

# Institut National de la Statistique

## MIGRATION MEASUREMENT

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**IDRISSA BOUKARY Abdoulaye**

182, Rue de la SIRBA  
BP : 13416 Niamey-Niger  
Tel : (+) 20 72 35 60  
Fax (+222727) 20 72 21 74

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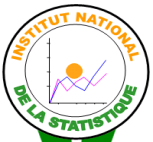
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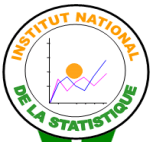
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# ***I. INTRODUCTION***



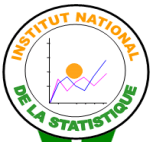
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The phenomenon of migration is at the center of the major challenges of the twenty-first century, as evidenced by the intensity of the international agenda on the issue. Indeed, there has been a multiplication of high-level meetings sanctioned by important resolutions that have emphasized the need for international cooperation in response to migration. The holding of the World Summit on International Migration and Development in New York in September 2006 marks a decisive turning point in the integration of migration into development strategies, policies and programs.



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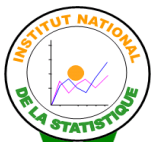
Thus, since 2007, a global forum on migration and development has been held annually. Is it also important to underline the Rabat Process (Morocco) as a framework for dialogue on migration, which periodically organizes Euro-African Ministerial Conferences on Migration and Development, the most recent of which held in Rome / Italy on 27 November 2014, adopted a declaration and its annex, the Rome program.



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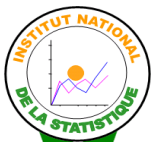
The main objective of this presentation is to describe the different measures of migration by reviewing the definitions and concepts as well as the difficulties associated with studies on migration and migration typologies.

## ***II. DEFINITION AND CONCEPTS***



- ❑ **Migration** : Migration can be defined as the change of the place of usual residence for a conventional minimum duration (6 months or 12 months depending the country);
- ❑ **Internal migration** : Internal migration is a migration that takes place within the borders of a country or territory;
- ❑ **External or internationale migration** : migration is international when it refers to changes in habitual residence between countries ;
- ❑ **"lifetime" migration**: The "lifetime" migration is defined by relating the place of birth and the place of residence to a reference date. The migrant "life-time" is any individual who resides in an administrative entity other than his or her place of birth.





- ❑ **Migratoire flows** : Migration flows refer to movements (in and out) of population (nationals and foreigners) that occur at the borders of a given country ;
- ❑ **Stock of migrants** : Migrant stocks are referred to as the number of migrants (immigrants and emigrants) residing in a country with a certain length of stay, irrespective of the socio-economic characteristics (migrant workers, refugees, students, etc.) of migrants ;
- ❑ **Diaspora** : A diaspora is defined both as the dispersion of a people in foreign countries and the formation of a community of that people in those countries ;
- ❑ **clandestine/irregular migration** : There is "clandestine migration" when an foreigner enters a country without respecting the entry conditions or has entered illegally, remains there beyond the time allowed by law.

# ***III. DIFFICULTIES IN THE STUDY OF MIGRATION AND TYPES OF MIGRATION***

## Difficulties in the study of migration

- ❑ One of the major difficulties in the study of migration is that there is no standard in the definition : The criteria for duration, boundaries and residences vary from one country to another, from one study to another. In the same country these elements may vary over time ;
- ❑ The comparability of indicators between countries is an often insurmountable obstacle ;
- ❑ The comparability of indicators over time in the same country is problematic when the administrative division changes ;
- ❑ There is a need to be very careful in interpreting migration indicators and comparing these indicators ;
- ❑ Understanding how the concept of migration has been defined is essential for conducting migration studies.

## Types of Migration

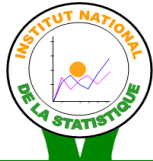
- ❑ **According to the reasons** : Work migration, familial regrouping, School migration, forced Migration, Refugees ;
- ❑ **Depending on the location** : Internal, Internationale ;
- ❑ **Depending on the location** : Seasonal migration, Circular migration, temporary migration, definitive Migration ;
- ❑ **Other typologies** : Migration lifetime, old migration, recent migration.

# ***IV. MIGRATION MEASUREMENT***



## Cross sectional measures : migration rates

- Let  $M$  be the number of migrations (inputs and outputs) observed in a population over a period of  $n$  years in a region  $i$ .
- Let  $P_0$  et  $P_n$  be the population at beginning and end of period.
- The gross migration  $m$  is given by :  $m = \frac{M}{\frac{n}{2}(P_i^0 + P_i^n)} k$   
 $k = 100, 1000 \text{ ou } 10000$
- In the same way, the gross emigration rate (or exit index) of an area  $i$  is calculated :  $m_{ia} = \frac{M^{ia}}{\frac{n}{2}(P_i^0 + P_i^n)} k$
- In the same way, one calculates the gross rate of immigration (or index of entry) of a zone  $i$  :  $m_{ai} = \frac{M^{ai}}{\frac{n}{2}(P_i^0 + P_i^n)} k$



## longitudinal measures : mobility quotient

- The net rate of migration =  $m_{ai} - m_{ia} = \frac{M^{ai} - M^{ia}}{\frac{n}{2}(P_i^0 + P_i^n)} k$
- **A positive net rate → attractive region**
- **A negative net rate → répulsive region**

The quotients measure the risk of migrating

- **Emigration quotient**  $e_x^s = \frac{E_x}{S_x + \frac{I_x}{2} - \frac{D_x}{2}}$

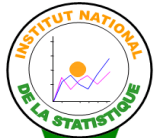
$e_x$  = quotient of emigration at the exact age x

$S_x$  = survivor at exact age x

$E_x$  = emigration at the end of age x

$I_x$  = Immigration at the correct age x

$D_x$  = Deaths at full age x



## Indirect measures of mobility

- **natural mouvement method** : This method make it possible to estimate the number of migrants.

- For net migration by age the formula gives :

$$P_{i(x)}^t = P_{i(x)}^0 + N_{i(x)} - D_{i(x)} + M_{ai(x)} - M_{ia(x)}$$

- The net balance of international migrants can therefore also be calculated if the number of international migrants is available through this formula :

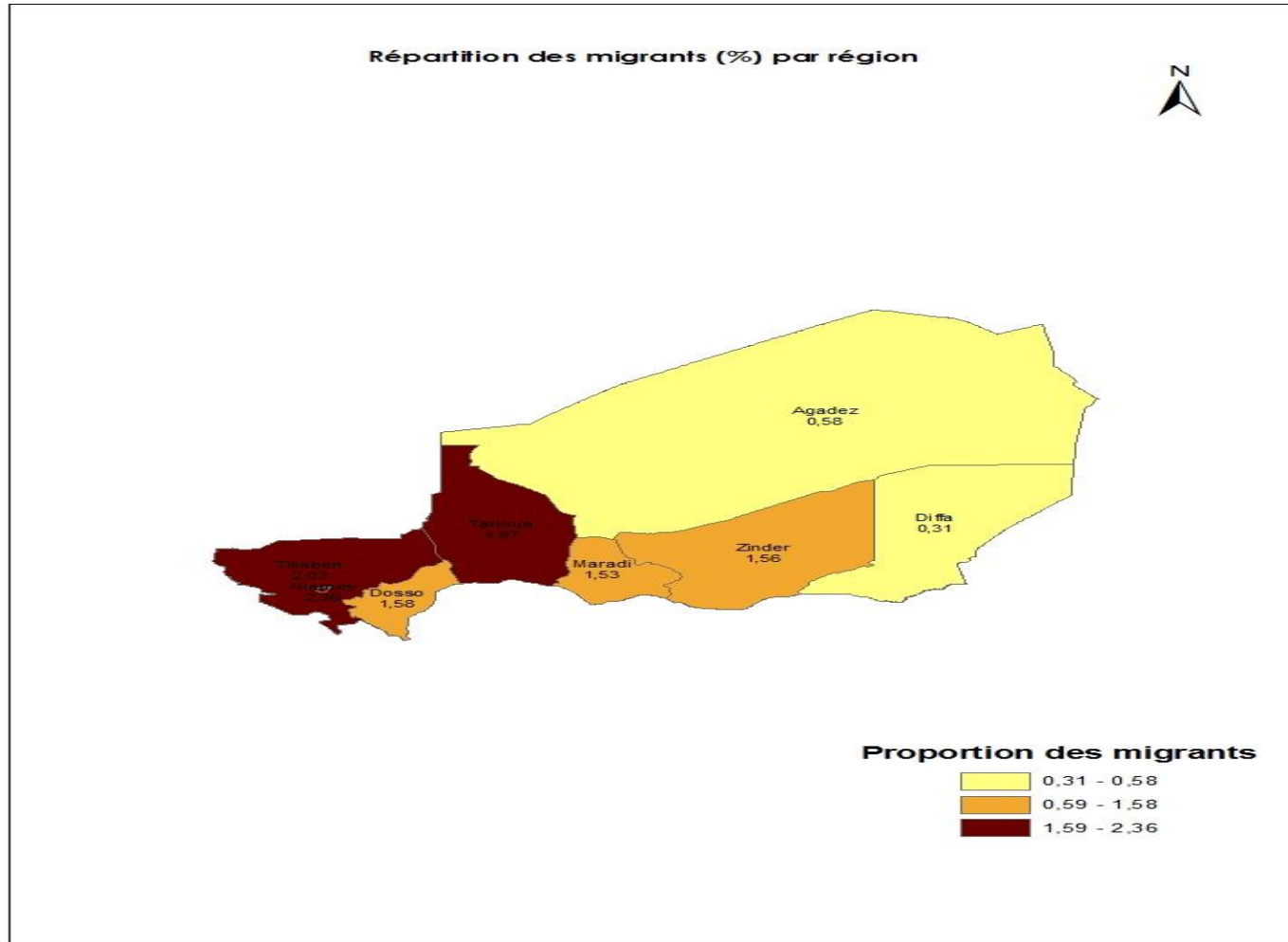
$$M_{ai(x)} - M_{ia(x)} = P_{i(x)}^t - P_{i(x)}^0 - N_{i(x)} + D_{i(x)}$$



***V. NIGER MIGRATION  
BALANCE SHEET FROM 2012  
CENSUS DATA***

- ❑ In Niger, the target population for migration is 16.731.929 ;
- ❑ In 2012, almost 12% of this population are migrants. This proportion was 10.86% in 2001, showing an upward trend in migration ;
- ❑ Male migration is more important since 13.15% of men are affected by the phenomenon against 10.73% among women ;
- ❑ In 2012, the incidence of migration was 7.43% against 7.00% in 2001, meaning a slight increase in 2012. This indicator shows that migrants are attached to their places of origin and that migration is a survival strategy to combat socio-economic difficulties.

# Spatial distribution of migrants

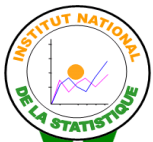


# ***VIII. CONCLUSION***



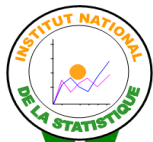
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- ❑ Like fertility and mortality, migration is a demographic phenomenon that is part of the population dynamics. It is part of human history and is the first means of contact and cultural and economic exchange between peoples.
- ❑ One of the major difficulties in the study of migration is that there is no standard in the definition because the criteria of duration, border to cross, residences vary from one country to another, from one study to another. And in the same country these elements may vary over time.



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- ❑ In Niger, the migratory phenomenon is widespread but remains less seized and poorly supervised; since there is still no migration policy. Important migratory exchanges exist between Niger and the rest of the world on the one hand and between regions and departments within the country on the other.
- ❑ The need for investment is acute when looking at intra-regional trade. Indeed, some departments seem to be isolated within the regions. Regional capitals, especially cities, are also centers of attraction, leading to negative migratory balances in most départements.



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- ❑ Another destination for migrants is the outside world. International migration of Nigeriens is captured by returning migrants. This phenomenon is very important and must attract the attention of local authorities in more than one way. International migrants can bring skills that communities can use. Investment opportunities need to be considered in order to frame the inflows and remittances of international migrants.
- ❑ Lastly, there are various measures on migration (cross-sectional measures: migration rates, longitudinal measures: mobility quotients, spatial redistribution indices, etc.) and these make it possible to identify migration across countries.



THANK YOU FOR YOUR KIND  
ATTENTION

182, Rue de la SIRBA  
BP : 13416 Niamey-Niger  
Tel : (+) 20 72 35 60  
Fax (+222727) 20 72 2174

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[www.ins.ne](http://www.ins.ne)