

# INED's Comprehensive Research Plan

2021 - 2025

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In the next five years, INED's Comprehensive Research Plan will cover 5 major research *areas*, each subdivided into 3 to 5 *sections*. Some of the areas were already defined as part of previous comprehensive research plans, attesting to continuity in INED activity over recent years. The first area is crises and how they interact with demographic phenomena. It is this area that most closely corresponds to the recent and ongoing pandemic situation, although some of the crises in question are lasting by their very nature. It is also the area where INED plans to intensify its efforts, namely on the question of relations between populations and the environment. The second area covers issues related to observation modes and analytic methods. In addition to the key role of surveys and the increasing use of new types of data, the emphasis here is on two approaches of great importance at INED: a critical perspective on data and analytic categories, and historical study. The next three areas are thematic and call to mind the three fundamental factors of demographic dynamics. But here they have been considerably renewed, as they encompass the now much wider range of subjects studied at INED and approaches used in conducting those studies.

This way of structuring the comprehensive scientific plan was developed collectively over several stages that are detailed in the appendix. When the entire range of INED research is examined, it is clear that certain questions and approaches are relevant to and operative in all the projects. Gender concerns, the life-course approach, international comparisons of public policies, and comparative analysis of policy effects on demographic behaviors (see box below) are common to or used in all INED research studies. Demographic aging is also a cross-cutting issue because it involves problems that are studied by way of mortality and fertility analysis or in terms of family and intergenerational solidarity, and because it has multiple implications for social, health, and economic policy. In the architecture of this comprehensive plan, aging is of special importance in sections 3.5 (due to the economic and social issues involved) and 4.2 (health).

The emphasis that INED studies place on analysis of inequalities of all sorts (related to gender, age, region, social position) is quite remarkable. When INED researchers were asked what major issues Institute research should focus on for the next 5 years, the majority of them cited inequalities (particularly social ones). Inequality might have been designated an area in its own right, but this would have thrown the overall architecture of the plan off balance. The problematics of how inequalities are observed, produced, and reduced are nonetheless a central concern, as attested by the occurrence of the word in a number of area and section headings.

# 1 CRISES AND POPULATIONS: BREAKS IN CONTINUITY, CONTINUITIES, TRANSFORMATIONS

Taken together, events of the last decade project an image of a disrupted and shaken world. Crises of all sorts (migration-related, economic, social, political, health-related, and humanitarian) have roiled the world while the deep, lasting phenomena of global warming and its environmental consequences; demographic aging; and world population growth continue to threaten world equilibriums. Some crises are occurring at the level of the planet; others concern specific geographic or geopolitical regions or particular population groups. Demography and demographics are relevant here in two ways: as a cause or aggravating factor in certain crises, and as phenomena affected by crises (crisis impacts on fertility, mortality, population

movements). For demographers, necessarily familiar with inertia in demographic phenomena and analysis of long-term transitional processes, crises raise the questions of what breaks in continuity and transformations they cause, and how they fit together with transitional processes already under way (demographic and health transitions). Crises also reveal and amplify inequalities.

#### Geographic coverage and international comparisons

Research conducted at INED covers a large part of the world, thanks in particular to the solid network of international partners the Institute has developed over many years. INED collaborates extensively with universities and other European and North American demography institutes. Collaborative projects in Europe and North America very often include international comparisons. The recent creation in 2016 of an "International perspectives" research group gave new visibility to those studies while opening up opportunities for comparing experiences and competencies above and beyond group members' geographic areas and disciplinary fields. INED also contributes to international projects using a wide range of international databases, including (among many others) the Human Mortality Database (HMD), the Human Cause-of-Death Database (HCD), the International Database on Longevity, the contextual databases of the Generations and Gender Programme (GGP), and the European Union Family Policy Dataset (EUFamPol). INED's recently created DataLab is in charge of maintaining and diffusing data from these bases.

The Institute also has a long history of engagement in research on global South countries. One of its research units focuses exclusively on this area and covers the entire range of demographic issues: fertility and nuptiality, internal and international migration, urbanization, mortality, and health, particularly sexual and reproductive health. Many projects focus on the particular situation in Africa: unprecedented demographic increase, persistently high fertility, and slower, less assured health progress than on other continents. INED has a strong, longstanding commitment to several demographic tracking sites in Senegal, Mali, and Burkina Faso, and a likewise longstanding policy of partnering with African national statistics and research institutes. It has also long been engaged in research on the Arab and Muslim worlds (particularly North Africa, Iran, and the former Soviet republics of Central Asia). Studies of these countries show how the profound change processes under way in them—demographic transition, economic development, the digital revolution, energy transition, and others—are related to and interact with each other in a context where aspirations are taking on a more individual cast. INED is also recognized for its expertise on the demographic giants China and India.

This first area comprises several sets of research studies that take on the above-cited questions. The first investigates ties between population and the environment; INED moved into this research terrain long ago. The relations between development and the environment are still an issue; meanwhile climate change is raising many questions relevant to global North as well as global South countries. The second set of studies looks at the effects of the COVID-19 pandemic. The third set covers other major disruptions—political or socio-economic, present or past—and how they are related to demographic dynamics.

#### 1.1 DEVELOPING RESERACH ON TIES BETWEEN POPULATIONS AND THE ENVIRONMENT

Interactions between population and the environment are complex and multiform. Moreover, the very term "the environment" covers highly diverse realities: climate and its many effects as they characterize life milieus; air, water, and ground pollution; exposure to pollutants at home or in the workplace; work organization, etc. INED research encompasses all these dimensions. In line with earlier studies at the Institute, this section will assess the overall state of systemic ties between populations and the environment across the planet. Projects already under way on the effects that populations have on the environment and those that environmental changes have on populations in both the global North and South will be pursued. They focus on a wide range of environmental changes, from those that are gradual and related to increasing settlement density to those that are sudden and due to disasters or violent weather events. Studies are being developed on ties between family dynamics and access to resources (land, water, wood) in regions of East Africa with high population growth, while studies of resilience in Eastern India following cyclones are continuing. Both of these sets use qualitative survey series to supplement existing quantitative data, notably census data. The Institute hopes to set up a doctoral research network on demographic factors of resilience to environmental shocks and disruptions that would combine analysis of data from standard demographic sources (censuses, survey) and environmental data sources (weather stations, space data). The network would be headed by INED and involve a considerable number of partners, particularly African universities and statistics institutes. INED is also taking part in an interdisciplinary project headed by the Institut de Recherche pour le Développement or IRD [French National Research Institute for Sustainable Development] that will cross-check demographic data from population observation sites in Senegal with environmental data.

Increasing numbers of research studies on global North countries are focusing on ties between work and the environment. One example is research that aims to quantify the environmental impact of practices in the research world; for example, what is a researcher's carbon footprint? INED research is also highly attentive to the effects of workplace exposure on workers' health. A study already under way focuses on the concept of "attributable fraction," widely accepted to accurately indicate the proportion of morbidity-mortality related to work and the environment; it seeks to identify the drawbacks of that indicator and to propose new indicators. Another project uses a reflexive perspective to assess what we learn from systems for monitoring the health impacts of industrial activities (specifically, the monitoring systems used by Santé Publique France, the country's regional health agencies [Agences Régionales de Santé or ARS], and ad hoc surveys conducted by local residents) and to determine the blind spots in those systems. As part of the ELFE cohort study [French Longitudinal Study of Children], data is being collected on different types of environmental exposure (pesticides, endocrine disruptors, air pollution, X-rays, ultraviolet rays, etc.) to learn how they impact on child health and development. Another project will describe households' environmental protection behaviors and analyze connections between pro-environment behaviors and gender inequalities (see 2.1).

# 1.2 Demographic and social effects of the Covid-19 pandemic in France and across the world

From the onset of the COVID-19 crisis, INED began designing its own research projects and joining projects conducted by outside partners, all in the interest of deciphering the impact of the pandemic and lockdown and analyzing the inequalities that have manifested themselves in this context. These studies are not limited to short-term effects but extend to mid- and long-term ones as well.

The first set of studies focus on the health impacts of the crisis. At the very outset of the pandemic, INED set up a dedicated internet platform for critical presentation and analysis of international data on COVID-19-related deaths (https://dc-covid.site.ined.fr/) that documents the data collection methodologies used in the different countries. Mortality analysis will be pursued and honed—always from an international perspective—through examination of mortality structure by sex, age, and cause-of-death, and by relating it to available data on case prevalence. The impact of the pandemic in terms of health care consumption, particularly hospital care, will be studied for France on the basis of medical-administrative data from the National health data system (Système National des Données de Santé or SNDS) (Projet COVID-HOSP). Because INSEE's Échantillon Démographique Permanent or EDP [Permanent Demographic Sample] is being enriched and matched with SNDS data, researchers will be able to identify affected immigrant and second-generation groups and to access information on sociodemographic and economic profiles at a local scale; this source will also be used to study how ethno-racial and spatial inequalities are implicated in seeking (or not seeking) health care for COVID-19 and how early or late in the process people do so. Some studies cover neighboring European countries hard-hit by the pandemic. Epidemic dynamics in Italy and England-Wales will be modeled at the infra-national scale (using information from Google's Community Mobility Reports database) to help understand observed territorial differences. And at the European scale, INED is participating in IMagiNE EURO, a WHO-funded project to collect data in 10 countries on child delivery during the health crisis. The impact of the pandemic and lockdown on recourse to abortion will also be assessed. Finally, INED is contributing to an international project run by the European Pregnancy and Paediatric Infections Cohort Collaboration (EPPICC) and the Collaborative Initiative for Paediatric HIV Education and Research (CIPHER) designed to describe the epidemiology of COVID-19 in HIV-positive children.

The COVID-19 epidemic, together with the lockdowns that have been necessary to prevent its spread, have put people's housing, employment, and income situations as well as their family relations and work/life balance arrangements under strain; these effects will be long-term. Moving beyond strictly epidemiological questions, INED decided early on to conduct general population surveys (COCONEL) to learn about the effects of lockdown; it also took part in Sapris surveys (SAnté, Pratiques, Relations et Inégalités Sociales pendant la crise COVID-19) of 130,000 volunteer respondents who were already part of large national health survey cohorts (Constances, Etude Familiale E3N-E4N, ELFE-Epipage2, and NutriNet Santé). The Institute is also participating in the EpiCOV national cohort survey, based on a sample of 135,000 individuals representative of the adult population in France, where it is in charge of the socio-demographic modules (daily life and employment). Taken together, these data will improve our knowledge not only of the social disparities (in occupation, origin, and gender) implicated in exposure,

infection, and the development of life-threatening COVID-19, but also on the living conditions of households under lockdown. They will enable researchers to measure the short-term and longterm changes the pandemic caused for households when non-essential social activities were stopped, mobility reduced, schools closed, and as households' financial and employment conditions got worse during lockdown. Also, to supplement the COCONEL survey and as part of doctoral thesis fieldwork, life history interviews were conducted by telephone or videoconference to access people's subjective experiences and representations of lockdown, and to better understand how households were managing to juggle the different dimensions of their lives and handle the tensions caused within couples and families by the adjustments that had to be made. These surveys will enable researchers to measure the impact of lockdown on various dimensions of family and social life—housing conditions, household composition, domestic and parental work-sharing, demographic events, employment and work arrangements, relations with neighbors, children's schooling and well-being—and on existing social, gender, and ethno-racial inequalities in these areas. All of the surveys will work to situate the COVID-19 pandemic and the Spring 2020 lockdown period in France within inhabitants' life trajectories and long-term social situations. This crisis has the potential to lastingly transform societies (causing as it has a major economic crisis, affecting movements and mobility, speeding up recourse to remote working, impacting gender and intergenerational relations, etc.). INED researchers will not simply describe these effects but also analyze how they interact with demographic events.

#### 1.3 POLITICAL AND SOCIO-ECONOMIC DISRUPTIONS AND DEMOGRAPHIC DYNAMICS

This section is concerned with the effects of economic or political crises on individual and collective behaviors in different spheres of society.

Several studies focus on forced population movements or movements made under duress, displacements that are usually due to repressive state policies or adverse prevailing conditions in the territories people leave: economic or social crises, wars and severe conflicts, etc. Rather than study policies themselves, decision-making processes, or policy implementation, which, taken together, constitute the overall context, INED studies position themselves at the level of the affected populations, who have no real choice but to adapt as they are either forced to stay where they are or move, and to adapt their demographic and socio-economic behaviors in response to given situations. Some examples are postponing starting a family or forming a couple, losing or changing jobs, undergoing economic difficulties that leave people more vulnerable than before, etc.

Economic crises have major effects on demographic behaviors. An unstable economic environment, characterized by a high risk of unemployment and discontinuous occupational careers, leads individuals to postpone forming a couple and having children. Economic instability affects different social groups differently, a fact that may go some way to explaining observed differences in demographic behaviors. The effects of the 2008 financial crisis and those related to the economic slowdown caused by the COVID-19 pandemic (see 1.2) will continue to be studied.

Whatever their nature, crises have varying timespans. Some of their effects may be temporary, in which case individuals adapt their behaviors at a given moment but can later return to what

was normal for them; other crises bring about sudden and ultimately definitive changes in societies, changes that severely and durably affect social cohesion. Societies may have great trouble regaining that cohesion after armed conflicts, for example.

The link between crises and societies is currently under study in different regions of the world in connection with a range of concerns. Historical studies already under way at INED draw on archive material to track forced population movements during the Stalinist period, focusing on exile trajectories and the mass displacements caused by that authoritarian regime. They discuss processes that developed in the past and that belong to both a long history of displacement policies and family histories that extend over several generations. This research is particularly attentive to returns from exile and the various mechanisms involved in (re)integrating into the country of origin.

The political crises that shook a great number of Arab countries occurred at different moments in time and differ in magnitude and the impacts they have had on the societies involved. The repercussions of the 2011 political crisis in Tunisia on individual behaviors have been studied by way of a nationwide survey that aims to capture the social transformations that have occurred (ETST 2017). More broadly, the study describes and analyzes the demographic effects of twenty-first-century economic, political, social, and health crises on Mediterranean Basin countries.

The DEMOcrises project focuses on a different world region: Latin America. In the last several decades, this part of the world has been hit by a considerable number of economic and political crises and armed conflicts that have resulted in humanitarian crises. The DEMOcrises project (Marie Sklodowska-Curie fellowship in association with Johns Hopkins University) will provide precise demographic assessments to improve our understanding of the complex dimensions of the humanitarian crisis in Latin America. The model will be Venezuela: because migration became Venezuelans' only possible survival strategy, the crisis came to engulf the entire continent. No Latin American country has been spared the effects of the collapse of Venezuela.

#### 2 OBSERVATION AND MEASUREMENT: CRITICAL AND HISTORICAL PERSPECTIVES

INED's heavy investment in innovative data collection operations—operations run by its Surveys and Polls Department (Service des Enquêtes et Sondages or SES)—is a key feature of the Institute's identity, one that distinguishes it from its alter egos in other countries. As INED can furnish social and human sciences research with infrastructures that meet international standards, it regularly wins national and European funding. In the next five years, a number of core programs and highly innovative data collection operations will either be developed or completed. Alongside and, in some cases, in addition to surveys, data not designed for research purposes but rather "recycled" to that end is being used with increasing frequency and raising new questions that INED—specifically its Statistical Methods and Legal Departments—will be examining very closely. The Institute is pursuing its efforts to be on the cutting edge of methodological innovations in mathematical demography and statistics. Two other key features of INED's identity are the high level of attention paid to data quality and critical thinking on categories used in both data collection and analysis. The last section in this area forefronts the disciplinary approach of history. INED researchers have produced many studies in the field of historical demography, some of which are mentioned below in thematic area presentations. This

section will give the historical demography approach to population sciences the visibility it deserves.

# 2.1 New data, new issues

Survey data is an essential "raw material" for INED research. And while INED researchers make considerable use of data collected by other organizations, the Institute also enjoys a fine reputation as an essential data producer, especially in conjunction with sensitive subjects and design and implementation of innovative survey protocols. These INED-run operations are at different stages of progress. Several field surveys (Trajectoires et Origines 2 or TeO2, Immigrés chinois à Paris et en region parisienne or ChIPRe, Migrations Famille Vieillissement 2 or MFV2, Fin de Vie DOM [on end-of-life in France's overseas departments]) are already under way, but the COVID pandemic has complicated and delayed data collection operations. Meanwhile, new surveys are being designed. The theme-centered projects in the third Comprehensive Research Plan area—specifically, the Fécondité [Fertility] survey project; the new wave of the Generations and Gender survey (GGP2020), which is competing for inclusion in the European Strategic Forum on Research Infrastructure (ESFRI) road map; the ENVIE [Desire] survey on the emotional lives of young adults (JEUNES project-Agence Nationale de Recherche or ANR); the second edition of the Familles et Employeurs survey (FAMPEMP2); future waves of the ELFE cohort survey and the Eurocohort project (including France's involvement in a project for a new, European-scale child cohort survey)—will require heavy data collection. The AMP-Sans Frontières survey [Assisted Reproductive Technology (ART) without borders] on the use of ART outside the French legal and medical framework offers an excellent illustration of the INED study innovativeness and resonance with societal issues. These ambitious surveys take up social questions that are very much part of public debate: falling fertility, changing contraceptive possibilities and options, the bioethics questions implicated in access to ART, family life/work life reconciliation arrangements, young people's high-risk behavior and their uses of technology, forms of intergenerational solidarity, gender relations, the role of informal caretakers, the well-being of children. They will provide both researchers and policymakers with essential data for capturing long-term developments and radically new trends in all these areas. In compliance with the recommendations of the HCERES [French High Council for the Evaluation of Research and Higher Education], INED has submitted a project called observatoire LifeObs for integration into the PIA3 [third installment of France's Investments-in-the-Future national research funding program]. If the project is chosen, funding will be secured for all these surveys. Meanwhile, a key goal for the ELFE cohort [French Longitudinal Study of Children], currently funded by Investments-in-the-Future through 2024, will be to obtain new funding to ensure continued child cohort follow-up.

Other surveys are at earlier phases of development. This category includes a planned survey on inmates after prison, a survey project on friendship relations called *Contacts*, and one on how couple members share "environmental protection" tasks. The ELFE institutionally mixed research unit (*UMS Elfe*) is preparing a direct survey of cohort adolescents (aged 13) that will take up issues specific to that age (addictions, mental health, attitudes toward the body, etc.). It will be a challenge to have this population participate directly, as it is very seldom questioned in surveys.

In the sphere of methodology, INED's SES is working on questionnaire and survey conducting procedures (multimode survey development), new means of contacting respondents

(multilingual approaches), qualitative approaches and methods (focus groups, cognitive approaches and sensitive subject survey methods using interviews, and **cards**), as well as specific sampling methods, including use of INSEE's *Fichiers Démographiques sur les Logements et les Individus* or Fidéli files [Demographic files on housing units and individuals] and using the snowball method to access hard-to-reach, seldom surveyed population groups. For example, the sample used in the TRUST survey of young men engaging in sexual relations with other men that put them at high risk for HIV infection was drawn using the *Respondent Driven Sampling* method (RDS). This survey, funded by the ANRS [National health research agency], investigates these young men's sexual practices and sexual and socialization networks to facilitate getting them into combined prevention programs such as pre-exposure prophylaxis or PrEP. The *AMP-Sans Frontières* survey, meanwhile, uses participatory research methodology.

In the last ten years, use of quantitative sources other than survey data has greatly increased. Though this material, called "management data," is produced by public administrations or private companies for other-than-scientific purposes, it can be of use in research. For example, some of the data allow for passively following individuals—an extremely valuable feature.

While administrative data have long been used at INED, thanks among other things to its historical proximity to France's Institut National de la Statistique et des Études Économiques or INSEE, the sources of such data have changed greatly in the last few years. Today, INSEE's Permanent Demographic Sample (EDP) is widely used by Institute researchers, as are its Fidéli files; both can be in connection with a wide range of themes, including conjugal and family trajectories, children's living conditions, international migration, residential mobility, and gender gaps in retirement pension systems. ANR's Big Stat project, which investigates how mass management data and survey files made available for demography research are used, has been a major catalyst in INED use of these data, as it has centralized research problematics in this area, facilitated data-sharing among users, and pushed forward dialogue with data producers. These avenues should be pursued further, because collaborative research is a key asset in transferring the knowledge and know-how needed to use these databases.

The 2016 creation in France of the National Health Data System (SNDS) has opened up new research opportunities. INED has recently launched a considerable number of health research projects that use these data: specifically, projects on infertility treatment (ANR StimHo), pregnancy outcomes, and end-of-life, as well as on the impact of the COVID-19 pandemic. Likewise, the data have made it possible to renew research on abortion (studies instituted by France's Code de la Santé Publique). Abortion statistics used to be obtained by way of forms filled out during abortion procedures. Those forms have been replaced by access to CNAM databases (Caisse Nationale de l'Assurance Maladie, France's national health insurance fund). Researchers can now access exhaustive data on the previous 5 years or over 20 years (sample at 1/100) from CNAM databases, material that enables them to track health care consumption trajectories and reproductive histories. For the ELFE cohort survey, this kind of data will provide reliable complementary information on health care consumption, thereby reducing the burden of data collection for participants. They will also make it possible to do passive health-related follow-up on irregular survey participants.

Population science researchers at INED and elsewhere can also mine the lode of companies' and corporations' "sleeping data": partnership agreements with companies enable them to use those data free of charge and in compliance with the same personal data protections that apply to more traditional sources. "Sleeping data" include data from company and administration personnel files, website user data, metadata on exchanges and interactions between individuals or intracity movements, etc. They enable researchers to study a range of diverse phenomena: career trajectories, gender inequalities, couple formation modes and digital sociability, movements within a given city and how they change over the day. They are different from traditional survey data in that they are often exhaustive, longitudinal (involving panels), quickly accessible, and cost-saving because they eliminate data collection costs. They are also gathered in a highly specific way: management files record traces of practices and events rather than responses to questions. Still, certain precautions must be taken in using them, related to anonymity, consent of studied groups, caution in generalizing findings (companies may represent particular cases only; cursory individual socio-demographic characteristics), and the need to clean and recode data or digital traces.

Last, INED is becoming involved in using satellite data. Institute researchers are taking part in a feasibility study run by the Laboratoire d'Informatique Paris Descartes or LIPADE [Laboratory of Informatics Paris Descartes] on automatic production of contextual and environmental indicators based on remote sensing data in Africa—data that would be used to understand demographic changes at fine-grained geographic scales. The project would use open-access Sentinel2 images produced by the European Space Agency. A project grant application has been submitted to the Data Intelligence Institute of Paris (diiP). There is also a plan in synergy with the Diginove company to study estimating populations using Sentinel2 images. This could open the way for a CIFRE Program thesis [Industrial accords on training through research]: funding would be provided to hire a doctoral student in accordance with CIFRE Program objectives. Finally, Institute researchers are exploring the possibility of collaborating with the Centre National d'Études Spatiales or CNES to use Spot and Sentinel images to capture changes in human settlement and forest cover in western Uganda over the last 30 years, a project that would combine and compare satellite data, census data, and qualitative surveys and that could conceivably be extended to the outskirts of Kampala.

Some processes and mechanisms cannot be statistically objectified, however. It would be hard to capture individuals' subjective representations, aspirations, or the meanings they give to their life trajectories by way of quantitative surveys. Some population groups cannot readily be studied under the constraints of "traditional" surveys or longitudinal tracking. It is therefore useful to combine qualitative methods (ethnographic interviews, life narratives, personal archives such as letters, photographs, personal accounts) with quantitative ones, and INED researchers often use the former. The combination sheds light on the processes operative upstream and downstream of quantitative analysis and enables researchers to identify statistically marginal phenomena or those that concern a statistical minority of the population under study.

# 2.2 DEVELOPING INNOVATIVE TOOLS AND METHODS

Remaining loyal to its origins and identity, INED is on the cutting edge of research in mathematical demography and demographic methods. The objective is to use mathematical and statistical tools to measure demographic processes and their interrelations and to formulate projections on how those processes will evolve in the future.

INED research studies in this area focus primarily on mortality. There are several different projects on measuring and projecting level indicators, mortality by age, and mortality differentials and inequalities. Other projects aim to develop and apply new types of mortality indicators (Cross-sectional Average Length of Life or CAL, Lagged-Cohort Life Expectancy or LCLE, Modal Age at Death, and others) that will enable researchers to better understand how mortality has evolved over time and across populations and to supplement the most frequently used indicators, such as life expectancy.

Another direction in this research section is to develop new model life tables, specifically for children between 0 and 5 years (see also 4.4). The objective here is to model how mortality risk varies day by day or month by month between the ages of 0 and 5 years in order to better understand underlying mortality factors and detect and correct defective data. Projects on data smoothing techniques are motivated by this same concern to correct data and so better capture real mortality trends.

Improving mortality projection techniques is also an important focus of mathematical demography research at INED. Here the point is to use new indicators developed elsewhere whose regularities and inertia reduce mortality projection uncertainty.

INED research in the field of mortality measurement is conducted interactively with several different international organizations (United Nations Population Division, UNICEF, WHO). A number of the projects cited here directly impact how these international organizations fulfill their mission to track mortality trends at the international level. INED is also a reference when it comes to synthesizing knowledge in the field of demographic analysis; there are plans to develop manuals in this field in both French and English.

### 2.3 CRITICAL SCRUTINY OF DATA, OBSERVATION CATEGORIES, AND ANALYTIC CATEGORIES

Researchers designing surveys reflect on both how these crucial work instruments have been used in the past and how they might be used to better effect in the future. For example, they have attentively studied the methodology used in the *Etude des Parcours Individuels et Conjugaux* or EPIC survey [Study of individual and conjugal trajectories]. Do respondents speaking in the presence of their partner narrate their conjugal history the same way as when the partner is not there? Do partners tell the same story of how they met? How are we to interpret the spontaneous or less-than-spontaneous way respondents cite important dates (wedding day, the day the couple entered a formal civil union)? In preparing the second edition of the *Familles et Employeurs* survey, researchers will be testing to see whether sufficiently precise information can be collected on partners' respective work lives and working conditions by questioning one partner only (about both their own and partner's situation). The data collection problems that arise in connection with multi-residence—most notably double-

counting, particularly of children—are another matter for critical reflection. Meanwhile, a study supported by the Institut Convergences Migrations and the Conseil Général governing body of the Seine-Saint-Denis *département* focuses on how census data is collected there. Finally, researchers are working on the new challenges of sexuality surveys in the digital age.

In global South countries, the amount of demographic data available has increased considerably in recent years. Though civil registers are missing some information, most of these countries now have several censuses and demographic surveys at their disposal for monitoring demographic trends since the 1960s. The situation remains far from satisfactory, though, due to uncertainties about data quality and therefore about estimations made on the basis of those data. Using, comparing, and analyzing data from a range of different source types (demographic tracking, local and national surveys, population censuses) and the related metadata are key activities in INED's research on global South countries. They enable researchers to better understand observed differences and more accurately describe situations and trends in spheres ranging from health to fertility and family.

The categories used in collecting and analyzing data also come under critical scrutiny. For example, how the word "couple" is defined is an important issue; existing definitions are constantly being called into question. A collective work coedited by INED researchers on how to statistically capture gender and sexual minorities is currently being drafted. And INED is contributing to the debate on ethnic statistics by studying how stances on this issue have varied over time and space. The GLOBAL RACE project (ANR in partnership with Sciences-Po; see 5.5) includes documenting and mapping official statistics uses of ethnic and racial categories in conjunction with anti-discrimination policies in 10 European, North American, and South American countries. Simultaneously, a research program is under way to study the formulation and implementation of categories used in twentieth-century France to identify colonial migrants living in metropolitan France. Last, a joint project with the Fondation Maison des Sciences de l'Homme, the University of Brasilia, and the Moscow Academy of Sciences will analyze how "otherness" is "collected" and categorized in those three countries' public statistics and the fit between those collection practices and the countries' respective social policies.

There are also studies either planned or in progress on institutional classifications and terminology: the construction of a "socio-occupational nomenclature" (*Profession-Catégorie Sociale* or PCS) to describe the unit "Households" in France and thereby meet the need to characterize household social positions; investigation of the new issues that arise for the PCS when it comes to capturing economic precarity and new legal statuses; reflection on regional (territorial) nomenclatures and typologies to facilitate critical comparisons between historical periods and within the present. There will also be historical studies on these questions. A history of how labor was measured from the seventeenth through the twentieth century is currently under way. Another historical study will focus on the work of Jacques Ferdinand-Dreyfus (1884-1943), an actuary at the Ministry of Labor.

# 2.4 CONTEXTUALIZING SOURCES, DATA, AND IDEAS: THE IMPORTANCE OF THE HISTORICAL APPROACH

The historical approach to demography, in interaction with contemporary studies, is of considerable importance in INED research. The idea that unifies historical studies done at the Institute is the importance of contextualizing historical material. Studies of the intellectual history of population sciences and economics that draw on hitherto unexploited archive material provide researchers with important knowledge on the discipline's fundamental texts and often involve publishing critical French editions of those texts. An INED study of the Physiocracy movement (1756-1789), for example, aims to situate it within the Enlightenment not only from an intellectual but also a social and cultural perspective.

Historical research studies may also cover more recent periods; examples are a study of connections between medical and demographic knowledge in the nineteenth century, and a study of how consanguinity came to be problematized socially and scientifically in the twentieth century. The latter focuses on how the vast, ill-defined research fields of the time took up the question of "consanguineous unions" in a period when the social sciences and biology were not yet clearly differentiated from each other.

Historical studies conducted at INED also encompass long-term developments in the French population, with particular attention to the structural changes—aging, socio-economic developments—that have affected that population. In the coming years, two major research areas will be investigated: the long-term transformation of the labor market that began with the rise of wage-labor and the workers' rights that accompanied it (retirement, unemployment compensation, health protections); and the effects of state construction, apprehended through the military conscription and the extension of welfare policies to the nation at large.

All of these studies include a strong methodological dimension, in line with recent developments in the discipline. Those developments themselves are subjects of vigorous international debate. The aim is to participate in thinking on historical demography in light of the many technical innovations that have appeared in recent years, from optical character recognition to automatic person matching.

# 3 LEADING ONE'S LIFE: CHOICES, OPPORTUNITIES, AND CONSTRAINTS AT DIFFERENT PHASES IN THE LIFE CYCLE

From childhood to adulthood, from retirement to old age, life is punctuated with "events" that correspond to stages, breaks in continuity, bifurcations, or transitions, depending on how they are experienced. Some of those events—the ones studied in 3.2 ("Conjugality, fertility, parenthood and family")—are demographic in the strict sense of the term: having a child, getting married or forming a couple, separating, losing a life partner. But events within this sphere, commonly called "private," interact in many ways. The experiences a person has in childhood and their early schooling trajectory strongly influence their later family and occupational life and path, which likewise interact with each other, as the issue of balancing work life with conjugality and parenthood clearly illustrates. The question of gender relations is also fundamental in these

matters. Youth is the period in which people construct their sexual identities. Later in life, retirement and old age are also likely to bring about fundamental rearrangements. And generally speaking, "private life" is not as private as all that: it is lived in a social, cultural, economic, and political environment made up of opportunities and constraints. It also inherits content from previous generations, resulting in a variety of inequalities—notably between men and women—that often make social mobility difficult. One objective of family policies is to mitigate those inequalities; such policies play a crucial role in individuals' lives.

# 3.1 CHILDHOOD, EDUCATION, AND TRANSITION TO ADULTHOOD

Research studies on these subjects show that childhood and the transition to adulthood are crucial periods in a person's life trajectory. By studying them, researchers attain a better understanding of individual trajectories and the inequalities observed in a population at large. This section brings together studies on that composite period of life, emphasizing how inequalities are produced from the moment a person is born, throughout their childhood, and all the way through to the start of adulthood.

One segment of this research seeks to understand the impact of family characteristics and childhood experiences (poverty, parents' separation, migration, and others) on individuals' life trajectories. A key question here is the impact of those experienced situations and events not only on health but also cognitive and socio-emotional development. In this connection, researchers are particularly attentive to methods for measuring childhood poverty in all its dimensions. INED is heavily involved in research on these questions, as attested by its status as coordinator of the ANR EGAL survey (Emergence of health GAps in early Life: A dynamic analysis of three national birth cohorts) and implication in the international EU Horizon H2020 Lifecycle project (run by Erasmus University). Other studies focus specifically on individual transitions to adulthood (educational, occupational, etc.), working to determine which socio-demographic factors impact them. The ELFE study, meanwhile, takes into account the diversity of young people's social life experiences (leisure activities, friendships, relations with adults, etc.). In the coming years, the study will be directly questioning adolescents, producing an unprecedented corpus of data on this pivotal age.

Inequalities within the population at large develop well before adulthood. INED is participating in the international Development of Inequalities in Child Educational Achievement project or DICE (French segment funded by the ANR's Open Research Area), which focuses on inequalities in scholastic performance and how different contextual features (access to formal daycare arrangements or early schooling, for example) can either aggravate or help reduce existing inequalities in scholastic performance, early learning, cognitive skills, etc. Income inequalities impact children directly from a very young age. A study currently under way focuses on differences in parents' spending on their children by social group.

Several studies in this section target specific population groups. Longitudinal follow-up on respondents and qualitative interviews from the ELAP survey (Étude sur L'accès à l'Autonomie des jeunes Placés) [Study on access to autonomy of young people living in foster care institutions in France] are being used to study these young people's outcomes after they leave the institutional structure (for example, whether they become parents, acquire financial

independence, etc.). Other studies, drawing on panels used by the Department of Evaluation, Prospects, and Performance (DEPP) of France's National Ministry of Education, focus on the life trajectories of disabled children. For example, all persons with cystic fibrosis in France are followed by a national organization that collects information on them from birth to adulthood.

Several projects in this section, including the ELFE study, rely on data from international child cohorts. A wide variety of disciplines are involved in producing those data, greatly enriching the analyses. Moreover, the ELFE study uses scientifically validated scales for measuring child development, quality of life, and cognitive skills, making international comparisons possible, comparisons that in turn bring to light the role of national context in producing inequalities and facilitate the study of factors that promote or hinder child development and well-being.

# 3.2 CONJUGALITY, FERTILITY, PARENTHOOD AND FAMILY

In France and global North countries generally, men's and women's family trajectories have become more diverse and complex, with the increase in union breakups and blended families. Couple formation changed over the twentieth century. And online dating services can now be observed, showing how people get matched on the basis of explicit preferences and indicated choices. A project to use mass data from a dating site will enable researchers to analyze how this matchmaking market operates in 16 European countries. This way of meeting potential partners can lead not only to affective and/or sexual relationships but also to the formation of various types of couples: cohabiting partners, partners who continue to live in two separate homes. And the length of relationships formed this way varies. In stable couples, the questions of conjugal and family roles are ongoing ones. The main episodes of conjugal life are occasions for establishing practical arrangements on domestic work-sharing and work life/family life balancing—arrangements that vary by social milieu. Decisions may be reached through negotiation; choices may be more or less formalized; they may be made under varying types of constraints. When young couples postpone the birth of their first child, this implies an explicit decision to have one in the first place and makes it easier to choose not to. But people do not always have full control over their behaviors. Some couples run into medical difficulties in getting pregnant or successfully bringing a pregnancy to term, whereas for others an unplanned pregnancy can disrupt family life. Labor market and childcare availability constraints have to be dealt with after the birth of a child.

The diversity of INED research topics in this section corresponds to the wide variety of observed conjugal and fertility behaviors, from intensive childbearing and parenting to childless couples; from means for achieving work/family balance to the constraints that come with staggered working hours; from conjugal negotiations and arrangements on domestic task-sharing to domestic violence. Intergenerational relations are also becoming more complex, due to falling mortality. Family solidarity of various kinds is strong in France and ranges from parents helping their adult children look after *their* children to children helping aged and now dependent parents. Most of these studies also observe and attend to various forms of gender inequality. Likewise, union breakups often lead to reconfigured socio-economic situations that are significantly different for women than men. And family trajectories after union breakups may include repartnering and forming a blended family; that is, a new family made up of several existing ones whose contours then get redrawn in conjunction with individual, family, or occupational

trajectories. These studies draw on a varied corpus of data: INED surveys (life course and partner choice surveys, the *Familles et Employeurs* survey); other French data, notably from INSEE surveys (*Famille et Logements* [Families and housing], *Budget de Famille, Emploi du temps* [Timeuse], the Permanent Demographic Sample (EDP), *Génération*); international surveys (Generations and Gender or GGS [ERFI in French]). Wherever possible, INED researchers use the historical depth these data offer to retrace the histories of certain behaviors. The process is never complete, and the above-cited surveys must be redesigned and redone regularly. Obtaining funding for these INED-run operations is a key concern and activity at the Institute (see 2.1).

Diversification of family and occupational trajectories has produced new inequalities not only between the sexes but also between social groups in a context of rising economic and occupational uncertainty. INED studies will examine these inequalities closely. Context effects, too, work to construct social differences, in that behaviors may be influenced, limited, or contained by a person's immediate human surroundings and life milieu and the social and institutional context of everyday life. Paternity leave options, the legal frame for life partner relationships (marriage and marriage contracts, civil unions, cohabitation) and parent-child relationships, normative social policies on conjugal unions and parenthood—all of these conditions help explain national specificities. Once again, international comparisons are very useful in assessing the impacts of institutional environments on behaviors.

Research problematics in global South countries are considerably different, and the situations studied there vary widely. INED has long been following fertility and nuptiality trends in Africa. Today's rebounding fertility in Egypt and Algeria call into question the demographic transition theory. Marriage, still perceived as necessary in southern Mediterranean societies, has become an increasingly difficult goal to achieve in them, and singlehood is rising. The fact that an increasing number of women are now continuing their educations is very likely contributing to these developments. Studies under way on these questions compare and combine analysis of census data and qualitative interviews.

In West Africa, where fertility is still relatively high, research is examining women's reproductive choices under existing structural and normative constraints, taking into account their contraceptive practices and recourse to abortion as well as gender relations and the relational nature of procreative and contraceptive processes. These studies use a qualitative approach; moreover, the Indepth network that collects data on a routing basis at rural demographic tracking sites can now take into account a new module on reproductive and contraceptive histories. In sub-Saharan Africa, fertility is generally falling, but there, too, sudden jolts and accelerations are observed, and nuptiality is changing along with household and family configurations. Research on East Africa focuses primarily on family configurations as revealed, on the one hand, by demographic data (surveys and censuses) enriched by information on household structures, unions and marriages, and reproductive histories; on the other, by how people living there perceive their experiences. A survey on Kenya and Uganda is currently being designed with the Graduate Institute of International and Development Studies (IHEID), involving the universities of Geneva, Makerere, and Nairobi, and the African Population and Health Research Center (APHRC). Comparisons of parents' preferences regarding their children's gender will be done at a broad international scale (covering not only Africa and Asia but also former Soviet countries) using census data made available by IPUMS-International. These studies on changes in the family, nuptiality, and fertility will fuel general reflection on social policies in these countries, where the family—particularly children—plays a key role in individual and family strategies for combating poverty.

# 3.3 GENDER AND SEXUALITY: CHANGING PRACTICES AND NORMS

While the theme of inequalities between men and women cuts across INED research, gender is a focus of study in its own right. The research in this section concerns gender identities and the various types of logic that drive differentiations between men and women and their situations. The recent emergence of new identities, termed non-binary, are a methodological challenge: How might gender be objectified in a way other than the category of sex? This development coincides with theoretical renewal: gender relations are increasingly understood in terms of how they interrelate and interact with other types of social relations, particularly those of age, class, and race. These issues and research questions are central to several studies already under way at INED, some focused specifically on sexuality and violence (see box below).

Since the 1990s INED has regularly produced major surveys on sexuality: unprecedented tracking of sexual practices and norms in France that has yielded a great deal of information. That effort is now being renewed by way of the Enquête sur la Vie Affective des Jeunes Adultes (ENVIE—ANR JEUNES) survey [Survey on the emotional lives of young adults]. Focused specifically on young people's sexuality, the survey is updating both knowledge and methodology, the latter thanks to its innovative relational approach for capturing romantic and affective relationship diversity. INED is also taking part in the upcoming edition of a general population survey on sexual health (Sexualités et santé, E3S, INSERM-ANRS). The research projects derived from these surveys study sexuality in connection with three questions: practices, including new digital practices such as online dating and the use of pornography sites; sexual fantasies and the gender relations that structure them; sexual norms, such as consent and the tensions around it. Homosexuality is also a fundamental focus of this research, with studies that aim to capture the socio-demography of gay and lesbian populations in a context of much greater social acceptance. Researchers are also critically examining and reflecting on indicators used to study these groups. The studies have a strong comparative dimension, focusing in particular on practice and category differences. One example is a new comparative study of LGBTQ parenthood in France and the United States (Marie Sklodowska-Curie fellowship in association with the University of Texas at Austin).

Understanding gender relations is essential to understanding violence. INED's VIRAGE surveys (*Violences et rapports de genre*) of the general population in metropolitan France and their recent extension to France's overseas *départements* are now providing benchmark data on the subject, data currently being analyzed in several studies at INED or partner institutions. Focused on sexual and domestic partner violence among other issues, these projects are concerned with both the types of logic that drive gender violence (here the direct focus is the perpetrators) and the consequences of such violence on life trajectories, particularly sexual and emotional lives and health histories. The specificity of sexual violence against and as experienced by men (rather than only women) is included in the surveys and studies.

#### A benchmark center for research on violence

INED today has become a reference for research on violence. Its *Violences et Rapports de Genre* surveys (VIRAGE 2015) [Violence and gender relations] and the VIRAGE survey adapted for and conducted in overseas French *départements* (VIRAGE OM) encompass verbal, psychological, physical, and sexual violence suffered in different contexts. The surveys are updating what was learned from the precursor ENVEFF survey (*Enquête nationale sur les violences envers les femmes*, 2001) [National survey on violence against women] while opening up the survey frame to include men. VIRAGE findings on all these areas of France will be published in a collective work in January 2021, and first findings on violence in the Guadeloupe, Martinique, and Reunion *départements* were presented in those *départements* in 2019. Analyses presently under way overseas (ANR VIdOM) will not only furnish data that complete the picture of violence in France but also stimulate thinking on violence as an analytic category and on the best indicators and methodological tools for apprehending it.

A closely related issue that has emerged in recent years as both a concept in itself and a focus of study is gynecological and obstetrical violence. The question is now an integral part of research projects on health and sexual and reproductive rights. The issue of violence is also central to research on connections between demographics and political violence, the subject of a study on mass displacements caused by authoritarian regimes and the trajectories of political exiles.

# 3.4 LIFE TRAJECTORIES, INEQUALITIES, AND SOCIO-ECONOMIC MOBILITY

Family events (births, unions, separations, the death of one's life partner) frequently and sometimes lastingly impact on individuals' socio-economic trajectories, affecting standard of living, wealth, job opportunities, and occupational dynamics. Research on these questions brings to light effects that differ by age, sex, and socio-occupational status, clarifying that conjugal and family trajectories can be an important component of inequality dynamics in the population at large. The projects in this section explore various dimensions of inequalities and socio-economic mobility as they relate to family life. They draw on a range of different data sources (longitudinal surveys, public administrative data [particularly tax-related], company data files, qualitative interviews) and often involve international comparisons.

Analysis of conjugal trajectory determinants and economic impacts and how they have been evolving over the generations will be further detailed by differentiating the mechanisms at work by sex and social origin. "Matrimony" strategies and behaviors will be studied here in connection with legal regulations in effect, which vary by type of union, how resources are shared and not shared within couples, and how resources get divided in the event of separation or life partner's death. The objective is to assess the impact of critical work-related events (unemployment, retirement, occupational changes) on conjugal trajectories. The effect of those trajectories—trajectories more likely than before to be discontinuous—on labor supply, standard of living, and wealth accumulation will also be studied. Another area of interest is ties between conjugal trajectories and health and quality of life (sleep quality, among other criteria) and how they differ by gender. These studies work from data contained in INSEE's *Histoire de Vie et Patrimoine* survey [Life histories and wealth], thoroughly revamped in 2014 when a longitudinal component was added.

Existing studies on inequalities in men's and women's shares of domestic work and parenting activities and how those inequalities evolve with age and from one generation to the next will be pursued. New INED survey projects (in connection with the GGS and FAMEMP2 surveys) will be done on interfaces between family life and work life and the role played in men's and women's socio-occupational trajectories by unequal division of domestic work and parenting activities within couples. FAMEMP2, the new edition of the Familles et Employeurs survey (first edition, 2004), will measure trends in the prevalence of work life-personal life conflict and work to understand people's strategies for fitting together their jobs and family lives, assessing the effects of those strategies on careers, well-being, and inequalities. It will also analyze the effects of company practices in this area, from the standpoints of both employers and individuals (see 2.1). One of several innovations in this survey compared to the first edition is that the question of balancing private and occupational lives will be extended to caregivers of dependent persons (rather than just parents caring for children). Studies of the factors that account for differences between men's and women's occupational trajectories will be pursued using data from longitudinal surveys and qualitative interviews, and consolidated through analysis of personnel files drawn up by major companies that INED has signed agreements with, files that provide access to more than 10 years of data on individual careers. These original data will enable researchers to pinpoint the moments that gender pay gaps occur in occupational trajectories and how company policies contribute to socio-occupational inequality and mobility dynamics. They can also be used to identify the ways company structure partakes of gender-related career inequalities. A study already under way will pursue the history of social mobility across careers in France from 1970 to 2015, attempting to break down and distinguish the effects of age, period and cohort. Using data from the Histoire de Vie survey (INSEE 2003) [Life history], researchers will reconstitute individuals' socio-occupational trajectories to study their determinants (particularly family-related one). Social mobility dynamics will also be examined from a generational perspective over 3 generations (self, parents, children) using data from the Biographie et entourage survey [Life history and close relations]; the findings will then be compared with those from a study of Quebec.

New research studies on the impact of family, social, and employment policies will be developed, also for the purpose of international comparison. Evaluation of different social policies and systems, specifically those related to caregiving (childcare, aid to persons caring for dependent relatives, work-life reconciliation) will be of prime importance.

### 3.5 Aging: where, hox, with whom?

Older persons—a strongly growing segment of the population—are a group whose living conditions and ways of life are undergoing profound change as social inequalities in old age increase. Studies in this section will analyze in fine detail the social trends that affect various aspects of older persons' living conditions from retirement to, in many cases, extremely old age. The crucial issue here is to ensure that analysis and assessment of retirement and dependency policies are founded on precise knowledge of older persons' behaviors and ways of life. It is important to capture the great diversity of experiences of old age and to understand trends in the area of resources—monetary, familial, or related to health, needs, or wishes and aspirations—as people grow older and from one generation to the next. Through its involvement

in the *Institut de Longévité, des Vieillesses et du Vieillissement* (ILVV) [Institute for the study of longevity, aging, and the diversity of older persons' situations and experiences], INED plays a major role in structuring and coordinating research on advanced old age.

Analysis of residence changes upon retirement but also further on into old age—particularly the move into a nursing home—will be pursued in greater detail. Trends in these phenomena over the last decades will be identified using census data. How they are related to retirement, conjugal events, and dependence will be explored using Fidéli fiscal data, EDP data, and data from such longitudinal surveys as SHARE (Survey of Health, Ageing and Retirement in Europe). In the framework of ANR ELVIS (Étude Longitudinal sur le Vieillissement et les Inégalités Sociales) [Longitudinal study of aging and social inequalities], a range of data sources (administrative data, large panel surveys, life narratives) will be used to characterize how the many dimensions of inequality (family, residential, economic) develop up to retirement and evolve over the course of old age. Generational dynamics will be assessed through comparison of retiree cohorts.

Post-retirement material conditions are a major concern. Fidéli and EDP data will be used to describe how those conditions relate to conjugal trajectories past age 50—a question seldom studied. Existing studies on the role played by social protection systems, particularly the retirement system, in inequalities after retirement and in older age will be pursued. Matched demographic and administrative data (for France and other European countries) will be used to assess the degree to which different retirement systems take into account conjugal and family trajectories and the gender inequalities they cause. INED researchers working collaboratively with the *Institut des Politiques Publiques* will use a micro-simulation approach to evaluate different life partner rights arrangements, such as pension sharing in case of divorce and the move to extend the right to a share of a deceased spouse's pension to union types other than marriage.

Last, INED researchers will focus on family relationships and intra-family assistance behaviors, both parent-to-child or child-to parent. Assistance to elderly dependents is the other major concern of old age social policies. The nature and determinants of "informal" assistance provided by a spouse to their dependent partner and by children to dependent parents will be analyzed in conjunction with formal arrangements and programs. Administrative data, survey data, and monographs will be used to analyze public policies on caring for dependent older persons in connection with two main research concerns: regional inequalities in care facility supply, and how public policy is positioned in relation to family solidarity.

# 4 THE HEALTH OF POPULATIONS: DOES PROGRESS EQUALLY BENEFIT ALL?

The health transition theory formalized the health-related and socio-economic factors and dynamics that led to higher life expectancy. But the advances identified do not benefit everyone the same way. Studying the profound inequalities operative in health and mortality is a fundamental research undertaking at INED. Those inequalities are found at two different levels: between subpopulations within a given country and between countries or geographic regions. The first section of this research area covers the first of those levels: inequalities by gender, sex, and social position, primarily within global North countries. The second section is also primarily concerned with global North countries, countries that completed their epidemiological transition

long ago; it probes what has happened in them since then, especially the question of mortality at extremely advanced ages. The third section works in counterpoint, taking up health issues in global South countries, countries whose situations suggest that the epidemiological transition theory may not be fully generalizable. Studies in the last section cover health and sexual and reproductive rights. Here again, we can question whether equality has been achieved: either certain medical treatments and techniques are not universally used, or conditions for accessing them are themselves a source of inequalities.

# 4.1 DESCRIBING AND UNDERSTANDING INEQUALITIES IN HEALTH AND MORTALITY

This section analyzes social, gender, and regional differences in health and mortality, differences constructed throughout a person's lifetime and already present at their birth. In this respect, birth weight is an explanatory variable. Researchers are using data on three national child cohorts (France's ELFE cohort, the United Kingdom's Millennium Cohort, and United States' Early Childhood Longitudinal Study) to do cross-country comparisons of birth weight variations by parents' socio-economic status and analyze how poverty and deprivation impact young children's health.

The inequalities that get constructed throughout a person's lifetime are also being studied in adulthood, with particular attention to the impact of working conditions (notably, being unoccupied). Such inequalities are at the core of the WELLWAYS project, which examines how a sum total of "adverse situations" degrades individuals' wellbeing, and what resources modulate those harmful effects. Researchers are investigating social disparities in health and mortality risk factors (smoking, alcohol consumption, sleep quality, for example), paying special attention to cohort, age, and gender effects. The gender question runs through all these research studies. It is central to the INED-run Genre et Inégalités de Santé dans Constances project (ANR GINCO) [Gender and inequalities in health in the Constances cohort) and the GENDHI project (Gender and Health Inequalities: from embodiment to health care cascade) run by INSERM and the Paris School of Economics. These studies draw on a range of sources: the Constances cohort, Santé et Itinéraire Professionnel (SIP), Conditions de Travail, Surveillance Médicales des Expositions aux Risques Professionnelles or SUMER [Medical surveillance of occupational risk exposure], European Working Conditions Surveys, the Emploi du Temps [Time-use] survey. Other projects focus on inequalities involved in the impact of the COVID-19 pandemic (see 1.2) and mortality differentials between immigrants and their descendants (the second generation) (see 5.5).

The analytic scale in most of these studies is national, but INED is also concerned to study infranational health and mortality disparities wherever relevant data is available. One project bears specifically on health inequalities related to social disparities in the Seine-Saint-Denis département just north of Paris. Another combines ethnographic and SNDS (Système National des Données de Santé) data to assess social disparities in access to Hospital-at-Home for cancer patients in the Île-de-France region (including Paris) and to study access conditions. The questions that drive analysis of variations in mortality by region—Are variations an effect of context? an effect of the characteristics of individuals who live there?—are not new. Another, historical study examines the role of urban infrastructure (water access, the sewer system, etc.) in inequalities in death in Paris over the nineteenth and twentieth centuries. INED is also taking part in the REDIM study, a large-scale comparison of infra-national disparities in cause-specific

mortality across 20 European countries, funded by a European Research Council (ERC) starting grant. Yet another project, funded by the US National Institutes of Health, focuses specifically on geographic variations in mortality in France and the United States.

Analysis of the immediate circumstances surrounding social disparities in mortality and health requires establishing mortality tables and calculating life expectancy indicators (total and healthy life expectancies). INED is a longstanding contributor to this scientific undertaking. One of the difficulties of doing research in this field is accessing data files that include information on health or mortality *and* socio-economic status. A study currently under way aims to model EDP mortality data and so to produce mortality tables by educational attainment and socio-occupational category on a routine basis. Another project will study mortality in the United States by socio-economic category.

#### 4.2 Longer Lifes: How long and in what state of Health?

In high life expectancy countries, the two unknowns are how far into advanced age life expectancy gains can continue, and the concomitant question of elderly persons' health. The COVID-19 pandemic has confirmed the fragility of this population group, which we already knew was vulnerable to seasonal flus, heat waves, and winter cold. What will health and mortality come to in these countries during this extremely particular period when the full effects of demographic aging are also making themselves felt? The cardiovascular revolution of the 1970s disproved the pessimistic assumptions on life expectancy predicted by the epidemiological transition. What new advances can be expected from progress in medical therapy, especially treatments for cancer and degenerative diseases? INED researchers are taking on these questions by analyzing trends in causes of death and comparing those observed in France with trends found for other countries. It is important to point out here that having access to SNDS data is not enough to successfully conduct these studies, which require access to a warehouse where all causes-of-death files produced by INSERM since the 1960s appear to be stored; matching with other databases would not be required.

INED's expertise in constructing long time series for mortality indicators by cause is internationally recognized. The Institute is currently working on such series, using mortality data from the United States, Japan, and Germany. In partnership with the University of California at Berkeley (UCB) and the Max Planck Institute for Demographic Research (MPIDR), INED's DataLab (<a href="https://datalab.site.ined.fr/fr/donnees-agregees-contextuelles/">https://datalab.site.ined.fr/fr/donnees-agregees-contextuelles/</a>) constructs and maintains the Human Mortality Database and the Human Cause-of-death Database. It also a driver of multiple-cause-of-death analysis (encompassing all causes mentioned on death certificates) at the international level. This innovative approach can capture multi-morbidity at time of death. The DataLab will also be hosting the International Database on Longevity (IDL), which covers people age 105 or older (super and semi-supercentenarians). These validated data can be used to test the shape of the mortality curve at oldest-old ages. A specific validation process is under way in the French Caribbean to check whether the high frequency of supercentenarians in Guadeloupe and Martinique corresponds to reality and if so, try to explain it.

INED is also recognized for its expertise in calculating and analyzing healthy life expectancy trends. The Institute participates actively in the REVES network (*Réseau international sur les* 

espérances de vie en santé: International network on healthy life expectancy). Production and analysis of non-disabled life expectancy series will continue at the national and international levels; also at the French département scale using data from the 2014 Vie Quotidienne et Santé survey [Daily life and health] and the segment of the Migrations, Famille, Vieillissement survey on overseas départements (see 5.3). These analyses will be supplemented by studies of connections between biological functioning, chronic diseases, and dependency in the framework of the GINCO project.

The phenomenon of increased survival at ages when people's health may be quite poor is partially responsible for our societies' current acute concern with end-of-life. INED initiated the first national survey on end-of-life in France (*Fin de Vie* 2010). That survey is currently being conducted in the country's overseas *départements* (see 5.3), and work has started on designing the second edition of the survey in metropolitan France.

# 4.3 HEALTH AND SEXUAL AND REPRODUCTIVE RIGHTS: PROGRESS AND THREATS

Sexual and reproductive rights are making remarkable progress in the current, fast-evolving legal framework, but they are also being subjected to new threats and dangers. In many countries, including European ones, access to abortion is blocked in the name of religious or ideological convictions or pro-birth policies. In France, nearly half a century after passage of the Loi Veil legalizing abortion (1974; law named for its promulgator, Health Minister Simone Veil), exercising that right can still be a delicate matter for some women. French society is divided on several other procreation-related proposals (extending access to assisted reproductive technology [ART] to all women, using oocyte vitrification to enable women to conceive at advanced ages). In the French context, where sexual and reproductive health is heavily medicalized, that medical framework is coming in for strong criticism. Trust in doctors has been undermined to a degree (see the recent emergence of such themes as gynecological and obstetrical violence and a movement to reject hormonal contraceptives). These new questions will be explored using an intersectional approach where gender inequalities will be considered in relation to age, class, and race. Particular attention will be given to the issue of accessing sexual and reproductive health care and the exercise of sexual and reproductive rights by migrants and racialized groups.

Access to health and sexual and reproductive rights are studied from several disciplinary perspectives at INED. History, for example, sheds considerable light on contemporary debates on these issues. One project aims to retrace the battle against sterility in France and how it developed: the history of "ART before ART" (1920 to 1980). Another will study the history of prenatal monitoring over the twentieth century. INED has conducted statistical, epidemiological, and sociological studies in this area for many years. One priority in the coming years will be to return to the question of contraceptive practices, which were recently disrupted by the medical crisis around birth control pills. The next *Fécondité* [Fertility] survey will explore these questions in greater detail. Analysis of abortion use in France will continue, with an SDNS data-based study of how abortion fits into women's reproductive histories. The data will also be used in a research study on pregnancy outcomes. Several studies will expand these investigations to other European countries: a comparative project on miscarriages in Europe, and a study of reproductive health determinants among migrant women in Finland. The issues of sexual and reproductive rights will also be studied in several research sites in Africa and Asia (see 4.4).

SNDS data will also be used in the StimHo study on ART-related hormonal stimulation treatments in France. The first project analyses have found frequent discontinuities non-recourse in treatment and a considerable level of non-recourse to it. This observation raises new research questions, particularly on social and regional inequalities in access to these treatments. The *FemPrim* project is specifically interested in inequalities in sexual health care supply and use in the Île-de-France region. Research will also analyze variability in health care professional practices (those of midwives, GPs, gynecologists) as a function of their personal characteristics, the geographical context and organization of their practice, and the social positions of their (women) patients.

INED has also committed to collecting data to estimate and describe ART use outside the French legal and medical framework (see 2.1, *AMP-sans-Frontières* project [ART without borders]). And the Institute is taking part in the international EU-funded B2-InF project (Horizon 2020) for assessing young people's knowledge and expectations of ART in 8 European countries. Meanwhile, ELFE cohort data will be used to study how children born through ART are developing.

# 4.4 HEALTH ISSUES IN GLOBAL SOUTH REGIONS

In recent decades, most global South countries enjoyed rapid progress in health. Nonetheless, their mortality rates remain relatively high due to a combination of infectious-parasitic diseases (malaria, HIV/AIDS, tuberculosis, and others) and non-communicable diseases (cardiovascular diseases, cancer, respiratory diseases, and others). Development and urbanization have led to increased prevalence of what are called social diseases (obesity, high blood pressure, and others) that is in turn linked to the diffusion of new ways of life (unbalanced diet, lack of physical exercise) that amount to risk factors. INED studies take into account health and mortality throughout the life cycle and at the international scale (modeling), drawing on national surveys and local data (demographic tracking systems).

The Global Age Patterns of Under Five Mortality project (see also Section 2.2), funded by the U.S. National Institutes of Health and jointly conducted with the University of Pennsylvania, the London School of Hygiene and Tropical Medicine, and Johns Hopkins University, aims to measure and understand variations in mortality between the ages of 0 and 5 years. Based on a mass of existing data on the subject (civil register information, demographic and health surveys, demographic tracking system data), this project aims to update mathematical models of child mortality by sex and age in severely underdeveloped countries.

Health conditions overall are least favorable on the African continent. Research has long neglected the question of adult health there due to the high priority of child, maternal, and reproductive health. But progress made in those areas has partially reoriented research. INED is actively implicated in this directional change and is currently conducting research on such subjects as the health of twins, mental health throughout the life cycle in relation to poverty, disabilities, multiple causes of death, and end-of-life circumstances. A detailed study of adult health in urban areas is now being designed that will draw on data collected with the Population observatory of Ouagadougou in Burkina Faso.

Since the start of the AIDS epidemic, INED has been heavily involved in research on issues related to HIV infection. One example is the ANRS-funded PRINCESSE project (*Agence Nationale de Recherches sur le Sida [AIDS] et les Hépatites Virales*), which follows 500 female sex workers in Ivory Coast. The purpose is to set up, document, and analyze a community health care program combining HIV screening, pre-exposure prophylaxis (PrEP), immediate post-infection HIV treatment, treatment for hepatitis B, and sexual and reproductive health care. INED has also been doing research for many years in Thailand, one of the Asian countries hardest-hit by the AIDS epidemic. The Sidaction-funded TEEWA-2 survey (Teens Living with Antiretroviral), already underway, captures the health and social impacts of this burden on adolescents born with HIV. This original nationwide data collection process, which uses hospital data and a questionnaire together with a control group, will provide precious knowledge on a vulnerable population observed at an age that is critical for individuals' future trajectories.

A joint project in the area of health and sexual and reproductive rights is being designed with the Niakhar observatory in Senegal, the Taabo observatory in Ivory Coast, and the Nahuche observatory in Nigeria to examine women's contraceptive practices and recourse to abortion in contexts where the latter practice is heavily stigmatized (see 3.2). Qualitative data will supplement these reproductive histories. Women of childbearing age who have had an abortion have already been interviewed in Ivory Coast and Burkina Faso, along with their families and health care professionals (*MiFaCi* project, in collaboration of Doctors of the World, Centre Population et Développement or CEPED, and the University of Bouaké in Ivory Coast). Finally, a project is being developed to explore ties between reproductive events and health, and the consequences of unplanned births on mother's and child's health in global South countries.

# 5 SPACE, MOBILITY AND MIGRATION: INDIVIDUAL TRAJECTORIES AND PUBLIC POLICIES

All the studies in this fifth area focus on the dimension of space and are motivated by the issue of inequality in all its variations. They analyze space and residential and geographic movement and mobility in connection with life trajectories. Since the early 2000s, French society been heavily impacted by deepening inequalities in housing, inequalities that in turn affect spatial population distribution. Situations of residential vulnerability have also increased. The studies in 5.1 account for these changes and analyze the factors that drive them, from the respective roles of public policies and the market to the effect of immediate human surroundings on social integration processes. The studies in 5.2 analyze the tie between life trajectories and movement-mobility on the one hand, regions and public policies on the other, in a context marked by a switch to regional social policymaking.

Two sections focus on transnational migration movements. One covers the impact of transnational movements on individuals' life event histories (fertility, family trajectories, transition to adulthood, relational network, moves back and forth between countries of departure and arrival, etc.). A key focus in this set of studies is the effects of migration on family members who did not leave (exchange of material goods, the development of family trajectories in several countries). The issue of integration into destination countries is present in this section but is even more central to the last section, which takes it up directly in relation to inequalities

between immigrants, their descendants, and destination country populations—questions analyzed in light of the immigration, integration, and anti-discrimination policies in effect. The TeO2 survey [Trajectories and Origins 2] will be a precious source of material for these studies.

Last, INED has contributed considerably over the past decade to improving statistical knowledge of France's overseas *départements* and communities by way of several surveys on various subjects. In those areas, the major population issues (demographic aging, migration, and others) take highly specific forms compared to metropolitan France. The research projects made possible by these new data are covered in a dedicated section, 5.3.

# 5.1 THE HOME, A HOME: HOUSING, SPACE, LIVING CONDITIONS

The Spring 2020 health crisis cast new light on the crucial place of housing in social life. At the time of this writing, many activities take place in the home, providing a glimpse of major changes to expect in the coming years—massive use of remote working and hybrid forms of work, the development of online education and training, etc.—changes fostered and facilitated by the digital and technological revolution. Nonetheless, the housing market in France is quite stretched: prices in urban conglomerations are rising together with rental occupancy levels and seasonal tourist rentals, and France's social housing capacity is close to saturation. All of these developments condition household housing choices and how people's residential trajectories unfold.

INED research analyzes three ways in which housing contributes to social integration. The first set of studies analyze households' material living conditions, access to different housing market segments, and how residential mobility and daily commuting are evolving—all in a context of deepening socio-economic inequality. They take into account the impact of national and local housing construction and infrastructure building policies, including policies to achieve balance in social housing supply across regions, plan and build socially diverse neighborhoods, support working-class home ownership, and carry out major public transportation construction projects. The second set focuses on people at the margins of ordinary housing: without a home of their own or living rough, living in institutions, informal occupancy situations, shelters. The objective is to document the residential trajectories of vulnerable populations very seldom reached by major public statistics surveys for a number of reasons: only recently arrived in France, the informal nature of their status (refugees, first-generation migrants), not visible in public space (single-parent families), or spread throughout France (young people in precarious circumstances or undergoing social status decline, second- and third-generation immigrants, etc.). These groups, whose numbers are growing, raise challenges for a range of policy sectors: anti-poverty, immigration, student housing, affordable housing, etc. The third set of these INED studies works to analyze ties between household housing conditions and the other dimensions of social life: employment and work, family and conjugality, domestic work-sharing, solidarity and mutual assistance among neighbors and in local spaces. For example, the Mon quartier, mes voisins survey [My neighborhood, my neighbors], for which data collection is complete, probes the role of relations between neighbors. Here housing is seen not only as an indicator of disparities in household living standards and ways of life but also a circumstance that conditions access to other types of goods and services, essential to social integration and mobility. There are also more specific studies under way on students' residential and educational trajectories, situations that have particularly impacted by the economic and social effects of the COVID-19 pandemic, as revealed by the *Coconel* survey (see 1.2). Connections between education institution offer and geographic mobility, along with the impact on student trajectories of moving out of the family home and the conditions under that move occurs, are being analyzed using data from administrative sources, statistical surveys, and detailed life story interviews, especially with young people of working-class background and precarious or vulnerable groups.

# 5.2 LIFE TRAJECTORIES, MOVEMENTS AND MOBILITY, AND REGIONAL DYNAMICS

INED has been developing and conducting life history surveys (3B, Biographie et Entourage) and surveys with a life history dimension (Histoire de Vie 2003, ETST [Tunisia] 2016, EDER [Mexico] 2017) for many years. An entire set of methods, some from other research fields, have gradually been developed for analyzing individual trajectories. Taking into account ties between individuals (family, work-related, etc.) and individuals' relationships with their social, institutional, and urban environments enriches our understanding of the sequences of family, occupational, or migration events that punctuate individuals' life paths. These approaches also account for the many ways individuals are located in and move around in space. The notion of entourage (family, friends, close relations, immediate network)—which has proved highly operational for understanding the diversity and complexity of family ties in the present time—seeks to widen an individual's social reference group. INSEE's 2011 Famille et Logements survey was the first to explore multi-residence, making it possible to revisit family configurations and how they affect individual behaviors. The first Famille en Polynésie Française survey (Feti'i e fenua) will enable researchers to detail the movements and constraints specific to a fragmented territory, and the types of family settlement they give rise to (see 5.3).

A crucial feature of this research is that it investigates individuals' geographic movements in conjunction with the regional dynamics they generate. Movements at the individual scale affect regional demographic and social composition. Individual movement and mobility are among the most powerful drivers of such social and spatial filtering processes as socio-spatial segregation and gentrification, and the regional inequalities they produce. Conversely, changes in regions' physical and social characteristics affect individuals' movements. In this sense, geographic movements and mobility are a relevant angle for studying how existing regions are currently being recomposed. Mexico City, like most Latin American metropolises, bears the marks of a settlement process wherein intra-urban mobility is the main force driving change in socially-based divisions of space. The research analyzes residential mobility and daily commutes at the scale of the city as a whole to discover and describe the variety of inhabitants' experiences and of the contexts they live in as they pertain to mobility.

While analysis of residential moves and mobility reveals relatively long-term spatial segregation processes—gradual social transformation of residential space—daily movements and commuting are implicated in short-term, daily, even hourly social changes to regions, changes that also diversify their uses and inhabitants. The development of social segregation on a daily basis—over the timespan of a single day—is seldom studied in the literature. In addition to studies of these issues in Paris and the greater Paris region, research is under way in Latin American metropolises, where the issue of segregation is particularly acute in that it is present in both urban configurations and the representations of individual inhabitants.

At quite another time scale, analyzing entire migration trajectories advances our understanding of how regions get recomposed over the long term. From this angle, the demographic and social transformations of particular regions can be analyzed as different phases of residential settlement at the scale of individual lives and over generations. Analysis of data from the 2017 *Enquête démographique rétrospective* (EDER) [Retrospective demographic survey] on Mexico gives us a clearer picture of the migration dynamics that have unfolded consecutively in Mexico over the past several decades.

The relevance of the life history approach for analyzing how the major Latin American cities have evolved seems particularly strong given that the rapidity and intensity of twentieth-century urbanization there corresponds fairly exactly to the length of a human life. Urban growth is slowing today; neighborhoods are aging; and more cities than before are implicated in daily intraurban movements and commuting. One research project under way studies the gradual reorganizing of the former outskirts of Bogota, Buenos Aires, and Santiago—today located just outside the city center—to identify the specificities of the processes affecting these spaces.

There are also two projects that study regional transformations in France since the 1970s in terms of spatial and social movement and mobility. One examines the spatial inscription of immigrants in rural and exurban spaces in metropolitan France to determine how those spaces have been recomposed; the other focuses on how areas in Île-de-France and along the axis of the Seine have been evolving. By fitting together the individual and aggregate scales, these two projects, each in their own way, offer a new perspective on social and spatial filtering processes in these areas.

### 5.3 ISSUES AND STUDIES SPECIFIC TO OVERSEAS FRANCE

Over the last ten years, production of statistics on France's overseas départements and communities has improved considerably. INED has contributed to this development by designing and collecting data, jointly with INSEE, for the Migrations, Famille et Vieillissement survey (MFV) [Migration, families, and aging] (2011); collecting data in Mayotte in 2014; and, most recently, extending the VIRAGE survey on violence and gender relations to the overseas départements [Guadeloupe, Martinique, French Guiana, Reunion] (2018). Two surveys are currently under way there: the second edition of the Migrations, Famille et Vieillissement survey (MFV2) in the historical départements of Guadeloupe, Martinique, French Guiana, and Reunion, and the extension of the end-of-life survey to those départements (Fin de vie DOM). Data collection for the Enquête Feti'l e fenua (the first Famille en Polynésie Française survey), done jointly with the Institut Statistique de Polynésie Française (ISPF), has just been completed; qualitative follow-up surveys are currently being prepared. INED is assisting the statistical institute of New Caledonia in conducting the MFV there. Collection of supplementary VIRAGE survey data has also been planned in the framework of ANR VIdOM (qualitative follow-up surveys, focus groups, interviews with local actors, ethnographic observation periods, media archives, support for anti-violence campaigns). Last, the Trajectories and Origins survey on the diversity of the population of metropolitan France will study migrants in la métropole born in overseas départements and their descendants.

All of this material will facilitate continued study of socio-demographic transformations under way in the overseas départements (changes in family structure and behaviors, aging, migration acceleration, internal movements). With regard to aging, particular attention will be paid to measuring disability-free life expectancy and therefore loss of autonomy, the latter a condition already found more frequently in overseas than metropolitan France as demographic aging accelerates in the Caribbean and, to a lesser degree, in Reunion. A study on how this situation may best be handled through both institutions and family solidarity will also be done, given the degree of economic precarity found for large proportions of these aging populations. Meanwhile, knowledge about gender relations in these départements, specifically gender violence, will be updated from an intersectional perspective; that is, by examining how power relations involving sex, social class and racialization fit together and how they are implicated in the occurrence of violence and the experiences of its victims. Feti'i e fenua data, combined with census data, will enable researchers to describe territorial organization in Polynesia in terms of mobility and family functioning, also relating it to public infrastructure and health, education, and transportation policies (ANR ATOLLs). Another project will generalize from this work by identifying the mechanisms (public services, economic development, and others) that govern sustainable settlement of population groups and families in administrative territories made up of islands and archipelagos.

Several projects will study trajectories between overseas and metropolitan France. Archive and administrative data from the Ministry of Justice will fuel a study of the trajectories of senior civil servants assigned to overseas territories since 1958. In connection with the question of governance in overseas France, researchers will use the TeO and MFV surveys to describe the individual and collective trajectories of migrants from overseas *départements* and to relate their migration trajectories with their family trajectories (unions, separations, fertility behaviors). The following section examines these same questions as they apply to migration generally; that is, to migrants of all origins.

# 5.4 MIGRANTS AND THEIR CLOSE RELATIONS: FAMILY TRAJECTORIES, FORMS OF SOCIABILITY, TRANSNATIONAL NETWORKS

The body of research in this section falls somewhere between life trajectory studies and studies of international migrants' geographic trajectories. The underlying question is, what kinds of interaction may be observed between migration movements and family and social life? When do young immigrants leave the parental home? Whom do they marry? What attitudes do they have toward unions outside marriage? Does migration affect fertility, and if so, how? Do the life trajectories of the second generation more closely resemble those of their parents or native French trajectories? These are some of the questions that the projects in this section work to answer, using public statistics data sources such as the EDP and major INED and INSEE surveys such as Trajectories and Origins (TeO) and TeO2, Migrations Family Aging (MFV) and MFV2, as well as census data. Most of them focus on France. There are also studies of Mexico that draw on that country's EDER survey [National life history] (see 5.2) and investigate the same questions. The objective of these studies is to relate internal and international migration to other dimensions of migrants' life histories (*Migrations et FAMilles MEXicaines* project).

International migrations are often thought of simplistically as settlement in another country followed by more or less successful socio-economic integration into it. In reality, a considerable share of migrants return to their countries of origin, while some go and settle in a third country, and others engage in circular migration, going back and forth between their home country and the receiving country. Studies drawing on EDP data are updating what we learned when return migrations were first taken into account in assessing inequalities between natives and migrants. It is also important to mention that even migrants who settle permanently in the destination country often maintain close contact with their home country. Easier communication modes and faster, cheaper international travel have enabled a considerable number of immigrants to live "bifocally," simultaneously pursuing their personal and economic interests in the home and destination countries. One objective of INED researchers working on such projects as TEMPER (Temporary vs Permanent Migration) and ChIPRe [Chinese immigrants in the Paris region] is to restore the full complexity of these interactions. The ChIPRe project will shed light on the role of social capital and its structure in the lives of Chinese immigrants in Paris and the greater Paris region. INED is also involved in the REFPoM project on health risk factors among Central Asian migrants in Russia, an ethnological study focused on informal individual, family, and collective practices.

# 5.5 IMMIGRANTS AND MINORITIES: INEQUALITIES, DISCRIMINATION AND RACISM

In France as in most European countries, public opinion is expressing increasing mistrust of governments and their migration policies, from migration flow management to migrant integration policies. An entire set of INED research studies bears precisely on the composite issue of immigration, integration, and anti-discrimination policies. Their objective is to analyze the social context in which those policies were produced and to assess their effects. One historical study focuses on immigrant integration mechanisms during France's 30-year period of economic growth (1945-1973). INED is also taking part in the European *Upstream* project, which analyzes government integration policy strategies in the Netherlands, France, Spain, Great Britain, and Poland. The INED-run ANR GLOBAL RACE project (to be completed in 2021) analyzes the different ways in which racism and the concept of race have been reconfigured since 1945 as anti-discrimination policies came to be instituted. It will examine the various theories and practical strategies around the notions of race and ethnicity as they have been developed in science and academia, state policies, and by social movements.

A major part of the scientific efforts in this section will center on the TeO2 survey (2019-2020), the fieldwork for which will soon be complete. More than ten years after the first TeO (2008-2009), this new survey, a joint INED-INSEE project, will enable researchers to study integration and discrimination in France in a quite different context from the one in 2008. While the general structure of the questionnaire has changed very little, TeO2 will be a powerful instrument for studying intergenerational integration processes in immigrant families. For the first time, researchers will be able to analyze socio-economic variables in families of foreign origin over three generations: immigrants, their children, their grandchildren. A new project entitled 3GEN and focused on the closely related question of social disadvantage transmission over three generations in immigrant families has just been awarded ANR funding.

INED has long conducted research into socio-economic inequalities between immigrants and their descendants and native inhabitants, and on the discrimination that immigrant families undergo. A study already under way uses data from the *Emploi* survey to clarify income inequality between immigrants' children and natives; another focuses on immigrants' access to French citizenship and economic integration. In the area of health, the mechanism that explains the relatively low mortality rates found for immigrants in all of the world's major destination countries is self-selection. But a current project funded by the U.S. National Institutes of Health (NIH) has shed light on another mechanism that few studies have remarked: self-selected departure from the destination country; that is, immigrants in poor health returning to the country of their birth upon or after retirement.

The French media has given considerable coverage to the vulnerability of immigrants and ethnic and racial minorities to COVID-19 and the other problems raised by the pandemic. Research studies already under way in this area will be pursued to refine that diagnosis and better understand what is responsible for this situation. INED researchers working on the European LifeCycle project (see 3.1) are particularly interested in health inequalities between very young children of immigrants and their native counterparts. It is also interesting to focus more closely on particular pathologies or subgroups. For example, INED is taking part in a study of ties between migration and schizophrenia conducted by the Hospital Henri Mondor in the Val de Marne outside Paris. And given the growing numbers of mixed marriages between immigrants and native French, it is also relevant to extend health and mortality analyses to multicultural families, the most intimate framework for intercultural interaction.