconstruct series of economic, socio-cultural, and policy variables at the national level, for each country involved in the project. Unfortunately, the community level is not represented in the MAFE dataset. Although previous research has shown how relevant community factors can be to explain the logics of migration (Beauchemin & Schoumaker, 2005; D. Massey & Espinosa, 1997), we decided not to include this level of information in the MAFE survey design for two reasons. The first is conceptual. Previous research on community factors was mainly based on rural areas. One of the rare studies

¹⁴ Regarding this issue, the experience of the survey "Biographie et entourage" was especially enlightening. See, for instance, Bonvalet & Lelièvre (2008).

¹⁵ As it was impossible to collect retrospective objective information on all the households' earnings at every point in time, we decided to ask two subjective questions. Answers to this kind of question are reputed to be quite reliable at the time of the survey (Razafindrakoto & Roubaud, 2000). However their validity for past situations remains to be tested. The two questions are the following:

Q312 - When you lived in this house: on average, would you say that the financial situation of the household regarding the purchase of basic goods was (1) More than sufficient, (2) Sufficient, (3) Just sufficient, (4) Insufficient?

Q313 - And relative to other people from the village/town/city where you were living, on average, would you say that your living conditions were (1) Better, (2) Equivalent, (3) Less good?

¹⁶ For more details on the measure of migrant networks in MAFE, see the works of Mao Mei Liu, Sorana Toma and Sophie Vause.

that included urban neighbourhoods in its design produced rather inconclusive results regarding community effects (Fussell & Massey, 2004). Our decision is based on the rationale that the notion of community is quite unclear in urban settlements, and especially in large cities of Southern countries, that often change at a very rapid pace. Since the MAFE project - to date - focuses on cities, collecting data at the community level was considered unfeasible. The second reason relates both to methodological and practical problems. If community data are to be used to explain migration, then such data must be available at every point in time. Since most people have a domestic and/or international migration history, community histories must be collected not only in the places where people live at the time of the survey, but also in the places where they used to live. Otherwise, causality between community context and migration would not be properly assessed since the wrong places would be taken into account in the analyses. A community survey that covers the interviewees' residential histories is not impossible to carry out, but it multiplies the survey fields and costs (B. Schoumaker, Dabire, & Gnoumou-Thiombiano, 2006). This was beyond the scope of the MAFE project.

The challenges of cross-country and cross-time comparison

We highlighted earlier the imperative of comparison in international migration studies. Whether the research interest be focused on the factors or the consequences of migration, it is almost systematically necessary to compare migrants, non-migrants and returnees, and thus people living in different countries. This comparative requirement is doubly augmented in the case of the MAFE project. First, its objective is to compare several flows of African migration, which increases the number of countries to take into account when designing the questionnaires. Second, the longitudinal nature of the data obliges us to think about comparison not only at the time of the survey but at any point of time in the past (starting with the birth date of the oldest interviewee). The notions used in the questions need to be relevant and easily understandable by the interviewees in all contexts, i.e. for all countries where they have ever lived and for all points in time. In short, the MAFE life event history questionnaire had to be designed in a "catch-all" manner. Some concepts are easily transferable because they are universal or because comparative solutions have already been identified and widely recognized¹⁷. Other concepts raise substantial problems because they are heavily context-specific, even though they may seem universal at first glance. This can be illustrated with three examples: undocumented migrants, children, and couples. What is an *undocumented migrant*? The clearest answer would be the following: a migrant who has no official document (permit) allowing him/her to be a resident and/or a worker in the country where he/she lives. The problem comes from the fact that each country has its own set of laws regarding the status of migrants and that, furthermore, these laws can change over time (sometimes quite often, as in France at the turn of the 2000s), which potentially complicates data collection in a retrospective framework. The legal status of migrants is not always clear-cut. There are sometimes intermediate situations between illegal and fully legal statuses. Temporary documents sometimes give partial rights to the migrants. In some countries and periods, it is

¹⁷ For instance, to describe the interviewees' occupations, the MAFE project uses international lists with minor adaptations to the African context. Regarding the level of education, it is recorded in terms of the number of years that the interviewee has spent in the school system. For comparative purposes, it is a quite good alternative to educational qualifications that are very country-specific (although qualifications were also recorded in the MAFE project).

possible for a migrant to be documented from a residential viewpoint, but not with regard to work, and vice-versa. And, in some cases, there is no document requirement, so that “undocumented” migrants are in fact legal. Considering all these complications, what was the solution adopted for the MAFE project? First, we distinguished between work and residential permits. And, second, within each category, four items were proposed as answers to cover the variety of situations in a standardized framework (Box 7). We believe the MAFE data thus captures, in a comparable manner, all situations regarding migrants’ legal status, at all times and in all places. However, the record is not completely systematic since the information was collected only for migration periods of at least one year. This time restriction, introduced to simplify data collection, may thus conceal periods of legal instability¹⁸.

Box 7. MAFE Life event history Questionnaire - Excerpt from the Book Questions to fill in the Ageven Grid regarding migrants' legal status

RESIDENCE AND WORK PERMITS (FOR ALL STAYS OUTSIDE GHANA THAT LASTED MORE THAN A YEAR) → **COLUMNS 11 AND 12**

EXPLAIN: Opportunities for living or working in a country may depend on the type of document you have. Therefore I would like to retrace together with you the different types of documents and residence permits that you may have had or not when you left Ghana and while you lived abroad. Could we try to retrace this together? The questions concern all countries where you lived. If some countries don't require any residence permits, don't hesitate to let me know.

• → 1st PERIOD OF LIFE OUTSIDE GHANA

RESIDENCE PERMITS (column 11)

○ → 1st status: → When you arrived in "Name of the country", did you: → "NNRP" → Not Need any Residence Permit in this country

→ "V" → have a Visa

→ "RP" → have a Residence Permit (permit of stay, residence permit, refugee status...)

→ "NP" → Not have a permit

→ Other → Specify

GRID: Note NNRP, V, RP, NP or Other (and specify) at start year

NB: in the start year, Ego may have a simple visa, then obtain another form of permit (NNRP, RP, NP, Other). Note: V + RP

○ → 2nd status: → And then? Did your situation change?

GRID: Draw an arrow to the new situation and note the new status at the year of change. Explore all status changes over this period.

WORK PERMITS (column 12)

○ → 1st status: → And with regard to the sphere of work: when you arrived in "name of the country" did you:

→ "NNWP" → Not need any work permit (you had the right to work without ever requesting a legal authorisation)

→ "WP" → have a work permit (you had a permit allowing you to work in whatever company, in whatever type of occupation)

→ "SWP" → a selective work permit, on request or limited to a specific activity (for every new employment you had to request and obtain a new permit)

→ "NWP" → No work permit (in principle, you didn't have the right to work in this country)

→ Other → Specify

→ GRID: Note NNWP, WP, SWP, NWP, Other (and specify) at the start year.

○ → 2nd status: → And then? Did your situation change?

• → 2nd PERIOD OF LIFE OUTSIDE GHANA: CONTINUE in this way for each period outside Ghana.

Second example: interviewing persons about their *children* is not as obvious as it seems at first sight. In some European countries, recent family changes make it necessary to consider whether the question relates to the interviewee’s own children or to his/her step children. And in the African context, the notion of child is often blurred by the prevalence of fosterage. In most African family

¹⁸ For more details on migrants’ legal trajectories, see Erik Vickstrom’s work with the MAFE data.

systems, the children do not “belong” only to their biological parents but rather to their lineage or family group (Findley, 1997). Child circulation between several households is thus quite common in some contexts. In Sub-Saharan Africa, depending on the country, between 9% and 35% of all households include children without their biological parents (Pilon & Vignikin, 2006). This is the reason why the MAFE questionnaires specifically asked about biological and also about adopted or fostered children¹⁹.

Third example: the notion of *couple* is also deceptively obvious, so that identifying objective criteria to define when two people form a couple is a seemingly impossible task. Could co-residence be a relevant definition criterion? No. First, co-residence of spouses is not necessarily a norm in Sub-Saharan Africa (Findley, 1997). And second, co-residence simply does not apply to couples - even married- who are geographically separated by migration. Could marriage be a relevant definition criterion? No, this does not work either. While marriage is practically universal in most Sub-Saharan countries (including polygamous unions in some contexts), it is now quite rare in some European countries where consensual unions are becoming a social norm. All in all, considering the difficulty of defining a couple with objective criteria that would be relevant in multiple contexts, it was decided to adopt a subjective definition for the MAFE project. In English, the questions thus refer to “relationships”, with the interviewees declaring whoever they consider as their “partner” at the time of the survey or in the past. It must be underlined however that this option raised translation problems because such neutral terms do not exist in all languages. For instance, the translation for “partner” is “spouse” in local Senegalese languages or in Spanish, a term that excludes partners in consensual unions that exist even though they are still quite rare in these societies. To ensure that the questionnaire would be similarly understood by all interviewees in all contexts, it was thus necessary to add a specification in all languages, as follows: “let’s talk about the partners that you have had in your life, *whether you were married to them or not*”.

This last example reminds us that all survey tools had to be translated, hence their availability in French, English, Spanish and Italian. The questionnaires were not translated in local languages of African countries, but workshops were organised during the interviewer training sessions to discuss the translation of the potentially problematic concepts (such as “couple” or “child”). In any case, it took years of preparation to build questionnaires that were satisfactory in all countries of the MAFE project. It is important to underline the essential contribution of each national partner in the project: without a local view of the questionnaires in each country, it would have been impossible to build a unique questionnaire that fits all contexts. The first versions of the questionnaires were designed in 2005. Various tests were then conducted in MAFE-Senegal, first in France and Senegal, then in Italy and Spain before implementation in a simultaneous pilot survey. In parallel, the questionnaires were tested and adapted in Belgium and Congo during the MAFE-Congo I survey (2007), leading to new adjustments implemented in the final MAFE-Senegal survey (2008). Finally, after minimal adaptations, the questionnaires were used for MAFE-Ghana (in Ghana, the Netherlands, and UK) and MAFE-Congo II (in RD-Congo, Belgium, and UK) in 2009.

As a result, the questionnaires are almost identical in all countries. The sole adaptations regard cultural (religion, ethnic groups) and family variables (no polygamous unions and no reference to core family in the households in Ghana and Congo; no reference to fostered children in MAFE-

¹⁹ Unfortunately, this distinction was not introduced in the first version of the questionnaire used in MAFE-Senegal.

Senegal). The same data entry programmes were used in all countries (thanks to a multi-lingual design). And, in the end, the MAFE datasets have exactly the same structure wherever the survey took place. They are thus especially designed to facilitate comparisons across time and countries.

3.3. Sampling

The MAFE project is based on three comparable sub-samples (MAFE-Senegal, MAFE-Congo, MAFE-Ghana), each of them being of transnational constitution with people surveyed in their origin country (non-migrants and returnees) and in destinations countries (current migrants at the time of the survey). The MAFE project is thus basically a multisite survey. Obviously, as in any other quantitative project, the objective was also to construct representative samples, counting enough households and individuals to allow for the analyses needed to achieve our scientific objectives. In the following sections, we describe first, the general sampling framework and second, the methodology for selection of households and individuals.

A multisite survey

As mentioned before, the first sampling objective of MAFE is to provide representative socio-demographic data for both origin and destination areas, i.e. in Sub-Saharan Africa and in Europe. Our contention, in line with recognized recommendations (Bilsborrow et al. 1997; Massey 1987), is that data collected only at the place of origin or at the destination are not sufficient to fulfil the scientific objectives of the project. Surveys carried out only in sending countries tend to collect poor information on migrants themselves, either through proxy respondents (since migrants are absent by definition) or from a biased sample of those who temporarily return at particular times of the year. On the other hand, surveys carried out in receiving countries can ask migrants directly why they moved, but this may lead to over-emphasis on ex-post considerations rather than real factors at the time of departure. Moreover, destination country surveys do not allow comparison of migrants with non-migrants, which is essential to determine both the factors which are significant in influencing migration, and what the impact of migration has been. A transnational design is thus required to meet the substantive objectives set by the MAFE project.

In addition, the MAFE project aims at providing comparable data across various migration systems in order to overcome what is identified as a fundamental handicap to the study of African migration, i.e. the lack of data that would allow to disentangle national specificities and general processes (Cross et al. 2006, Lucas 2006). Such an objective was also pursued by the “Latin American Migration Project”²⁰, which strictly replicated the MMP, in order to compare migration to the United States from various Latin American countries. It was also an aim of the “Push-pull” project which offered data to compare several migrant groups in Italy and Spain. However, MAFE is unique in its aim to collect data in several destination countries. In the context of Afro-European migration, this objective is necessary because flows are no longer only driven by historical links between the former colonial powers and their colonial territories. African migration now functions on a diaspora model with migrants heading towards various destination countries, including outside Europe²¹.

²⁰ For more information, see: <http://lamp.opr.princeton.edu>

²¹ Whereas in the 1960s and 1970s the major migration flows went mainly from the former colonies to the former metropolises (France, United Kingdom, Portugal, Belgium), this symmetry has lost some of its relevance, with the growing scale of migration to such countries as Italy, Spain, the Netherlands or Germany and other countries outside Europe (Black et al. 2003; Hamilton 1997; Zlotnik 1996).

Ideally, we would have included in MAFE all the destination countries of the African groups of interest in the project, i.e. complete migration systems. However for obvious financial and practical reasons regarding the range of destination countries, this was just not possible. We therefore reduced the sample objective to two or three destination countries per origin, and thus to only partial migration systems, as indicated and explained in Figure 1 and Box 1.

Within each country, our ideal objective would have been to draw nationally representative samples. For cost and practical reasons again, it was simply not feasible to assemble such samples in nine countries. The surveys were thus conducted in selected regions. In African countries, MAFE samples focus only on the regions of the capital cities (i.e. Dakar, Kinshasa, and Accra), except in Ghana, where the sample could be extended to the town of Kumasi. All in all, these regions are inhabited by respectively 26 % of the total population of Senegal in 2002, 12% of RD-Congo and 17% of Ghana²². They are known to be regions of high prevalence of out-migration. For instance, Dakar is the region of origin of 31% of the international migrants declared in 2001-2002 by Senegalese households in the ESAM-II survey (Sall, 2008). In Europe, selected regions were chosen in France, Spain and Italy (listed in Table 3). The objective was both to cover a significant part of the Senegalese population in each country (for instance, the three selected regions in France comprise 64% of Senegalese people in the country, Table 3) and also to diversify the migrants' profiles by including regions with a high concentration of migrants, and also of lesser concentration to represent rural regions where, in Spain and Italy, Senegalese migrants are employed in agriculture. For instance, in Italy, the survey took place in four regions with very varied levels of Senegalese concentration: in 2006, 40% of Senegalese migrants in Italy lived in Lombardia, 13% in Emilia Romagna, 8% in Toscana and below 3% in Campania. In the Netherlands, the survey focused on Amsterdam (North Holland), The Hague (South Holland) and Almere (Flevoland). In the United Kingdom, no particular region was selected, but the surveys were concentrated in the London area and in the places where Congolese and Ghanaian migrants were living. In Belgium, survey places were randomly selected across the whole country, taking into account the number of people of Congolese origin in all places.

Thanks to the retrospective nature of the MAFE data, it will be possible to enlarge the samples in the future in order to add new observations to the original datasets. This is possible at the transnational level - additional destination countries can be included in the project - and within each country. For instance, a second wave of about 400 Senegalese migrants was interviewed in Spain in 2010-2011. A progressive data collection system was also applied for the MMP. At the outset (1982), only five Mexican communities were included in the project sample, but after several survey waves in Mexico and the United States, the MMP sample now includes more than 100 communities, so that MMP results are now close to nationally representative figures (Massey 2000).

In contrast with the MMP or other surveys (Arenas, Teruel, Rubalcava, & Herrera, 2009; Condé & Diagne, 1986; Mazzucato, 2008), the MAFE project is not a (completely²³) matched survey, in which individuals interviewed at destination are related to those interviewed at origin. This feature has been discarded for several reasons. First, it is not needed to answer the various research questions

²² Source for Ghana and RDC: http://esa.un.org/unpd/wup/unup/index_panel3.html

²³ A small proportion of the MAFE-Senegal African and European samples are matched. For more details, see Beauchemin and Ferrer-Gonzalez (2011).

of the project: the migrants' relationships with their origin family is not the core of the MAFE research programme. Second, building matched samples raises practical problems that may be difficult to resolve in some contexts, as proved by the experience of origin-based snowballing in MAFE-Senegal (Beauchemin & Gonzalez-Ferrer, 2011). Third, matched samples make it possible to collect a representative sample at origin or destination, but not both at origin and destination at the same time. In particular, the secondary sample (i.e. the sample built through the contacts collected in the first place) is by nature a biased sample since it is based on the selection of people who are connected to the first sample. It was thus decided that the MAFE transnational samples would not be matched at the family level. They are not matched at the community level²⁴ and only partially matched at the regional level. For instance, while all non-migrants and return migrants interviewed in Senegal were living in the Dakar region at the time of the survey, 35% of the migrants interviewed in Europe never lived in this region²⁵. This geographical mismatch may induce some biases in the analyses that should be taken into account when interpreting results.

*Selection issues*²⁶

Quantitative international migration surveys are classically confronted with three types of sampling problems that are linked to each other: (1) the rarity of the targeted population (the migrants in destination countries, the returnees and the left-behinds in origin countries); (2) the vulnerable nature of part of this population (the undocumented migrants and their families); and (3) the absence of sampling frames to facilitate the selection of the target groups. In this section, we present the solutions that have been implemented in Africa and Europe to cope with these issues. As an introduction, we present the selection criteria and the sample size objectives of the MAFE surveys.

A basic solution to ensure that a sufficient number of households or individuals of interest are included in a survey is to define strata that identify these groups of interest so that they can be over-sampled. Following this strategy, we defined three strata at the household level (only in Africa) and four strata at the individual level (actually three strata in Africa and a fourth one in Europe), each time taking into account the migratory status of the observation units at the time of the survey. At the household level, the strata were the following: (1) households declaring migrants abroad, (2) households including return migrants²⁷, and (3) non-migrant households, i.e. declaring no returnee or migrant abroad. At the individual level, there were four strata: (1) current migrants (only in Europe), (2) return migrants, i.e. persons who have lived out of their home country for at

²⁴ This is another distinction with respect to the MMP which is designed as a community-based survey, in which 200 households are randomly selected per origin-community (a village, a town or a neighbourhood in Mexico-city) and 20 households sought at destination, i.e. in the US and recently also in Canada. The snowballing chain starts in Mexico, where the first contacts are recorded and continues at destination since migrants are asked for contacts of other migrants originating from the same community (Massey and Zenteno, 2000). In the end, the objective is to dispose of a representative transnational sample of each origin community included in the survey (Massey 1987)(D. S. Massey, 1994). However, the community samples are not strictly representative. First, the Mexican sample does not include members of the community who have migrated internally within Mexico. Second, samples in the US are concentrated in selected regions.

²⁵ However, 56% of the returnees surveyed in Dakar also lived for at least a year somewhere else in Senegal, as well as 55% of the non-migrants.

²⁶ This section is largely based on Schoumaker and Diagne (2010).

²⁷ In Senegal, these two first strata were combined into one (households with current or return migrants). It was not the best option to maximize the number of returnees in the sample of individuals (the individuals listed in the household questionnaires providing the sample frame for the selection of individuals to be surveyed in a second stage). It was therefore decided to distinguish the two types of households in MAFE-Ghana and MAFE-Congo. When households contained both migrants and returnees, priority was given to the returnee status to classify the households in one of the three strata. The sampling frames for these strata were built during the listing of the primary sampling units (screening survey).

least one year (whatever their former destination country), (3) migrants' partners left behind at origin, i.e. persons (often women) whose partner was living abroad at the time of the survey, (4) other non-migrants. The last three strata targeted people who were in their origin country at the time of the survey, while the first one targeted only individuals living in Europe at that time.

The interviewee selection criteria were identically defined for all individuals, whatever their place of residence, in order to maximize the homogeneity of the transnational samples. The criteria are the following:

- Respondents are aged 25-75 at the time of the survey, the lower age limit being set to obtain sufficiently informative life histories;
- Respondents were born in the departure country (Congo, Ghana, Senegal), the place of birth criterion being used to exclude immigrants in African countries and second generation migrants in Europe;
- Respondents have (or have had) the citizenship of the departure country, this criterion being used, in addition to the place of birth, notably to exclude children of immigrants in African countries (e.g. children born in Senegal to French parents)²⁸;
- In Europe especially, migrants were included only if they had emigrated out of Africa at age 18 or later, for a stay of at least one year, this criterion being used to exclude people of the 1.5 generation who are often "passive" migrants²⁹.

The number of migrants at destination had to be large enough to allow for comparison with non-migrants, considering that they could be interviewed in various countries. A minimum of 150 to 200 individuals per country was estimated as a lower threshold, including both documented and undocumented migrants. The latter had to be included in order to obtain a complete picture of the international migration processes³⁰. The sample of migrants in Europe may appear quite small at first glance. It is indeed a minimum sample size for conducting the analyses needed to meet our scientific objectives. However, it must be underlined that the ratio between the African and European samples is high in the MAFE project compared to other transnational surveys: in the MMP the theoretical ratio is one migrant in the US for 10 individuals in Mexico (Massey 1987)³¹, and the ratio was the same in an OECD survey on African migration from the Senegal River Valley (Condé et al. 1986). In MAFE samples, the ratio is approximately one migrant in Europe for 2-4 interviewees in Africa (Table 1).

²⁸ Actually, this criterion does not totally exclude immigrants' descendants in Africa. For instance, the Senegalese MAFE sample includes some individuals who reported being "Cap Verdians" (3), "Lebanese" (2) or "Portuguese" (1) when interviewed about their ethnic group.

²⁹ Note that this age at migration criterion did not apply to the return migrants surveyed in African countries. This creates a potential mismatch when comparing current migrants with returnees. Furthermore, this selection criterion was slightly different in MAFE-Senegal, where it did not refer to the age of first departure from Africa but to the age of first arrival in Europe. For the sake of homogeneity in the analyses, a flag variable has been introduced in the datasets. It indicates whether each migrant (current or returnee) arrived in Europe the 1st time before 18.

³⁰ Undocumented migrants (at the time of the survey) were included in the MAFE samples in a proportion ranging from 10% in Belgium among Congolese migrants up to 19% in the Netherlands among Ghanaians. The proportion of undocumented migrants is higher when counting those persons who did not hold a residence permit for at least one year at some point in their past: it ranges from 29% among Senegalese in France up to 57% among Senegalese in Spain (more details in Table 3).

³¹ This ratio actually varies according to the community.

Table 1. African and European Components of the MAFE Samples (2008-2009)

| | Senegal | Ghana | Congo |
|---|---------|-------|-------|
| (1) Sample size in Africa (non-migrants and returnees) | 1062 | 1243 | 1638 |
| (2) Sample size in Europe | 606* | 421 | 429 |
| (3) Ratio (1)/(2) | 1.8 | 3.0 | 3.8 |
| (4) Proportion of migrants interviewed in Europe over the whole sample: (2)/(1+2) | 36% | 25% | 21% |
| * 3 Senegalese migrants living in Europe (2 in Italy and 1 in France) were actually interviewed in Senegal while they were visiting their family. | | | |

In each origin country, about 200 returnees were also expected (their actual number ranges from 196 to 323, see Table 2 for details). Finally, in order to be able to analyze international migration from a gender perspective, our samples had to include a sufficient number of women among migrants (about 50%) and to over-represent left-behind women in origin countries (hence this specific stratum, mentioned above)³². In the end, how were the households and individuals selected in order to meet all these requirements?

In Africa, the MAFE sampling design was inspired by the previous and well documented experiences of the Push-pull project (Groenewold & Bilborrow, 2008). In the three African countries, stratified random samples of households and individuals were selected in the target regions (Table 3). In each region, a sampling frame of primary sampling units (PSUs) was prepared, distinguishing when possible areas of high and low prevalence of international migration³³. At a first stage, PSUs were randomly selected and, when possible, areas with high levels of out-migration were over-represented. In selected PSUs, a listing operation (screening survey) was carried out to prepare the sampling frame of households, distinguishing the three households strata defined above, so that households declaring current migrants abroad and return migrants could be oversampled. The number of households successfully interviewed was 1,141 in Senegal (2008), 1,246 in Ghana (2009) and 1,576 in Congo (2009). At a third stage, for the life event history survey, individuals were finally selected among those listed in the household questionnaires³⁴. In Ghana and Congo, all return migrants and partners of migrants currently abroad were selected, and one other eligible member was randomly selected within each household. In Senegal, up to two return migrants and partner of migrants were randomly selected, in addition to another individual (neither migrant partner nor

³² The objective of 50% of females in the European samples was met almost everywhere (see Table 3). In Africa, the total number of partners left behind varies from 78 in Congo to 101 in Senegal and 177 in Ghana (see Table 2).

³³ In Senegal, this was informed by the results of the 2002 Census that included questions about international migration (see Appendix 2). In Congo, this stratification was done using information given by knowledgeable persons (researchers, experts in international organizations, administrative officers, etc.).

³⁴ In MAFE-Senegal, the household survey was done before the individual survey. The individuals could thus be selected randomly and automatically in a sampling frame constituted after entering key variables of the household questionnaire. In MAFE Ghana and MAFE Congo, individuals were selected randomly in the field using a form specially designed for this purpose.

returnee). The number of biographies successfully completed is close to the number of households: 1,062 in Senegal, 1,243 in Ghana and 1,638 in Congo (Table 2)³⁵.

In Europe, about 1,450 African migrants were interviewed in 6 countries (Table 3). Even though the objective of the MAFE project was to generate representative samples, it was not possible to apply complete random selection techniques in Europe, except in Spain, the only country that offers a national sampling frame including documented as well as undocumented migrants (Appendix 3). Furthermore, due to the small size of the sample in each country, it was not possible either to apply alternative selection methods designed to reach rare populations in the absence of a sampling frame, such as respondent driven sampling or intercept point surveys (Heckathorn, 1997; Marpsat & Razafindratsima, 2010; McKenzie & Mistiaen, 2009).

It was thus decided to use quota sampling. Even though this approach is not as rigorous as a random sample selected from a suitable sampling frame, it is often recommended for constituting small samples, especially when no sampling frame is available. This method requires having auxiliary data that can be used to set quotas of respondents by different types of characteristics (gender, age, region of residence, etc.). The distribution of the sample according to certain characteristics can then be matched to the distribution of the population. In this sense, quota samples are representative of the target population. In all the countries (except Spain), the quotas were set by age and gender at least. In France, the socio-occupational category was also included as a criterion in the quotas, while in Belgium and the UK, the place of residence was used in the quotas. Randomness was also included in the samples in different ways. For instance, in Belgium, a random sample of places was selected according to the number of people of Congolese origin living in these places. Respondents were selected in these places. The combination of different recruitment methods also ensured that different types of persons had a non-zero probability of being included in the sample. For instance, some respondents were recruited in public spaces (street, metro station, hairdresser...), others were randomly selected from list of volunteers identified in churches... In France, Italy and Spain, some of the respondents were also selected using the contacts obtained in the household survey in Senegal" (Schoumaker & Diagne, 2010).

³⁵ These numbers refer to the questionnaires that matched the selection criteria and thus exclude the questionnaires that happened to be out of our field of interest (for instance people interviewed in Ghana who did not hold the Ghanaian citizenship). They are thus different from the numbers of the MAFE data collection report (Schoumaker & Diagne, 2010).

Table 2. Sampling characteristics in African countries

| | Senegal | Ghana | Congo |
|--|--|--|--|
| Target areas | Dakar Region (26% of the population of the country) | Accra and Kumasi (12% of the population of the country) | Kinshasa (17% of the population of the country) |
| Stratification | First stage: 10 strata based on the proportion of international migrants. | First stage: two cities (Accra and Kumasi). | First stage : 3 strata based on prevalence of migration |
| | Second stage: 2 strata households with and without migrants | Second stage: 3 strata: households with migrants abroad, with return migrants, without migrants | Second stage: 3 strata: households with migrants abroad, with return migrants, without migrants |
| | Third stage: 3 strata: returnees, partners left behind and other non-migrants | Third stage: 3 strata: returnees, partners left behind and other non-migrants | Third stage: 3 strata: returnees, partners left behind and other non-migrants |
| 1 st stage: selection of primary sampling units | Selection of 60 census enumeration areas. Sampling frame: 2002 Population and Housing Census | Selection of 60 census enumeration areas in Accra and 20 in Kumasi Sampling frame: 2000 Population and Housing Census | Selection of 29 neighbourhoods and 3 streets per neighbourhood (87 sampling units) Sampling frame: Sampling frame of the 2007 DHS |
| 2 nd stage: selection of households | Random selection of 22 households per enumeration area. 11 households selected in each of the two strata. If less than 11 households available in one or several strata, the remaining households are selected in the other stratum. | Random selection of 24 households per enumeration area. 8 households selected in each of the 3 strata. If less than 8 households available in one or several strata, the remaining households are selected in the other stratum. | Random selection of 21 households per enumeration area. 87 households selected in each of the 3 strata. If less than 7 households available in one or several strata, the remaining households are selected in the other stratum. In a few streets, there were less than 21 households; all of them were selected. |
| 3 rd stage: selection of individuals | People aged 25-75, born in Senegal and who have/had Senegalese citizenship. Up to two return migrants and partners of migrants, and one randomly selected other eligible person. | People aged 25-75, born in Ghana. All the return migrants and partners of migrants, and one randomly selected other eligible person. | People aged 25-75, born in Congo. All the return migrants and partners of migrants, and one randomly selected other eligible person. |
| Sample size (selected households) | 1320 households | 1920 households (1440 in Accra and 480 in Kumasi) | 1773 households |
| Completed household questionnaires* | 1141 households, including: Non-migrant HH: 458 HH with at least 1 returnee: 205 HH with at least 1 current migrant: 617 Household with returnee(s) and current migrant(s): 139 | 1246 households, including Non-migrant HH: 449 HH at least 1 returnee: 346 HH with at least 1 current migrant: 675 Household with returnee(s) and current migrant(s): 224 | 1576 households, including Non-migrant HH: 470 HH at least 1 returnee: 351 HH at least 1 current migrant: 1027 Household with returnee(s) and current migrant(s): 272 |
| Sample size (selected individuals) | 1387 | 1490 | 1946 |
| Completed life event history questionnaires | 1062 individuals, including: Returnees: 193 Partners left behind: 101 Other non-migrants: 768 | 1243 individuals, including: Returnees: 319 Partners left behind: 84 Other non-migrants: 840 | 1638 individuals, including: Returnees: 322 Partners left behind: 77 Other non-migrants: 1239 |
| Individual response rate | 76.6 % | 83.4 % | 84.2 % |
| Overall response rate | 66.1% | 54.1 % | 74.9 % |

Source: This table is based on Schoumaker & Diagne (2010). Numbers are smaller than in the data collection report because some individuals were dropped to comply more strictly with the selection criteria.

* The addition of non-migrant households with the households comprising returnees and partners left behind may be higher than the total number of surveyed households because a same household can belong to more than one category (e.g. a same household can contain both returnees and partners left behind).

Table 3. Sampling characteristics in European countries

| MAFE-Senegal | | | | |
|--|---|--|--|---|
| Country | Target areas | Sample size | Quotas | Recruitment methods |
| France | 3 selected regions: Ile de France, around Paris; Rhône-Alpes, around Lyon; Provence-Alpes-Côte d'Azur, around Marseille. | 201 (46% of females), including undocumented migrants - at the time of the survey: 12% ⁽¹⁾ - in the past ⁽²⁾ : 29% 80 % have lived at least one year in the region of Dakar | By age, gender and socio-economic status | Selection from contacts obtained in Senegal, Public spaces, migrant associations, snowballing, interviewers' contacts |
| Italy | 4 selected regions: Lombardia, Emilia Romagna, Toscana, Campania. | 205 (39% of females), including undocumented migrants - at the time of the survey: 17% - in the past: 46% 54% have lived at least one year in the region of Dakar | By age and gender | Selection from contacts obtained in Senegal, Public spaces, migrant associations, snowballing, interviewers' contacts |
| Spain | 12 provinces: Almería (Andalucía); Alicante & Valencia (Comunidad Valenciana); Barcelona, Lérida, Tarragona & Gerona (Cataluña) ; Madrid (Comunidad de Madrid); Zaragoza (Aragón); Las Palmas (Islas Canarias); Murcia (Comunidad Autónoma de Murcia) ; Baleares (Islas Baleares) | 200 (51% of females), including undocumented migrants - at the time of the survey: 18% - in the past: 57% 61 % have lived at least one year in the region of Dakar. NB: an additional sample of around 400 people will be added, thanks to a new survey round carried out in 2010. | Random sample from Padron | Population register (Padron) & contacts obtained in Senegal |
| MAFE-Congo | | | | |
| Belgium | Whole country | 279 (45% of females), including undocumented migrants - at the time of the survey: 10% - in the past: 33% 87.5 % have lived at least one year in Kinshasa | By age, gender and place of residence | Public spaces, migrant associations, churches, snowballing, phonebook, centers for asylum seekers, interviewers' contacts |
| United Kingdom | Whole country | 149 (50% of females), including undocumented migrants - at the time of the survey: 12% - in the past: 52% 93.3 % have lived at least one year in Kinshasa | By age, gender and place of residence | Public spaces, churches, snowballing, interviewers' contacts |
| MAFE-Ghana | | | | |
| The Netherlands | 3 cities (in 3 different provinces): Amsterdam(North Holland); The Hague (South Holland); Almere (Flevoland) | 272 (47% of females), including undocumented migrants - at the time of the survey: 19% - in the past: 56% 72.5% have lived at least one year in Accra or Kumasi areas | By age and gender | Public spaces, churches, snowballing, interviewers' contacts |
| United Kingdom | Whole country | 149 (48% of females), including undocumented migrants - at the time of the survey: 7% - in the past:14% 79.2% have lived at least one year in Accra or Kumasi areas | By age, gender and place of residence | Public spaces, churches, snowballing, interviewers' contacts |
| Source: This table is based on Schoumaker & Diagne (2010). Numbers are smaller than in the data collection report because some individuals were dropped to comply more strictly with the selection criteria. | | | | |
| ¹ Non-weighted percentage of interviewees having declared that they did not hold a residence permit at the time of the survey. | | | | |
| ² Non-weighted percentage of interviewees having declared that they did not hold a residence permit at some point in their migrant life for a period of at least one year (i.e. at the time of the survey or sometime in the past when they were living out of their origin country). | | | | |

4. CONCLUSION: ADVANCES AND REMAINING CHALLENGES

The objective of this note was to present the rationale for the methodological choices of the MAFE project. To a large extent, the survey methodology was inspired by previous experiences, such as the MMP, the Push-pull project or life event history surveys in France and in Africa. Building on these experiences, the MAFE project innovated in various ways. Applying a retrospective methodology, it developed new life event history questionnaire modules, such as those on migrant networks, detailed migratory attempts and trajectories, legal status of migrants, investments and remittances. These topics are not novel in themselves, but their longitudinal treatment is highly original. Furthermore, being one of the rare quantitative transnational surveys in the world, MAFE is the first project to collect data on several migration systems, i.e. taking into account several destinations for several origin groups. However, it is not sufficient to say how “unique” the MAFE data are. Like all other datasets, it has limitations. And they are related to the novelties of the survey.

The first limitation is related to data quality in the new life event history modules. The multiple tests and final fieldwork showed that the interviewees were able to answer a large range of questions regarding various aspects of their history, beyond the classical life event history modules (residence, occupation and family). However, further tests could be done to better assess data quality. For example, measures of subjective well-being are known to be quite reliable at the time of the survey (Razafindrakoto et al., 2000), but their relevance in a retrospective framework could be tested further. This could be done using the MAFE data and crossing this variable with other retrospective and objective indicators of well-being (type of house, earnings, socioeconomic status). Retrospective information on the migrant networks could also be further assessed: we could test to what extent respondents are able to reconstruct their parents’ and friends’ migration trajectories. Using the matched sample of the MAFE-Senegal data, we could compare the answers given by proxies in the household questionnaires and by the migrants themselves in the individual questionnaire. This could be done for information related to migration histories, but also for various other kinds of variables, so that the MAFE data could shed light on the reliability of data collected in surveys on international migration carried out only at origin with answers given by proxies.

The second kind of limitation is related to sampling issues. First, although they can be extended in the future, the samples are quite limited in size, so that some sorts of analyses may be limited. Second, even though the samples were built for comparative purposes, the sampling frames could not be identical across countries, so comparative studies must always be carried out with caution. Third, the destination countries included in the MAFE individual surveys are limited in number (two to three) and highly selected (only Europe). This may induce some biases in various kinds of estimations since African migrants have very varied destinations. This bias is partly compensated by the fact that some interviewees lived in other countries in the past (e.g. 9% of the Senegalese migrants interviewed in Europe have lived in other countries). In any case, the extent of bias can be assessed in some areas by using the household questionnaire that includes all migrants declared in the households, whatever their country of residence. And finally, even though the MAFE survey was conceived to permit the comparison of migrants, returnees and non-migrants, there are some mismatches in the samples. For example, current migrants and returnees cannot be compared without caution: while current migrants in some European countries, were only interviewed if they

had immigrated there for the first time at age 18 or above, returnees - interviewed in Africa - had come back from very varied countries (outside Europe) whatever their age at first departure. Another example: non-migrants and returnees in Africa and current migrants in Europe do not have the same regional background: while the former lived in the regions of the African capital cities at least at the time of the survey, some of the latter never lived there. These examples suggest that MAFE data users should always examine to what extent their groups of interest are actually comparable or not, depending on the object of their analysis.

The MAFE project thus produced a unique but also flawed dataset, as is the case for all other surveys on international migration that are never perfect but always better than nothing. Pointing up the surveys' various limitations is important for two reasons: (1) to prompt the users to analyse the data and results with caution and (2) to make progress in survey methodology on international migration. If flaws are not described and assessed, they cannot be overcome from one survey to the next. As yet, there is a real gap in the literature in this domain: when planning a survey on the factors and consequences (at origin) of international migration, there are very few studies to refer to. Survey experiences are rarely documented, and when they are, they are often not sufficiently self-critical³⁶. Beyond the scientific objectives described in the first section of this paper (patterns of migration, determinants, family change, migrant integration and re-integration), the MAFE project also intends to produce new methodological knowledge. This is the objective of the series of *MAFE methodological notes*³⁷.

³⁶ There are some good counterexamples, however, such as McKenzie & Mistiaen (2009) or Groenewold & Bilsborrow (2008).

³⁷ Available on the MAFE website: <http://www.mafeproject.com/>

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Appendix 1. Team members at the time of survey design and data collection

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|-----------------|---|
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| GHANA | <p><u>Project coordinator:</u> Peter Quartey (CMS)</p> <p><u>Team members:</u> Faustina Frempong (CMS) Cynthia Addoquaye Tagoe (CMS)</p> |
| ITALY | <p><u>Project coordinator:</u> Eleonora Castagnone (FIERI)</p> <p><u>Team members:</u> Sorana Toma Private firm: Doxa</p> |
| SENEGAL | <p><u>Project coordinators:</u> Papa Sakho (IPDSR)</p> <p><u>Team members:</u> Alioune Diagne (IPDSR) With the support of the INED team</p> |
| SPAIN | <p><u>Project coordinator:</u> Amparo Gonzalez (CSIC) and Pau Baizan (UPF)</p> <p><u>Team members:</u> Mao-Mei Liu (UPF) Private firm: Metroscopia</p> |
| THE NETHERLANDS | <p><u>Project coordinator:</u> Valentina Mazzucato (U. Maastricht)</p> <p><u>Team members:</u> Djamila Schans (U. Maastricht) Kim Caarls (U. Maastricht)</p> |
| UNITED KINGDOM | <p><u>Project coordinator:</u> Richard Black (U. Sussex)</p> <p><u>Team members:</u> Nalu Binaiisa (U. Sussex) David Garbin (U. Sussex) Adriana Castaldo (U. Sussex)</p> |

Appendix 2. Sampling strategy in Senegal

To draw a probabilistic representative sample of households in the region of Dakar, a three-stage stratified random sampling strategy was applied using the 2002 Population Census as a sampling frame. At the first stage, census districts, which include about 100 households in Senegalese urban areas, were randomly selected with varying probabilities. At the second stage, households were selected randomly in each of the selected primary sampling units. At the third stage, individuals were selected within the households.

1. Selection of primary sampling units (first stage): 60 census districts were randomly selected. This number of primary sampling units ensures a balance between a large geographical dispersion of households (which decreases sampling errors) and a more concentrated sample (which reduces costs). The region of Dakar was divided into 10 strata of equal size, according to the percentage of migrant households within each of them (on average, 11.6 percent of the households). 6 census districts per stratum were drawn, with a probability proportional to the number of households within each census district. By doing this, districts with a large number of migrants were more likely to be selected than those with low numbers of migrants. This provides samples of returnee migrants and of households affected by migration that are large enough for statistical analyses.

As important changes had taken place during the period between the Census in 2002 and the MAFE fieldwork in Dakar, especially in suburban areas, the listing of households in the 60 randomly selected census districts was updated before starting the second stage.

2. Selection of households (second stage): households were randomly selected from the updated list of households in the selected primary sampling units. Two strata were distinguished: households with migrants and without migrants. 'Migrant households' could not exceed 50 percent per district. Selected households that could not be reached (absence, refusals, etc.) were not replaced during the fieldwork. Replacement would distort the computation of sampling weights, and could also bias the sample. Instead, 22 households were selected to reach an effective sample size of 20 households per census district on average (the original target was 1,200 household questionnaires); in other words, we expected a potential drop of 10 percent..

3. Selection of individuals (third stage): individuals were selected within households for the life history survey. In each household, individuals were classified into 3 non-overlapping strata:

- Return migrants, who were aged 18 or over at their (first) departure (or whose age at departure is unknown).
- Spouses/partners of migrants (if the spouse/partner is not a return migrant himself/herself).
- Other people.

Then, simple random sampling was done in each household to select:

- Up to 2 return migrants (random selection if more than two in the households, all the return migrants were selected if not more than two in the household)
- Up to 2 Spouses/partners of migrants (random selection if more than two in the household)
- Other individual.

Our initial objectives were not completely fulfilled since the final drop was 23.6 percent: 1,396 individuals were selected and only 1,097 were ultimately interviewed. This loss is taken into account in the weights computation. It seems it does not introduce important biases in the samples (Razafindratsima, Legleye, & Beauchemin, 2011).

Appendix 3. The Padrón as a sampling frame for surveys on immigrant populations

The Spanish Municipal Register, commonly known as *Padrón Municipal*, constitutes a unique instrument to randomly sample immigrants of foreign origin for two main reasons. First of all, *Padrón's* figures are continuously updated by the Spanish municipalities and the results of such updating operations are periodically published by the National Institute of Statistics (INE) for the entire country. Second, and most importantly, the main feature of the *Padrón* for the analysis of immigration is that it contains data on the entire population living in Spain regardless of their legal status. Until 1999, the counting of foreigners in the *Padrón* was still seriously flawed because fear of expulsion prevented most foreigners from registering in their municipalities. However, this situation changed after the reform of the Immigration Law in 2000 (known as Law 4/2000, on the Rights of Foreigners and their Social Integration into the Spanish Society), which offered strong incentives for registration, particularly of undocumented foreigners.

The new legislation imposed the *empadronamiento* (registration in the *Padrón*) as the only legal requirement to access public health care and other public services such as enrolment in primary schools for children. In addition, the regularisation program that accompanied the legal reform - and all other regularisations implemented since then - accepted the certificate of *empadronamiento* as a proof of the length of residence in Spain, which especially encouraged registration of undocumented people wishing to regularise their legal status in Spain. Between 1st January 2000 and 1st January 2001, the number of foreigners born abroad in the register increased by 466,507 individuals. Moreover, since 2000, most municipalities have periodically carried out campaigns to promote the *empadronamiento* of foreign people residing in their territory. These campaigns were conducted not only for statistical purposes, but rather for financial reasons because an important share of municipal budgets (the share the central government annually transfers to each municipality) depends on its population as counted in the *Padrón*.

This kind of financial incentive might also explain why local and regional statistical offices show so little interest in keeping the register's figures updated. Aware of this perverse incentive on the part of the municipalities, along with the lack of incentives for out-migrants to de-register if they decided to go back home, the Central Statistical Authority enforced a regulation in December of 2003 aimed at erasing from the register those records of foreign people who registered once but who no longer lived in the country. The legal reform required all non-EU foreigners who did not have a permanent residence permit in Spain to renew their inscription in the Municipal Population Register every two years. The first adjustments were finally made at the end of 2006, after some disagreements between the INE and certain municipal statistical offices. About a quarter of a million foreigners were 'ex officio' de-registered as a result of the new law.

Although the statistical adjustments derived from the "expiry procedure" broke the statistical series at our disposal, the reform brought a major advantage for users of the *Padrón* as a sampling frame: figures in the *Padrón* will be now much closer to the real immigrant population living in Spanish municipalities. Even if some individuals who still live in Spain might have been de-registered, all those who remained as active records in the register are much more likely to be found at their reported addresses.

We actually asked the National Institute of Statistics for a random sample of 1,200 people born in Senegal and residing in one of the twelve Spanish provinces where most Senegalese migrants lived as of January 2008. The sample was drawn according to the following quotas: 50 percent aged between 25 and 40, and 50 percent between 41 and 70, and half men and half women within each age group, for the whole territory of the twelve selected provinces. The final sample was drawn from the Register as of February 2008, i.e. only two and a half months before the fieldwork started.

We provided the survey firm with only half of the total requested sample (600 individuals randomly selected from within the total sample of 1,200) and asked them to obtain a total of 200 completed questionnaires that matched the sex, age and concentrated/not concentrated strata. Interviewers were required to follow strictly the listing order and to try up to four times, on different days and at different times of day, before giving up.

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