



ACP OBSERVATORY ON MIGRATION
OBSERVATOIRE ACP SUR LES MIGRATIONS
OBSERVATÓRIO ACP DAS MIGRAÇÕES

INTERNAL MIGRATION IN CAMEROON: *Constraint for or driver of urban and health development?*

Dominique Meva'a Abomo
Jean Roger Abessolo Nguema
Bertrand Begoumenie
Marie Louise Ba'ana Etoundi

Etgard Manga Engama
Jeanette Fotso Wougaing
Marcel Nkouandou Njiemessa

Department of Study and Action-Research for Development (DSARD)

Panafrican Society of Builders (PSB)



N'Gaoundere hospital for HIV and AIDS - Copyright: Elin B @ Nordic Touch, 2007
Creative Commons - Attribution 2.0 Generic

Research Report

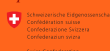
ACPOBS/2013/PUB13

2013



An Initiative of the ACP Secretariat,
Funded by the European Union

Implemented by IOM and with the Financial Support of Switzerland,
IOM, the IOM Development Fund and UNFPA



IOM Development Fund
Developing Capacities in
Migration Management



Panafrican Society of Builders
Société Panafricaine des Bâtières

ACP Observatory on Migration

The ACP Observatory on Migration is an initiative of the Secretariat of the African, Caribbean and Pacific (ACP) Group of States, funded by the European Union, implemented by the International Organization for Migration (IOM) in a Consortium with 15 partners and with the financial support of Switzerland, IOM, the IOM Development Fund and UNFPA. Established in 2010, the ACP Observatory is an institution designed to produce data on South–South ACP migration for migrants, civil society and policymakers and enhance research capacities in ACP countries for the improvement of the situation of migrants and the strengthening of the migration–development nexus.

The Observatory was established to facilitate the creation of a network of research institutions and experts on migration research. Activities are starting in 12 pilot countries and will be progressively extended to other interested ACP countries. The 12 pilot countries are: Angola, Cameroon, the Democratic Republic of the Congo, Haiti, Kenya, Lesotho, Nigeria, Papua New Guinea, Senegal, Timor-Leste, Trinidad and Tobago and the United Republic of Tanzania.

The Observatory has launched research and capacity-building activities on South–South migration and development issues. Through these activities, the ACP Observatory aims to address many issues that are becoming increasingly important for the ACP Group as part of the migration-development nexus. Documents and other research outputs and capacity-building manuals can be accessed and downloaded free of charge through the Observatory's website (www.acpmigration-obs.org). Other upcoming publications and information on the Observatory's activities will be posted online.

© 2013 International Organization for Migration (IOM)

© 2013 ACP Observatory on Migration

Document prepared by Dominique Meva'a Abomo, Jean Roger Abessolo Nguema, Bertrand Begoumenie, Marie Louise Ba'ana Etoundi, Etgard Manga Engama, Jeanette Fotso Wougaing et Marcel Nkouandou Njiemessa, Department of Study and Action-Research for Development (DSARD) - Panafrican Society of Builders (PSB). This publication has been produced with the financial assistance of the European Union. The contents of this publication are the sole responsibility of the authors and can in no way be taken to reflect the views of the Secretariat of the ACP Group of States, the European Union, the International Organization for Migration (IOM) and other members of the Consortium of the ACP Observatory on Migration, the Swiss Federation or UNFPA.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of the publisher.

Layout by Pablo Escribano Miralles, ACP Observatory on Migration.



ACP

OBSERVATORY ON MIGRATION
OBSERVATOIRE ACP SUR LES MIGRATIONS
OBSERVATÓRIO ACP DAS MIGRAÇÕES

INTERNAL MIGRATION IN CAMEROON:

Constraint for or driver of urban and health development?

Dominique Meva'a Abomo
Jean Roger Abessolo Nguema
Bertrand Begoumenie
Marie Louise Ba'ana Etoundi
Etgard Manga Engama
Jeanette Fotso Wougaing
Marcel Nkouandou Njiemessa

Department of Study and Action-Research for Development (DSARD)

Panafrican Society of Builders (PSB)

Foreword

This study on the links between internal migration, urbanization and health in Cameroon was conducted by the research team of the Department of Study and Action-Research for Development (DSARD) of the Panafrican Society of Builders (PSB). It constitutes the final report of the international research project 'Internal Migration, urbanization and health in Cameroon', launched by the ACP Observatory on Migration. Nowadays, internal migration in Cameroon is considered a rather decisive factor in the process of chaotic urbanization and urban health insecurity. Despite the limited attention given to internal migration, its contribution to development is tangible in terms of the improvement of migrants' living conditions and through the emergence of an informal sector which facilitates the creation of many new jobs for the national economy.

Stressing that internal migration is in fact a real opportunity for development, this study is part of a constructive approach for minimizing the negative effects of the interaction between internal migration, urbanization and health, which are increasingly visible in Cameroonian society. Ultimately, this study seeks to contribute to improved policy in this area and the transformation of internal migration into a driver of balanced national development, along with fair and sustainable human development.

In order to strengthen institutional capacity as well as improve the programmatic framework and strategic management of internal migration in Cameroon, this document proposes a Framework for the Proactive Governance of Internal Migration, which includes seven innovative practical recommendations. The territorial integration and ownership of this plan should strengthen the sustainability of the specific regulation of internal migration, especially through the creation of a Method of Endogenous Potentialities and Opportunities during its operational phase.

I would like to thank the ACP Observatory on Migration for the study of this issue at the national level, based on the needs identified by the National Consultative Committee, which has allowed incorporating the analysis of the interactive dialectic between the concepts of migration, urbanization and health to our research. Taking into consideration the poverty, marginality and

exclusivity of the topic in available literature, this paper promises to become the basis for greater scientific knowledge which will be of great interest and use to us.

Mr. Felix Mbayu
Secretary General
National focal point for migration and
development issues
Ministry of Foreign Affairs

Abstract

The present study raises the problem of interaction between internal migration, the urbanization crisis and health precariousness in Cameroonian cities. A qualimetric method was used in the framework of a multidisciplinary and systemic approach. Data was collected through a qualitative approach, namely through direct interviews. It has been analysed using three complementary techniques: qualitative (content analysis), quantitative and spatial (cartography).

Overall, the study shows that internal migration is a determinant of the urbanization and urban health crises in Cameroon. This phenomenon is marginalized, stigmatized, trivialized and even manipulated. Even so, its contribution to development is tangible in many forms: improvement of the living conditions of migrants, emergence of an informal economic sector, which is a supplier of relevant jobs and dominates the national economy of Cameroon. Thus, internal migration is a real opportunity for development, which unfortunately, collides with a deep governance crisis.

Therefore, this study recommends a Framework for the Proactive Governance of Internal Migration (F-PGIM). Its aim is to transform this societal phenomenon using balanced national development and sustainable and equal human development. Its objective is to reinforce the institutional capacities, that is, to enhance the programmatic and strategic management of internal migration.

In practice, seven pioneer recommendations were formulated for its execution: the creation of a national institution; the elaboration of the judicial and legislative framework; the elaboration of a national geo-policy for the proactive governance of internal migration that is executed from two paradigms: the proactive geo-strategy in rural areas and the proactive geo-strategy in urban spaces; the integration of internal migration in every national poverty-reduction strategy and national development planning; the creation of the National Centre of Observation and Integrated Supervision of Internal Migration; the contextualized use of the Endogenous Potentialities and Opportunities Method in the implementation of the F-PGIM; and the promotion of collaboration and cooperation.

Acknowledgments

This work would not have been possible without the contributions of certain persons and institutions to which we extend our sincere thanks. The first is the African, Caribbean and Pacific (ACP) Observatory on Migration/International Organization for Migration for the trust given to the Department of Study and Action-Research for Development/Département Etude et Recherche-Action pour le Développement of the Pan-African Society of Builders/Société Panafricaine des Bâisseurs for financing and collaborating on this study. Secondly, we thank all the institutions and resource persons who have contributed to the achievement of this study.

Table of contents

List of abbreviations	xi
List of tables and figures	xiii
Executive summary	xv
Résumé analytique	xvii
Resumo executivo	xix
1. Introduction	1
2. General justification and framework of the study	3
2.1 Context of the study	3
2.2 General framework of the study	5
3. Research methodology	7
3.1 Building a classic research reference for the study	7
3.2 Operational procedure	8
4. Analytical literature review	15
4.1 State of the internal migration issue in Cameroon	15
4.2 Current scientific view on the relationship between internal migration and urbanization	18
4.3 Urban health tested by internal migration	20
5. Results of the study	23
5.1 Characterization of the urban migration phenomenon in surveyed cities	23
5.2 Internal migration and urbanization	29
5.3 Internal migration and urban health	35
5.4 Analysis of the results of the study	39
6. Conclusion and recommendations	47
7. References	53
8. Annex: Direct interview guide	59

List of abbreviations

3rd CSH	3rd Cameroon Survey of Households
3rd GCPHH	3rd General Census of the Population and Human Habitat
ACP	African, Caribbean and Pacific Group of States
CBCPS	Central Bureau of Census and Population Studies
EU	European Union
F-PGIM	Framework for the Proactive Governance of Internal Migration
IOM	International Organization for Migration
NIS	National Institute of Statistics
UNFPA	United Nations Population Fund

List of tables and figures

Tables

- Table 1: Distribution of the number of counting zones selected per city
- Table 2: Sampling diagram of counting zones and migrant households
- Table 3: Distribution of types of urban migration identified within the surveyed population (in %)
- Table 4: Assessment of housing ownership, possession of land titles and building permits in the surveyed migrant population (in %)
- Table 5: State of the prevalence of illness diagnosis types within the surveyed migrant households (in %)
- Table 6: Evaluation of requests for therapeutic treatment within the surveyed migrant households (in %)

Figures

- Figure 1: Variation of the duration of urban migration (in %)
- Figure 2: Cumulative frequencies of duration in urban migration (in %)
- Figure 3: Proportion of migrant households willing to migrate to another city (in %)
- Figure 4: Proportion of migrant households in favour of return migration (in %)
- Figure 5: Variation of the conditions set for a return migration (in %)
- Figure 6: Distribution of the surveyed population by age and sex (in %)
- Figure 7: Cumulative frequencies distribution of the surveyed migrant population (in %)
- Figure 8: Evaluation of the marriage status of surveyed migrants (in %)
- Figure 9: Evaluation of the education levels of surveyed migrants (in %)
- Figure 10: Variation in household rubbish management methods within the surveyed migrant population (in %)
- Figure 11: Variation in domestic water waste management methods within the surveyed migrant population (in %)
- Figure 12: Variation in the proportion of migrant households having at least one mosquito net (in %)
- Figure 13: Schematic overview on the Potentialities and Opportunities Method, adapted to regulating the internal migration issue

Executive summary

The present study addresses the problem of the interaction between internal migration, the urbanization crisis and health precariousness in Cameroon urban spaces. One question emerged: what is the impact of internal migration on the dynamics of urbanization and urban health in Cameroon? The main research hypothesis stipulates that internal migration is a factor of the urbanization crisis and of health precariousness in Cameroonian cities. The objective was to carry out a structured analysis of the dialectic of internal migration, unmanaged urbanization and health precariousness surrounding urban areas by identifying the tangible opportunities internal migration offers to sustainable human development. This structured analysis was done with the aim of improving the institutional and programmatic framework and influencing the strategic management of internal migration in Cameroon. A qualimetric method was used following a multidisciplinary and systematic approach. In practice, data were collected using a qualitative approach (direct interview). They were analysed using three complementary techniques: qualitative (content analysis), quantitative (mono and bi-varied analysis) and spatial (cartography).

Overall, the study shows that internal migration is detrimental to the implementation of urbanization projects in Cameroon and a factor of urban health precariousness. It is a fact of marginal society: marginalized in the sphere of public governance and economic and social development planning. Furthermore, it has been found that internal migration is one of the main drivers of urban development, given its contributions to the informal sector. Indeed, 76.4 per cent of internal migrants interviewed work in the informal sector, contributing to reduced unemployment, income generation and improved living conditions. In this sense, internal migration can be a driver of urban and national economies as well as of human development of migrants themselves. From this perspective, urban migration becomes an opportunity to promote development. Yet, improved governance of urban migration is necessary to fully take advantage of the opportunities for human development and decrease the related risks.

This study therefore proposes a Framework for the Proactive Governance of Internal Migration (F-PGIM) in Cameroon. Its aim is to transform internal migration into a driver of balanced national

development and equal and sustainable human development through the strengthening of institutional capacities, the improvement the programmatic framework and the strategic management of internal migration. In practice, seven pioneer recommendations were formulated for implementing the proactive governance of internal migration: the creation of a national institution; the development of a legislative and judicial framework; the development of national geo-politic proactive governance implemented by the aforementioned institution and based on two paradigms: the proactive geo-strategy in rural areas and the preventive geo-politics in

urban areas; the integration of the internal migration phenomenon in national strategies of poverty reduction and in every planning of national development; the creation of a National Centre for Integrated Observation and Supervision of Internal Migration; and the contextualized use of the Method of Endogenous Potentialities and Opportunities (MEPO) in the operational phase of the F-PGIM, promoting collaboration and cooperation. Finally, the F-PGIM is a management tool which is politically timely and socially expected, economically feasible and culturally integrated.

Résumé analytique

La présente étude pose le problème de l'interaction entre migration interne, crise d'urbanisation et précarité sanitaire dans les espaces urbains camerounais. Une question principale a été formulée à partir de cette problématique d'interaction : quel est l'impact de la migration interne sur l'urbanisation et la santé urbaine au Cameroun ? L'hypothèse de recherche principale stipule que la migration interne est un facteur privilégié de la crise d'urbanisation et de la précarité sanitaire dans les villes camerounaises. L'objectif ici est de réaliser une analyse structurée de la migration interne, de l'urbanisation anarchique et de la précarité sanitaire en milieu urbain, en cernant les opportunités tangibles que celle-ci offre pour produire un développement humain durable. Cette analyse structurée est menée dans le but de contribuer à l'amélioration des cadres institutionnel et programmatique, puis de gestion stratégique de la migration interne au Cameroun. La méthode qualimétrique a été exploitée suivant les approches pluridisciplinaire et systémique. Dans la pratique, les données ont été collectées à partir d'une technique qualitative (l'entretien directif). Elles ont été analysées à partir de trois techniques complémentaires : qualitative (analyse de contenu), quantitative (analyse mono- et bivariable) et spatiale (cartographie).

Au total, l'étude révèle que la migration interne contrecarre le projet urbain au Cameroun. Elle est un facteur de précarité de la santé urbaine. Elle est un fait de société marginal et marginalisé dans les arènes de la gouvernance publique et de la planification du développement économique et social. Par ailleurs, il a été constaté que la migration interne est l'un des principaux leviers du développement urbain, ayant un rôle de précurseur dans le secteur auquel elle contribue. Il s'agit d'un secteur de reconversion professionnelle à forte capacité de résorption du chômage. Il est par conséquent un levier de l'économie non seulement urbaine, mais aussi nationale. Il a également été constaté que la migration est un facteur incontestable de l'amélioration des conditions de vie ou du développement humain des migrants. Sous cet angle, la migration urbaine devient une opportunité de développement à promouvoir. Le problème se pose tout simplement au niveau de la gouvernance de ce fait de société.

Cette réalité est à l'origine de la modélisation d'un Plan-cadre de gouvernance anticipative de la migration interne (PC-GAMI) au Cameroun dans cette étude. Son but est de transformer la migration interne en un moteur du

développement national équilibré, et d'un développement humain équitable et durable. Son objectif est de renforcer les capacités institutionnelles, d'améliorer les cadres programmatiques et de gestion stratégique de la migration interne. Dans la pratique, sept recommandations pionnières ont été formulées pour sa mise en œuvre : la création d'une institution nationale de gouvernance anticipative de la migration interne, l'élaboration d'un cadre législatif et juridique de gouvernance anticipative de la migration interne, l'élaboration d'une géopolitique nationale de gouvernance anticipative de la migration interne mise en œuvre par l'institution susmentionnée et fondée sur deux notions : la stratégie géographique d'anticipation en milieu rural et la géopolitique d'anticipation en milieu urbain,

l'intégration du phénomène de migration interne dans toute stratégie nationale de réduction de la pauvreté et dans toute planification de développement national, la création d'un Centre national de veille et de surveillance intégrées de la migration interne, l'exploitation contextualisée de la Méthode des potentialités et des opportunités endogènes / MPOE dans la phase d'opérationnalisation du PC-GAMI, la promotion de la collaboration et de la coopération. En définitive, le PC-GAMI est un outil de gestion dont l'exploitation est politiquement opportune, socialement attendue, économiquement réalisable et culturellement intégrante.

Resumo executivo

O presente estudo aborda o problema da interação entre migração interna, crise de urbanização e precariedade sanitária nas zonas urbanas camaronesas. A partir desta problemática de interação, levantou-se uma questão fundamental: que impacto tem a migração interna na urbanização e na saúde urbana nos Camarões? A principal hipótese de investigação refere que a migração interna constitui um fator privilegiado da crise de urbanização e da precariedade nas cidades camaronesas. Pretende-se realizar uma análise estruturada da migração interna, da urbanização anárquica e da precariedade sanitária em meio urbano, identificando as oportunidades tangíveis proporcionadas pela mesma para criar um desenvolvimento humano sustentável. Esta análise estruturada é realizada com o propósito de contribuir para a melhoria dos quadros institucional e programático, bem como de gestão estratégica da migração interna nos Camarões. Foi explorado o método qualimétrico, seguindo as abordagens pluridisciplinar e sistémica. Na prática, os dados foram recolhidos a partir de uma técnica qualitativa (entrevista diretiva). Esses dados foram analisados a partir de três técnicas complementares: qualitativa (análise do conteúdo), quantitativa

(análise univariada e bivariada) e espacial (cartografia).

Em termos gerais, o estudo revela que a migração interna compromete o projeto urbano nos Camarões, dado que constitui um fator de precariedade da saúde urbana; é uma realidade de sociedade marginal e marginalizada nas arenas da governação pública e do planeamento do desenvolvimento económico e social. Além disso, constatou-se que a migração interna é uma das principais alavancas do desenvolvimento urbano, desempenhando um papel precursor no setor para o qual contribui. Trata-se de um setor de reconversão profissional com uma grande capacidade de redução do desemprego. É, por conseguinte, uma alavanca da economia não apenas urbana, mas também nacional. Constatou-se igualmente que a migração é um fator incontestável da melhoria das condições de vida ou do desenvolvimento humano dos migrantes. Nesta perspetiva, a migração urbana torna-se numa oportunidade de desenvolvimento que deve ser promovida. O problema coloca-se simplesmente ao nível da governação desta realidade da sociedade.

Esta realidade está na base da modelização de um Plano-quadro de governação anticipatória da

migração interna (PQGAMI) nos Camarões objeto do presente estudo. Visa transformar a migração interna num motor de desenvolvimento nacional equilibrado, bem como de desenvolvimento humano equitativo e sustentável. Visa ainda reforçar as capacidades institucionais, melhorar os quadros programáticos e de gestão estratégica da migração interna. Na prática, foram elaboradas sete recomendações pioneiras para a sua aplicação: a criação de uma instituição nacional de governação proativa da migração interna, a elaboração de um quadro legislativo e jurídico de governação proativa da migração interna, a elaboração de uma geopolítica nacional de governação proativa da migração interna executada pela instituição supracitada e assente em duas noções:

a estratégia geográfica de antecipação em meio rural e a geopolítica de antecipação em meio urbano, a integração do fenómeno da migração interna em qualquer estratégia nacional de redução da pobreza e em qualquer planeamento de desenvolvimento nacional, a criação de um centro nacional de vigilância e fiscalização integradas da migração interna, a exploração contextualizada do método das potencialidades e das oportunidades endógenas (MPOE) na fase de operacionalização do PQGAMI, a promoção da colaboração e da cooperação. Em última análise, o PQGAMI é um instrumento de gestão cuja exploração é politicamente oportuna, socialmente esperada, economicamente viável e culturalmente integrante.

I. Introduction

Human migration, predominantly internal, has become one of the major concerns of public authorities both nationally and internationally. It is considered one of the essential factors of the urban explosion and of its negative effects. It is inseparable from the generalized matrix of causes of urban crises. Long marginalized, today internal migration occupies an important place in the planning of urban and rural development. It is integrated into territorial planning policies, inequality regulation, territorial divisions and human development. The best scientific knowledge and understanding of internal migration dynamics thus become indispensable to development. Developing countries are particularly affected by internal migration and constitute an important area for studying internal migration as a driver of development in the 21st century.

This approach to internal migration is the basis for the international study programme: *internal migration, urbanization and health*. This programme was launched by the African, Caribbean and Pacific (ACP) Observatory on Migration, an initiative of the Secretariat of ACP

Group of States, implemented by the IOM and financed by the European Union. The aim of this programme is to transform internal migration from a constraint to a potentiality of a sustainable human development. The mobilization of a consistent body of scientific knowledge remains a mandatory condition to achieve this aim.

In this context, the ACP Observatory on Migration's objective is to conduct case studies to produce knowledge on South–South migration in its density, heterogeneity and complexity. This approach highlights the specificities and particularities of the phenomenon in each State. Cameroon, a State affected by the phenomenon of migration, was included in this programme. The present document is thus the final report of the project *internal migration, urbanization and health in Cameroon*. It is structured into four chapters. The first one focuses on the rationale and general framework of the study, the second on the research methodology, the third on an analytic literature review and the fourth on the results obtained.

2. General justification and framework of the study

Introduction

Completing the research project on internal migration, urbanization and health in Cameroon required a framework of theoretical elements from previous research. This is the objective of this chapter which is structured into two main parts. The first part is based on presenting the context of the study in four areas: general context, political context, economic and social contexts, and scientific context. The second part focuses on presenting elements such as problematic research questions, the hypothesis and research objectives.

2.1 Context of the study

General context

Human mobility in ACP countries has always been considered a challenge to the development of those countries. If this meaning is given to international migration (brain drain, selective immigration and so on), nevertheless, it remains to be reconsidered in the context of internal migration. There is no doubt today that the internal mobility of the Yoruba in Nigeria, the Dioula of Côte d'Ivoire and the Bamileke in Cameroon, is a driver of local development. Nevertheless, this is contrasted by the emergence

of a number of crises attributed to, or caused by, the same migration dynamics. The crisis of urbanization and urban health is an example. This contrast is the basis of the present international research programme on internal migration, urbanization and health of the ACP Observatory on Migration, an initiative of the Secretariat of the ACP Group of States implemented by the International Organization for Migration (IOM) and financed by the European Union. This programme therefore opens discussion on the dialectics of internal migration/national development. To achieve this objective, the ACP Observatory promotes the analysis of case studies of human mobility in ACP States.

Located in the Gulf of Guinea between the second and thirteenth degree of latitude North and the sixth and sixteenth degree of longitude East (Amou'ou Jam et al., 1985), Cameroon is an example of an ACP country where urban development is subject to the test of management of internal migration flows. Here, the national population was estimated at 19,406,100 on 1 January 2010 (Central Bureau of Census and Population Studies - CBCPS, 2010). That same year, the urban population was evaluated at 10,091,172 inhabitants versus 9,314,928 of the rural

population. The urbanization rate of Cameroon in 2010 was estimated at 52 per cent. This urbanization rate implicitly reveals an intense mobility of people and goods between cities and between cities and the countryside. This migration generates societal facts and phenomena that have captured the attention of the scientific community. Ultimately, the present project operates in a context characterized by mitigation, stigmatization and the accusation that internal migration is a suppressor of urban planning and a supporter of precarious urban health dynamics.

Political context

This research project on internal migration, urbanization and health in Cameroon operates in a political context of national integration that guarantees the safety of people and goods across the country. This state of affairs has a negative impact on the phenomenon of internal migration through the emergence of a deep sense of being at home. This study was carried out in the context of a governance crisis of urban migration at the origin of divisions, distances and tensions between different sectors of the urban population and among migrants, non-migrants and public authorities. The uprising against the forced eviction of internal migrants in the MAGZI zone of Douala, the uprisings of natives

against migrants in Douala (Deido crisis of 2012) and Ebolowa (uprisings against the Bamoun community in 2010) following the assassination of motorbike taxi drivers in the two towns, and the indictment of migrants in Yaoundé during the riots of 2008, are all illustrations of internal migration governance crises. When legislation is protective of native minorities, migrants are both object and subject of various types of exposure and vulnerability. Nevertheless, public political instigators of many youth employment and rural development programmes have a regulatory effect on the rural exodus and a catalyst effect on return migration.

Economic and social context

Cameroon is currently undergoing undeniable economic recovery. Every citizen legitimately desires to benefit from the dividends of this growth and to transform their lives. Cities and sites of large structural projects are perceived as places of excellence in achieving these transformations. If the economic crisis (1980–1990) triggered migratory survival flows, the decade of growth recovery (2000–2010) intensified, and then reconfigured them. The present project operates in the context of non-mastery of these new configurations of the migratory phenomena based on the social and economic transformation of the country.

Scientific context

The literature review conducted as part of this study shows that internal migration is a marginal object of study in Cameroon. The marginalization is evident through a significant lack of scientific research on this theme despite it being essential for human development. This scientific context is characterized by a lack of control over structural and functional configurations of internal migration, and the dialectic between this phenomenon and health and urbanization, in the context of the current recovery growth. Moreover, it is marked by the reporting of internal migration as a constraint to urban development. The transformation of internal migration to a force for development remains a real challenge for scientists at the local level.

2.2 General framework of the study

Research problems

The status of constraint to urban development which researchers and decision makers attribute to internal migration is undeniable in Cameroon. However, it is a foreseen result of the migratory managerial logics applied so far. This reality makes Cameroon ripe for the observation and study of internal migration, a phenomenon defined by its intensity, its heterogeneity and its complexity.

Gaps in migration management have many different consequences. Imbalances between urban and rural areas, the problem of social cohesion and integration in general and the dysfunction of urban units are all consequences of mitigated, stigmatized and, at times, manipulated migration flows. Another issue in this regard relates to the challenge of the role of driver of human development attributed to cities. This reality is the basis of the present study which raises the problem of integration among internal migrants, urban crises and precarious health conditions in urban areas of Cameroon. The main issue is the transformation of internal migration from a constraint to an opportunity for human development which cannot happen in a context of mitigation, stigma and accusation towards migrants and the migration phenomenon. Two main questions emerge here:

- What is the impact of internal migration on the dynamics of urbanization and urban health in Cameroon?
- How can we transform internal migration from a constraint into an opportunity for urban development in Cameroon?

Research hypothesis

The two aforementioned questions are at the basis of two research

hypotheses. The first stipulates that internal migration is a determinant of the urbanization crisis and the precarious health facilities in Cameroonian cities. The second stipulates that: strategically planned and proactive governance of internal migration is a transformation engine of this societal phenomenon from a constraint to an opportunity for urban development in Cameroon.

Study objectives

The aim of this study is to contribute to improving the institutional, programmatic and strategic framework for managing internal migration in Cameroon. To achieve this, a main goal and three secondary objectives were set. The main objective is to achieve a structured analysis of the dialectic of internal migration, unmanaged urbanization and precarious health facilities in urban zones, while identifying the opportunities that it has to offer as a trigger for sustainable human development. The first specific objective is to achieve a situational analysis of the structure and characteristics of internal

migration at the urban level. The second focuses on reconstructing the possible impact of migration on urbanization and health. The third is to develop a F-PGIM in Cameroon. All this work is accompanied by a thematic mapping for the variables of the study objectives.

Conclusion

This study addresses a developmental issue. The context of the study is a real opportunity for decrypting a poorly understood social problem, which seriously constrains national development. Theoretical elements such as those presented led to results which could contribute to a social, economic and political and cultural transformation of Cameroon. Noticeable results are better scientific knowledge of migration issues and contribution to strengthening institutional and managerial capacities. Therefore, is the experimented methodology a guarantee of expected results?

3. Research methodology

Introduction

Achieving the expected results in a research intrinsically depends on the relationship between the methodological planning of the study and the study aims. It extrinsically depends on the way the methodology is used. The main objective of this chapter is thus to present the methodology in two ways: the construction of a classic research reference and a detailed explanation of the operational procedure.

3.1 Building a classic research reference for the study

The classic reference for the research is the structural foundations of a research that determine the choice of specific methods and techniques for each phase of the study. In practice, it is the methodological approach in which the study is embedded, the methodological framework applied, the general research method adapted to the previously defined methodological approach and framework.

Methodological approach and research frameworks

The methodological approach is a classic framework in the production of scientific knowledge. The study

is part of the multimodal synthetic current that, as underlined by Aktouf (1992:10), encourages a bi-directional analytical approach. A first analysis goes from the general to the particular (hypothetical-deductive approach). A second analysis goes from the particular to the general (empirical-inductive approach). In a second stage, the issue was to clarify the methodological framework used in the synthetically multimodal approach.

The methodological framework is a specific, operational procedure, both exploitable and explained in a classic research framework that tries to develop scientific ideas. Two main methodological frameworks of the classic research model were used in this study: functionalism and empiricism. Functionalism is based on the perception of the object of the study, as a system with several components and functions. In practice, the task is to reconsider the aim of this study on internal migration, urbanization and health Interaction as a system structured in various components (migration, urbanization and urban health). Afterwards, the issue is to identify and analyse each component individually, based on the logic and strategies of its main participants. The reconstruction of the dialectic

between these components in terms of interaction, interinfluence and interdetermination is a last resort. Empiricism is based on the principle that the scientific knowledge sought is found in the facts studied. In practice, the study of the logic and the strategies of its components can be positioned without bias in the heart of the object of study. It also helps to build a structured explanatory model on the relationship between internal migration, urbanization and health in Cameroon.

Adopted research method: the qualimetric method following a multidisciplinary approach

The qualimetric method was more appropriate for the heterogeneity and complexity of the study. It is a scientific research method based on the combination of both qualitative and quantitative techniques for the collection and analysis of data. Its operation in this study recommends the use of qualitative techniques in data collection. It is based on a simultaneous use of qualitative and quantitative analysis of the data collected. It uses a dual approach for interpreting the analysis results: a classic interpretation and a predictive interpretation. Finally, it is based on using a multidisciplinary approach given the transdisciplinarity of the study's objective.

3.2 Operational procedure

The operational approach is presented in two main areas: the collection and analysis of data.

Data collection

The qualitative approach was applied during data collection in accordance with the qualimetric method. The research employed a direct interpersonal interview technique, from a non-progressive interview guide comprised of questions. Previously, sampling was required at two levels when preparing the field visit. This concerns sampling geographic research areas and sampling individuals in the statistical population studied (migrant households).

Geographic sampling took place in three phases:

- a) Sampling research regions, preceded by a geographical structuring of the national territory based on the administrative division of regions. The quota sampling method was used for the non-random selection of administrative research regions. Four regions (Coastal, Central, Far North, South) out of ten were selected from the superposition of several previously defined eligibility criteria. This resulted in a strong quantitative representation (40%) of the administrative regions of the national territory.

b) Sampling research stations in the selected regions was done through the non-probabilistic sampling technique in two phases. The first phase was characterized by geographically structuring the selected research regions into two main types of basic sociospatial structures – urban and rural areas – to orientate the study objectives to urbanization. The approximate sampling technique is justifiable for selecting urban spaces as research stations. The use of this technique was based on the eligibility criterion of thematic orientation in reference to urbanization. The second phase consisted of selecting a sample of stations (cities) in urban areas of the pre-selected administrative regions. The quota sampling method was used when selecting cities in each region. A quota of one city per region was selected for the economic feasibility of the study. The non-random sampling technique, based on the superposition of a certain number of qualitative eligibility criteria, was used to select the researched city. The main cities of the region were selected due to their strong representativeness of all the cities in the country in terms of spatial-demographic size, demands of urban migrants, magnitude of the urbanization crisis and urban health issues: Douala,

the economic capital and most populated city in the country; Yaoundé, the political capital of the country; Maroua, the main town of the most populated region of the country bordering Nigeria and Chad; Ebolowa, the main town of the region that shares a boundary with Gabon, Equatorial Guinea, and Congo, a subregional transit and traffic town. If, quantitatively speaking, the sampling of these four cities is not representative of all the cities in the country, the four selected towns are relevant from a qualitative point of view regarding the object of study. Moreover, the presence of Douala and Yaoundé among the four selected cities is justifiable due to the strong representativeness of the national urban population in this sample.

c) Sampling sociospatial data collection structures in the selected research stations was done in two stages. The first stage used the geographic structure of the urban space or the division of the city into basic sociospatial structures. The counting zone defined by CBCPS (RGPH-3) and later updated by the National Institute of Statistics (NIS) in the frame of the 3rd Cameroon Survey of Households (CSH) was chosen as the basic sociospatial structure for data collection. Each

city was thus split into counting zones in accordance with the most recent NIS' database. The quota sampling technique was used for the determination of the number of counting zones in each town. The counting zones quotas were determined in proportion to the total number of counting zones used in the 3rd CSH. In practice, the high dispersion or very significant differences between the number of counting zones in major cities (Douala: 100 counting zones, Yaounde: 100 counting zones) and small cities (Maroua: 28, Ebolowa: 16) substantially compromised the reliability and relevance of the systematic determination of homogenous counting zones quotas in each city.

The basis for determining the counting zone research quotas was firstly, in cities with a high population density, where more than 50 counting zones were researched during the 3rd CSH, the sample of counting zones represents 10 per cent of the total sample of counting zones used during the 3rd CSH. This first assumption was applied in Douala and Yaoundé where 10 counting zones were finally researched in each of the two cities. Secondly, in small cities having a low population density, where less than 50 counting zones were researched during the 3rd CSH, the sample of counting zones represents 20 per cent of the total sample used during the 3rd CSH. This

second assumption was applied in Maroua and Ebolowa where six and four counting zones were researched in each of these two towns. The passage from 10 to 20 per cent in this last case allows us to reduce the dispersion to relate the differences in the number of investigated counting zones between the big and small towns studied. It enhances the statistic representativeness of small cities' counting zones in the counting zone sample of the present study. In total, from table 1, the number of selected counting zones (30 counting zones: 10 in Douala, 10 in Yaoundé, 6 in Maroua and 4 in Ebolowa) is statistically representative (12.3%) of the population of counting zones researched during the 3rd CSH in the studied cities: 244 counting zones. In practice, the approximate sampling technique, based on the superposition of a certain number of eligibility qualitative criteria was used for the actual selection of research counting zones for each city: type of area hosting the counting zones, geographic location within the city, the issue of the counting zones in relation to the object of study. Selecting counting zones was not random.

The sampling of individuals of the statistical population studied is in function with the identification of the said individuals and migrant households. The sampling of the researched migrant households has also been done in three phases:

Table 1: Distribution of the number of counting zones selected per city

Towns	Total number of counting zones (3rd CSH)	Rate of determination of counting zones (in %)	Number of counting zones selected
Douala	100	10	10
Yaoundé	100	10	10
Maroua	28	20	6
Ebolowa	16	20	4
Total	244	-	30

- a) The determination of the sample size of researched migrant households which has faced a major challenge to its intelligible deduction for unavailability of accurate migrant households figures (parent population). It was therefore appropriate to use the formula for determining the minimum sample (n) when the sample size of the parent population is ignored: where: n = minimum size of sample; e = desired error. Admitting that the desired error is 5 per cent (0.05). Therefore the minimum sample should be of 400 migrant households for the result to be extrapolated with an accuracy or certainty of 95 per cent. The size of $n = 500$ migrant households adopted by the study is thus a proven, meaningful and relevant statistical representativeness, and allows the extrapolation of the results with a 95 per cent of certitude.
- b) The distribution of the sample between the researched cities involves the determination of a sampling rate (t) from the ratio between the total number of migrant households to be researched, that is, $n = 500$ and the total number of houses in the selected counting zones, that is $m = 54,012$ (according to the nomenclature document of the 3rd CSH in reference to RGPH 3). The quota of migrant households surveyed in every station/city of research is the product of the number of households in the said city and the sampling rate (t): or; p = number of migrant households to be surveyed in each city; v = total number of households in the city; t = rate of sampling. In total, the proportional distribution of 500 migrant households is 202 in Douala, 194 in Yaoundé, 54 in Maroua and 50 in Ebolowa.
- c) The distribution of samples of migrant households per counting

zone was done using the method of quota sampling. Quotas were changed in function with the total number of migrant households selected in the city and the number of researched counting zones. In practice, the number of migrant households surveyed in every selected zone in each city is proportional to the total number of migrant households surveyed in the said city and inversely proportional to the number of counting zones selected to this effect or: number of the migrant households surveyed in each of the counting zones selected in the city; p = total number of migrant households researched in the said city; z = number of counting zones selected for the research. The average number of migrant households surveyed in each counting zone is 20 in Douala, 19 in Yaoundé, 9 in Maroua and 13 in Ebolowa (table 2).

In the field, the random sampling technique was used to select migrant households. The selection was random and non-discriminatory. The general procedure, including document research, can be structured into nine phases: document research in three academic cities of the country (Douala, Yaoundé, Dschang)

and development of an analytic literature review on the study's objectives; defining a variable-analysis profile; emphasis on a needs matrix; preparing a data collection document; testing the data collection tools; readjusting and producing data collection tools; preparing teams for the field; fieldwork, recruiting and enabling data collectors; data collection; and recording interviews on digital media (CD).

Analysis of the collected data

The processing and analysis of collected data was structured in three phases. The first phase was based on processing the data using two complementary techniques: manual and digital processing. Manual processing uses the interview transcriptions and prepares individual records for pre-codified counting, manual counting of transcribed interviews is entered into individual pre-codified counted forms. Digital processing uses slip encoding, editing the input template via a statistical data analysis and counting interview data from the individual records of the transcription count.

Table 2: Diagram of sampling of counting zones and migrant households

Towns	Sample of counting zones			Sample of migrant households		
	Total number of counting zones (3rd CSH)	Rate of determination of counting zones (in %)	Number of counting zones selected	Total number of households (RGPH3 exploited by 3rd CSH)	Total number of migrant household to survey (1)	Average number of migrant household to survey by counting zone
Douala	100	10	10	21,850	202	20
Yaoundé	100	10	10	21,040	194	19
Maroua	28	20	6	5,797	54	9
Ebolowa	16	20	4	5,325	50	13
Total	244	-	30	54,012	500	-

(1) Rate of determination: 0.000925.

The second implementation phase consists of analysing processed data following three approaches: qualitative, quantitative and spatial. The qualitative approach utilized content analysis. It reconstructed explanatory and analytical models of the study objectives from associations and categorizations, deep meanings, and intentions, very often latent and not directly perceptible from the simple reading of the document. The quantitative approach is based on the mono-variable then multi-variable data analysis and spatial approach. It resulted in the quantification of categorization, structuring, and typologies issued from a qualitative analysis. Finally, spatial analysis allowed the representation of qualitative variables quantified in space. It resulted in spatial categorization, structuring and

quantified typologies. It also led to identifying geographic patterns and spatial variations of internal migration in relation to health and urbanization. The third operational phase of data processing hinged on interpretation following a dual approach: classical and predictive interpretation.

Conclusion

Despite being well planned, the methodology struggled due to time constraints. The division of labour, a significant increase in human capital and simultaneous data collection in four cities by teams trained for the task all helped to complete the study on time. At this stage, it is legitimate to ask if the obtained results reflect the previously set objectives and goals.

4. Analytical literature review

Introduction

The aim of this chapter is to critically analyse the literature on internal migration in relation to urbanization and health in Cameroon. This is a review of the analytical and structured literature, based on three main areas of interest, which support the objectives. The main problem stems from the literature's contribution to the constructive logic theory of internal migration. Migration is seen as a cause and/or challenge to development in general and health and urban development in particular. The primary focus is on the state of internal migration. The work here is to make a comprehensive review of the existing literature on internal migration. Analysis of the literature regarding the relationship between internal migration and urbanization on the one hand and between internal migration and health in urban areas, on the other hand, are respectively the second and the third focus of interest.

4.1 State of the internal migration issue in Cameroon

The existing scientific literature aims at identifying the state of urban or rural migration and then profiling it using a directory of similarities

and differences. The combination of objective variables such as sex, profession or occupation, itinerary, social status, etc. are thus considered relevant. The main idea behind this study is that there are social determinants in migration, further affected by urbanization and health.

This way of thinking is at the heart of characterizing internal migration, which is the movement of people from one region of the country to another, in order to establish a new residence (IOM, 2011). The place of residence refers to the area where the migrant has continuously lived for at least six months and one day, not counting temporary absences due to holidays or work assignments (UN, 2008:111). The term 'region of the country' includes several meanings: political, administrative, cultural, historical and geographical. The major internal migration trends in Cameroon help to highlight the magnitude of the phenomenon.

According to the statistics published by the CBCPS (2010), internal migrants represent 20.5 per cent of the population of the West, 18.9 per cent of the Central Region, 13.9 per cent of the Far North and 3.9 per cent of Adamawa. From a historical perspective, many archaeologists show that human beings have been in the present territory of Cameroon

since 5000 BC (Corvevin, 1993). The main settlements occur between the 17th and 19th centuries and led to the current geographical distribution of population. The population's movement – seeking places to live – within national borders have shaped the ethno-spatial configuration of Cameroon. Therefore, some cities owe their creation to these migrations – Douala, Bamenda and Foumban. Beyond the settlement process and the installation of a large number of groups of people in pre-colonial Cameroon, internal migration continued throughout the 19th and 20th centuries. Internal migration, observed during the colonial period, was linked to three main factors.

Firstly, there was the flight from colonial persecution and repression due to forced manual labour constructing roads and railways in Cameroon: both German and French-British. Many people were displaced for territorial planning: construction of roads and creation of agro-industrial plantations. Secondly, the suppression of subversive people during the struggle for independence in Cameroon led to several internal migration movements: several ethnic groups are now scattered across the country. Thirdly, social and environmental factors caused further displacement as people searched for fertile lands in West Cameroon. In addition ethno-spatial proximity of people, ethnic tensions and the effect

of numbers are determinants of the displacement of several populations in connection with environmental constraints.

Interest in this sociohistorical reading lies in the emphasis on internal migration as a cultural value in certain regions of the country, such as West Cameroon (Dongmo, 1980:168). The predominance of migration among the people of West Cameroon, due to the lack of land, overpopulation and a sort of moral community-orientated economics, may not apply to the overall population of the country. Many people in Cameroon live in the same situation as those in the West, but they prefer to stay in their natural environments for security reasons, personal convenience, etc. (Van Santen, 2012:255-288). Nonetheless, the Second Survey on Employment and the Informal Sector (EESI-2) underlines that certain populations are more willing than others to migrate, but it is not always the same factor which is the precursor element of each migratory route (NIS, 2011). In fact, an individual can feel at ease in a relatively difficult social milieu. Hence, there is an ambiguous relationship between migration and life expectancy, urbanization and health.

Spontaneous migration has intensified since independence in the 1960s in many African countries. It continues today, even if migrations which are

'controlled', planned or organized have taken more importance. Planned migration is also underpinned by a specific logic. This form of migration allows us to understand and better appreciate the official theory that characterizes the migration policy implemented between 1960 and 1982 in Cameroon. The phenomenon of migration directed by the government is one of the causes of conflict in the North¹ (Alawadi Zelao, 2006:324). Land conflicts between migrants and landowners seems to be a major concern for specialists in internal migration (Watang Zieba and Lieugomg, 2006; Van Santen, 2012).

Toupouri migrants move to *karals* (vertisols) that favour the cultivation of *mouskwaris* (seasonal sorghum) or to rice farms managed by the Expansion and Modernization of Rice Cultivation in the Yagoua Company, in the extreme North of Cameroon (WatangZieba and Lieugomg, 2006:6). Therefore, return migration is also a component of urban growth. It is part of the process of urbanization, as the population movement into and out of the cities reflects the capacity of urban economies to attract assets from rural economies. However, as evidenced by the transfer of funds from urban migrants towards other cities or their regions of origin

(Meka'a, 2007), urban and rural economies are intertwined. Small rural region centres (such as Bazou, Balengou, Baména, in the West) provide urban infrastructures (Gubry, 1996:437). Migrants from these regions may have the possibility to perform income-generating activities when they return to their villages. Furthermore, these populations can move to other centres to meet their needs, but not permanently; hence the term "pendulum migrants" (Meka'a, 2007:152). Living in a region is not just a matter of residence: with mobile phones and the development of urban/interurban transportation, migrants move easily and symbolically mark the space with their presence (De Bruijn et al., 2001).

The observed trends, based on retrospective data from recent national surveys, show that return migration now tends to stagnate, and even decline, whereas urban migration progresses² (Evina, 2009). Urban migration is strongly influenced by natural factors, since there are rural areas environmentally predisposed to abandonment: the mountain dwellers of North Cameroon cannot continue to live among the rocks where they are exposed to risks. It is the same with the inhabitants

1 Great North or 'North-Cameroon' refer to the set of three regions: North, Adamaoua and Extreme-North.

2 The 1976 census has shown that in towns of more than 10,000 inhabitants, the proportion of internal migrants in relation to the entire urban population is very high; more than 50 per cent.

of the equatorial forest where the presence of trees and the lack of working tools, such as chain saws, makes food cropping difficult. The extended argument according to which the rural exodus contributes to the impoverishment of abandoned cities and villages (Lututala Mumpasi, 2007:7) is therefore reduced. All small occupations carried out by migrants serve to mitigate the weakness of increasing urbanization. If it is paradoxical to question the return of migrants to their place of origin and urbanization, we must nevertheless reserve the right to make conclusions on return migration.³

Rural exodus can be disastrous in the sense that in Cameroon, as elsewhere in Africa, there is “urbanization without development” (Cheru, 2007:49). We should consider what the concept of “urbanization without development” means, suggesting that the Cameroonian post-colonial city is mostly a creation of political power (Mimché and Fomekong, 2008:244), but it should be noted that in the city, a migrant may benefit from relatively better living conditions

given the presence of more elaborate infrastructure without taking into consideration the cost (Gubry, 1996:12-13).

4.2 Current scientific view on the relationship between internal migration and urbanization

Internal migration is not the same in all regions of Cameroon. A descriptive study of migrants can lead to an impasse on the issue of the relationship between internal migration and urbanization in Cameroon. Under this relationship, the existing literature agrees that the rural exodus is the main issue. Migration is presented either as a cause or consequence in terms of the crisis of urbanization (Gubry, 1996). This second view is widely shared by urbanization specialists, who through the specificity of urban systems described, illustrate that migration in all its forms (temporary or permanent) contributes to the urbanization process.

Three categories of cities can be distinguished in Cameroon: pre-colonial (Foumban, Maroua), large villages transformed by colonial powers (Limbe); rural centres transformed to administrative headquarters through presidential decree, which gave them the status of cities (Hamadou, 2012:328-329).

³ Due to the complexity of return migration, which has increased since the mid-1990s, during the period of strong economic recession in Cameroon, specific research was done on the theme (Research on Migration Return or IMR) by the Ministry of Scientific and Technical Research, with CEPED and IFORD, with the support of Mission of the ORSTOM of Yaoundé in 1992.

The implementation of public action programmes in certain regions of the country has led to the outbreak of exponential population growth and rapid and uncontrolled urbanization of new areas around construction sites, industrial sites, and agro-business. The management of State land assets is part of the present political issue. The draft study by the National Monitoring Network of Public Policy and Strategies for Cooperation/ Dynamic Citizen called "Plea for the fight against forced evictions in the city of Douala, reported cases of forced evictions in the MAGZI industrial zone of Bassa-Douala in Cameroon", produced in 2011, showed that 88.3 per cent of inhabitants in areas at risk of forced eviction are migrants from other regions than the Littoral zone.

In general, disadvantaged migrants live in slums with high exposure to risks. The occupation of land precedes urban planning (Meva'a Abomo, 2011; 2006b). The result is the crystallization of a land crisis, from which results the idea of urban eco-paralyses in Douala (Meva'a Abomo, 2006a). In Cameroon, the informal sector often compensates for the inability of the government to improve the living conditions of urban populations. The NIS notes that 90.4 per cent of the active population is employed in Cameroon, the informal sector representing 90.5 per cent of

this ensemble, and 53 per cent of the agricultural sector (NIS, 2011). The study "Impact of development of urban agriculture on the demographic transition of southern cities: the case of the Mbanya watershed in Douala (Cameroon)" reveals that 95.8 per cent of urban farmers are migrants, 97.5 per cent have no qualifications and 70 per cent are women (Meva'a Abomo et al., 2011).

The informal sector provides massive employment without reversing the trends in insecurity and banditry. Many sources of police or journalist information, reporting on the many faces of urban crime, highlight how gangsters use informal sector services to commit their crimes. The work on urban crime does not find migration to be a factor of that phenomenon. Urban crimes are supported by traditional or modern criminal logistics and by consumption of narcotics (Mbarkoutou Mahamat, 2012:165). Instead of being presented as a factor of insecurity, urban migration is concomitant with insecurity, given the number of offences or crimes committed in areas of high concentration of migrants. Urban migrants use the same itineraries as (urban) bandits, but the assimilation migrants/bandits should be avoided at all costs.

4.3 Urban health tested by internal migration

The link between internal migration and urban health is not developed in the scientific literature in Cameroon. This theme is treated implicitly or in a derivative manner. The literature informs about the social conditions in which internal migrants live and represent their stay. The authors pay particular attention to the health profile of the migrant, the prevalence of diseases, and public action concerning health and quality of care. In Cameroon, previous studies on migrant health (in the region of origin or previous place of residence) are almost absent. While other research objectives can be set, studying the health of migrants before their departure could help avoiding generalizations, made without empirical basis, on the systematic increase of disease transmission due to the migration process.

One of the crucial problems of migration is the mobility of social diseases and illnesses. One of the migrant quarters in Douala (Bepanda TSF) was a main focus of the national epidemic of cholera in 2004 (Assako Assako et al., 2005). The city, which is the principal point of the fall of internal migration in Cameroon, is full of diseases from the migrants' region of origin. The spatial demographic explosion in Douala has led to a chaotic occupation of

urban spaces. It is also responsible for the risk associated to the health of households. Exacerbation of the holo-endemism of several insalubrious pathologies, for example the increasingly penetrating urban malaria, is hence registered (Meva'a Abomo, 2011). In view of the rapid urbanization and disorder, insufficient supply and the quality of the health service, the development context of internal migration provides some understanding of the dynamics of the cholera epidemics during 2004 within the Cameroonian territory (Assako et al., 2005). The different phases of the epidemic show the spread of cholera in two weeks from a non-equipped well in an insalubrious neighborhood of Douala to the economic capital of Cameroon through contamination and transmission processes mainly based on the intra-urban migration of infected subjects and objects, the water run-off and the use of infected objects. Subsequently, the epidemic spread to other parts of the country. In the end, seven of the ten administrative regions were hit by this epidemic. Nevertheless, the opposite evolution may be possible, as the mode of land occupation also determines the state of migrants' health.

In addition, the socialization of health risks due to the multiform pollution can also be observed in quarters with a high population of indigenous

people, as was seen during the cholera epidemics of 2011 in Yaoundé. Despite this, the internal migration of the illness and patients has retained residual attention from Cameroonian research. However, the migration of patients helps to evaluate health and medical engagement (Meva'a Abomo, 2006c; 2011). More complex and ambiguous phenomena are likely to mislead researchers. All the regions in Cameroon do not receive the same attention, as a result of the singularity of their social systems (urban migration and health).

The results of the case studies carried out so far are likely to provide some understanding of the social processes at work in the entire country. Due to that, it is convenient to carry out a careful reading of the different existing works in order to draw out the essential aspects by asking the following questions: "What do these studies allow us to know or to think? What directives or guidelines does the existing literature suggest to us? What does it make us hope for?" (Eboussi Boulaga, 2012:7).

Conclusion

At the end of this study, it appears that the existing scientific literature on the topic: internal migration, urbanization and health in Cameroon, is not negligible despite the lack of sufficient qualitative and quantitative studies so far. The study of internal

migration goes back to pre-colonial Cameroon with the settlement of populations.

Critical views mentioned in this analysis should not be misunderstood, as they are meant to be positive and constructive. This study analyses the content of documents to feed a political debate that is socially expected and scientifically legitimate. The avenues opened for discussion will enrich the debate. Finally, this state of scientific knowledge is the starting point for the production of new knowledge about the internal migration of people in the framework of the project on 'internal migration, urbanization and health in Cameroon'; a project whose purpose is to stimulate the integration of internal migration as fundamental in the planning of human development in Cameroon.

5. Results of the study

Introduction

The study ‘internal migration, urbanization and health in Cameroon’ was conducted in four cities sufficiently representative of the urban environment of Cameroon: Douala, Yaoundé, Maroua and Ebolowa. Data collection was carried out among a sample of 500 migrant households proportionally distributed in the researched cities based on demographic criteria. The objective of this chapter is to analyse these results in four main areas: the characterization of migration in the surveyed cities, the analysis of the internal migration/urbanization interaction, the study of the internal migration/urban health interaction, and finally the formulation of realistic and achievable recommendations.

5.1 Characterization of the urban migration phenomenon in surveyed cities

The present analysis characterizes the phenomenon of urban migration from five determinants: migration factors, migratory itinerary, duration of the migratory adventure, migration intentionality, and the sociodemographic characteristics of urban migration.

State of the factors and types of urban migration

Urban migration is maintained in the surveyed cities by six main factors acting individually or in combination. Based on these factors, the present study has revealed eight types of migration: labour migration, health migration, educational migration, migration due to social conflict, environmental migration, professional migration (job assignment), forced migration (following the expropriation of land for public purposes) and asylum migration from poverty⁴. If the term ‘asylum migration of poverty’ is original to this study, this phenomenon is observed in many other cities worldwide. Socioeconomic migration (job search and asylum from poverty with job search), and social migration (health management, education and social conflicts) are predominant with 64 per cent and 21.6 per cent respectively of migratory flux towards the cities studied. The intense urban migration experienced in the studied regional capitals mainly happens in

4 Asylum migration from poverty is the act of migrating to urban areas with the objective of searching for a piece of land, constructing a house to live in permanently without returning to the place of origin. Many urban exiles are buried in this area after their death. These migrants search for work or develop activities that yield revenue for their lives.

the context of efforts carried out to reduce poverty and improve living conditions.

Despite the problem of qualification, urban migrants constitute an impressive human capital. The widespread process of changing occupations in the informal sector reflects a problem of canalization and valorization of this human potential for development, either urban or rural. National development must therefore be adequately governed to anticipate and capitalize on the possible benefits of internal migration. Touristic migration is considered as a form of non-socioeconomic migration. Now, if socioeconomic migration is 64 per cent, touristic migration represents 36 per cent

of the internal migration to urban areas in Cameroon. In geographical terms, a spatial variation in migration patterns was observed between the cities studied (table 3). According to the summary analysis, socioeconomic and social migration are predominant in all cities studied, being respectively 62.4 per cent and 17.7 per cent in Douala, 64.9 per cent and 25.1 per cent in Yaoundé, 75.9 per cent and 16.7 per cent in Maroua and finally, 54 per cent and 28 per cent in Ebolowa. However, touristic migration in the preceding sense declined, which also varies due to the functions of the cities, being respectively 37.6 per cent in Douala, 37.1 per cent in Yaoundé, 24.1 per cent in Maroua and 46 per cent in Ebolowa.

Table 3: Distribution of types of urban migration identified within the surveyed population (in %)

	Search for work	Shelter from poverty	Health	School atten- dance	Social conflict	Environ- mental	Job assign- ment	Terri- torial planning
Douala	37.6	24.8	5.2	10.1	2.4	0.5	18.8	0.5
Yaoundé	46.9	18.0	6.1	13.4	5.6	0.5	9.3	0.0
Maroua	74.1	1.8	0.0	13.0	3.7	0.0	7.4	0.0
Ebolowa	42.0	12.0	4.0	16.0	8.0	0.0	18.0	0.0
Percentage of the total number of surveyed migrants	45.6	18.4	5.0	12.2	4.4	0.4	13.8	0.2

Source: Field enquiry, November 2012.

Analysis of migratory routes

The qualitative analysis of internal migration routes towards urban areas led to singling out two major dynamics: intraregional and interregional migration. Each dynamic has three main migratory movements: village-city migration (rural exodus), city-city migration (inter-urban migration) and village-city-city migration (mixed internal migration). Six types of urban migration have been identified based on the migration routes. The study identified a predominance (59%) of dynamic interregional urban migration routes. Analysis of the origin of migrants shows that 26.2 per cent of internal migrants are originally from the West region of Cameroon.

Spatial analysis of migratory routes and migrant origins reveals a spatial variation in these two variables of internal migration. City-city interregional migration (34.2%) and intraregional migration (23.8%) are the dominant migration forms in Douala. The surveyed migrant households are heterogeneous in terms of region of origin. The predominance of migrants from the Western and Central regions, respectively 37.1 per cent and 17.3 per cent of the migrant population surveyed, was recorded in Douala. In Yaoundé, city-city interregional migration (40.2%) and city-city intra-regional (20.1%)

are the dominant movements. A predominance of migrants from the Central region (30.4%) and West region (23.2%) was recorded in the city. Conversely, in Maroua, city-city intraregional migration (40.7%) and city-city interregional migration (29.6%) are the dominant movements. Those from the Far North regions (50%) and the Northwest (13%) predominate in the secondary pole. Finally, in the town of Ebolowa, city-city interregional migration (60%) and city-city intraregional migration (16%) are the dominant migration patterns. A predominance of people from the Centre (36%) and South (28%) was recorded in the city.

Assessment on the duration and stability of urban migration

Analysis of the migration duration shows that 1.6 per cent and 1.8 per cent of migrant households have spent 50 and of 40-50 years in urban migration respectively (figure 1). However, almost 60 per cent and more than 75 per cent of migrants had settled in the last 10 and 20 years respectively (figure 2). The improvement of migrant living conditions proved to be the main driver of this strong urban settlement. A high percentage (51.2%) of displacement to other cities of the country offering more opportunities was registered near the population

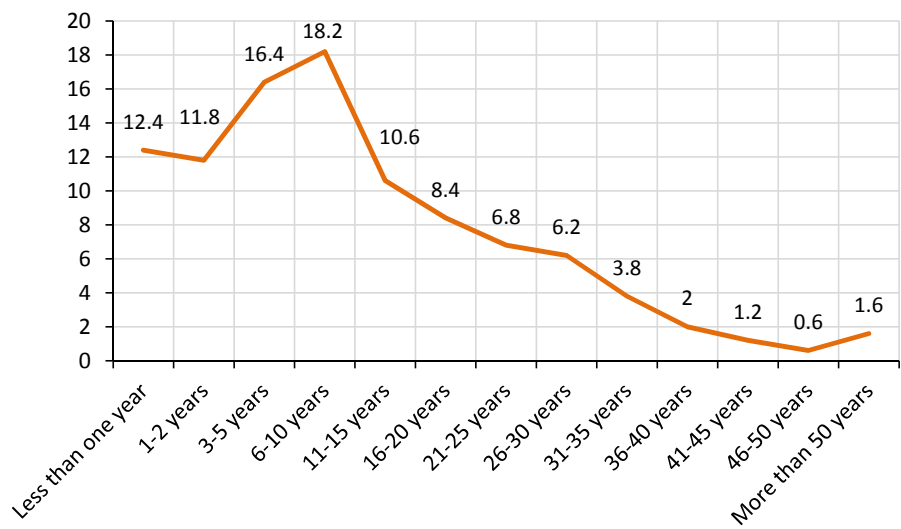
of the surveyed migrant households. Figure 3 shows that the percentage of inter-urban migration is high in Maroua with 62 per cent of favourable migrant households. Furthermore, not all migrants find satisfaction in cities. An average of 43 per cent of migrant households favour return migration. Figure 4 shows that the percentage is greater in Ebolowa with 66 per cent of migrant households favouring return. Nevertheless, this return is conditional and the conditions vary by migrant household and by city surveyed (figure 5). The conditions for return migration vary according to cities and individuals.

Most surveyed migrants (59.2%) have at least one child. A high number of young mothers were registered in the migrant population. However, this fact may be related to sociocultural registers and the economic context of poverty. A total of 38 per cent of migrant households have at least one migrant girl of school age who is already a mother. This high birth rate among school age migrant

girls operates in a context of lack of material and financial means. It is a lever of poverty perpetuation and rapid demographic growth in cities. It is a vector of the mismatch between demand and supply in infrastructure and sociocommunity facilities. If by nature, the town attracts people through the opportunities it offers (formal and/or informal employment, access to health facilities and medication, education, etc.), unmanaged urban migration is today a real issue for urban development in the cities studied.

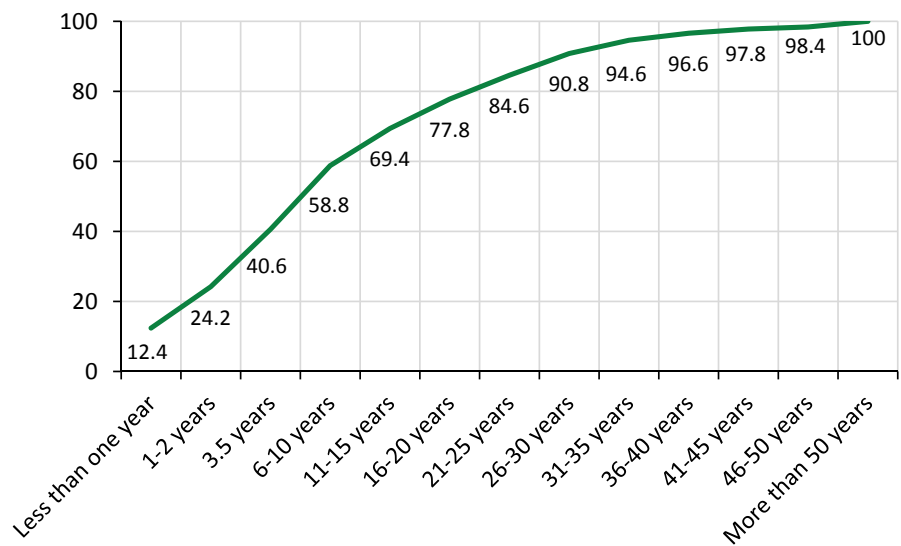
In general, 41.9 per cent of migrants wish for guaranteed work, 21.9 per cent want financial help to relocate, 19.1 per cent seek subvention from a revenue generator project. These conditions are generally socioeconomic. Overall, this analysis provides information about the migration perspectives of the migrant population surveyed. It thus can be used for prediction and forecasting.

Figure 1: Variation in durations of urban migration (in %)



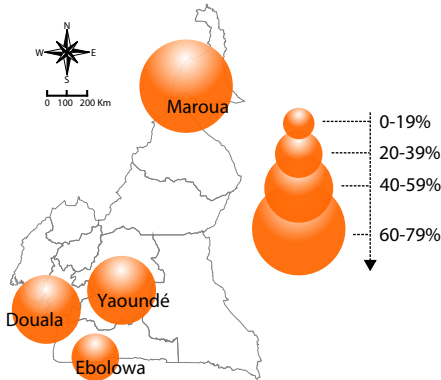
Source: Field enquiry, November 2012.

Figure 2: Cumulated durations frequencies in urban migration (in %)



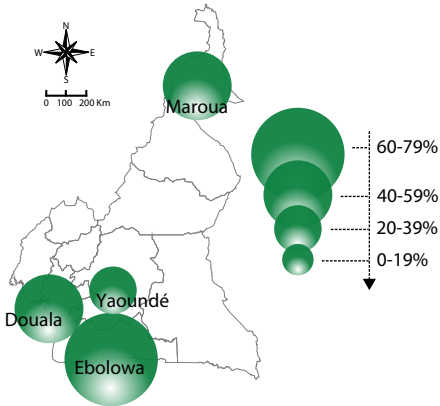
Source: Field enquiry, November 2012.

Figure 3: Proportion of migrant households willing to migrate to other towns (in %)



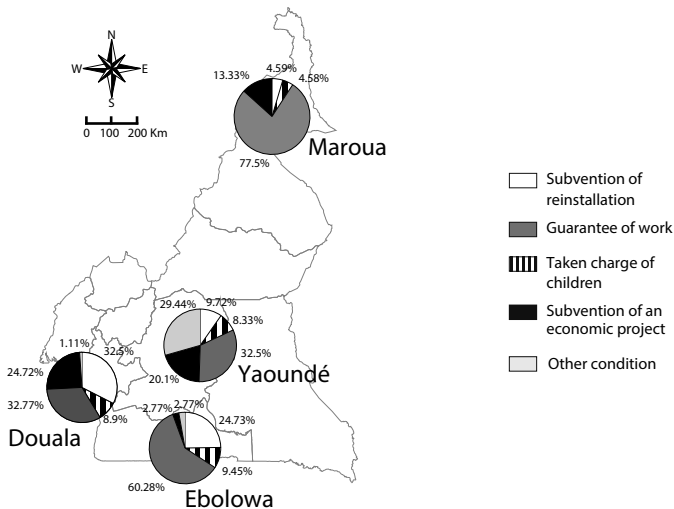
Source: Field enquiry, November 2012.

Figure 4: Proportion of migrant households favourable to return migration (in %)



Source: Field enquiry, November 2012.

Figure 5: Variation of conditions for return migration (in %)



Source: Field enquiry, November 2012.

5.2 Internal migration and urbanization

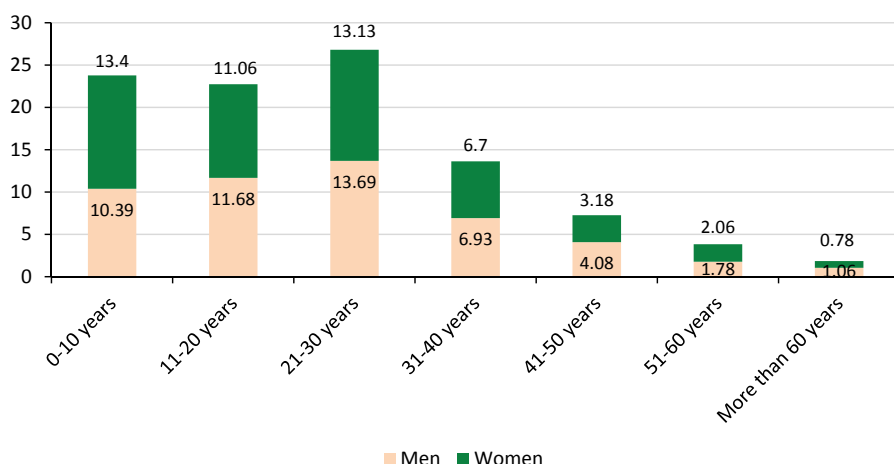
The analysis of the impact of internal migration on urbanization conducted in this section is based on five points: sociodemographic dynamics, planning, environment, economy and urban security.

Internal migration and sociodemographic urban dynamics

A total of 1,790 migrants were identified in the 500 surveyed migrant households with an average of 4 migrants/migrant household. The populations of migrant respondents were mainly male with 53.1 per cent men and 46.4 per cent women. A strong variation by age and sex of this

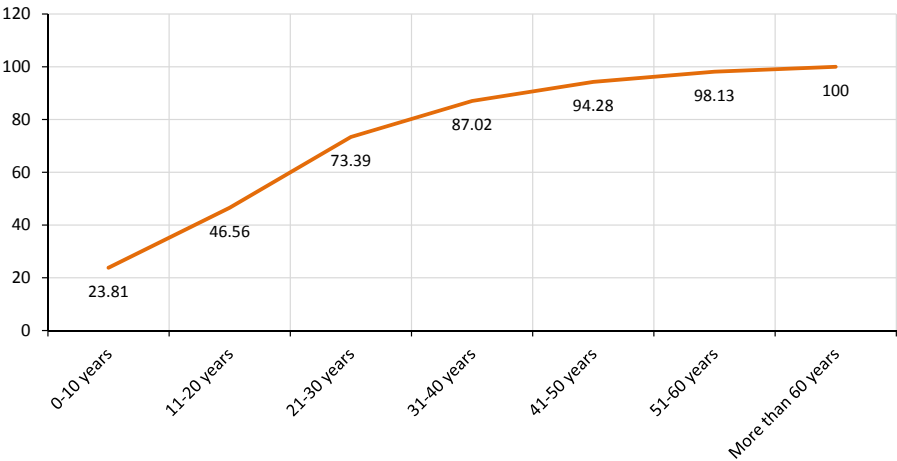
population was observed. According to figures 6 and 7, the majority of the population is young with more than 70 per cent of individuals being under 30 years old. Figure 8 indicates that surveyed urban migrants have a marital profile dominated by singletons (48.2%). 30.8 per cent are married migrant households, 38.7 per cent are single parents. The low educational level of migrants predisposes precariousness. Figure 9 shows that 60.2 per cent of surveyed migrants have at least a general secondary education level. The high proportion of migrants with higher levels of education (39%) shows the dropout phenomenon of migrants at university level.

Figure 6: Population distribution of surveyed migrants by age and sex limit (in %)



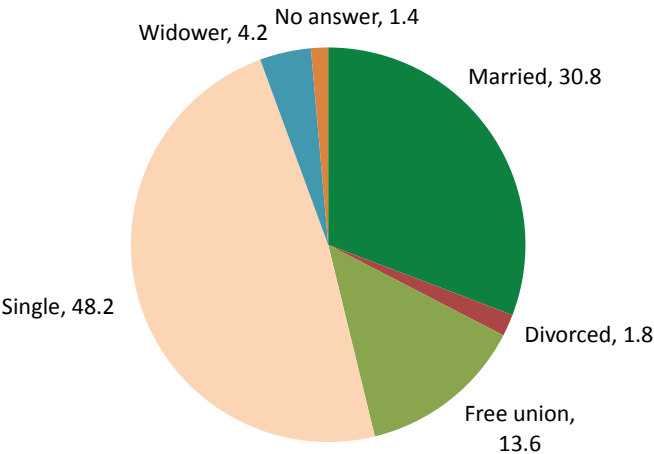
Source: Field enquiry, November 2012.

Figure 7: Cumulated frequencies of population distribution of the investigated migrant by age limit (in %)



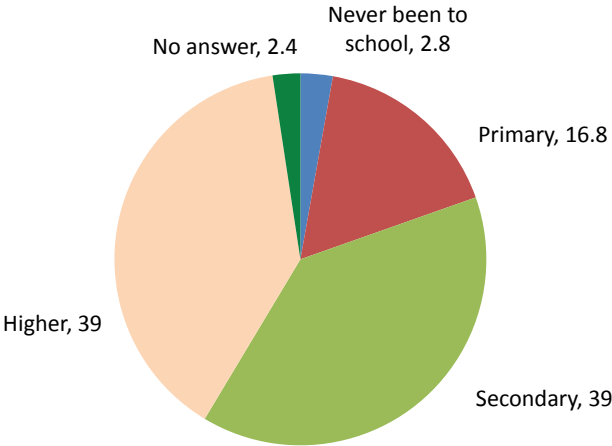
Source: Field enquiry, November 2012.

Figure 8: Evaluation of the marriage status of surveyed migrants (in %)



Source: Field enquiry, November 2012.

Figure 9: Evaluation of the education levels of surveyed migrants (in %)



Source: Field enquiry, November 2012.

Internal migration, urban planning and environment

- Internal migration and urban planning

The lack of regular updating of urban planning is a determinant of the urbanization crisis in the surveyed cities. As an example, the last urban planning of Douala, the biggest city of the country was dated 1983. The spatial-demographic expansion of the studied cities operates faster than the capacity of renewing the tenure of urban soils. The incidence of migration flows is an important cause of overburdened management in the cities. The very low prevalence of land titles within the surveyed migrant population is a relevant indicator of land crisis in the four studied cities. The occupation of undeveloped

zones such as swamps is marked by the irremediable proliferation of a spontaneous unhealthy environment developed by migrants. This risky planning damages the ecological balance in very sensitive areas. It results in recurrent catastrophes, such as flooding, and the emergence of the phenomenon of sinking houses in swampy areas.

Overall, 31.8 per cent of surveyed migrants are homeowners with an accompanying piece of land. However, 75.4 per cent of these migrant owners do not have legal land titles and 74.8 per cent still do not have building permission. The proportion of migrant home and land owners in each of the surveyed cities varies (table 4). When settling, non-owner migrants agree to lodge in risky and

precarious conditions. No migrant tenants have a legal lease contract. Just 27 per cent of migrants have an informal lease contract co-signed by the migrant and landlord. The State records show significant shortfalls in terms of tax charges for commercial use of social housing.

- Internal migration and urban environment

The urban environment is subject to several dysfunctions in the surveyed cities. This study focuses on three environmental models: the management of household rubbish, of waste water and land pressure. Regarding household refuse, migrants are part of a context where all urban actors are responsible for insalubrity in the surveyed city. Modern solid household rubbish management is practiced by 59.8 per cent of migrant households surveyed. It consists of collecting and transmitting the rubbish to the dealer in charge of hygiene and sanitation using dust bins or trucks that collect waste. Inappropriate management is practised by 30 per cent of surveyed migrant households. This consists of

emptying of household rubbish into bins found in open areas or spaces like pavements, home gardens, streams and drains. Finally, 8.8 per cent of migrant households practise a mixed management system consisting of the first two. Analysis of site research reveals the predominance of modern solid waste management of household refuse in each of the four cities (figure 10).

The opposite situation is observed concerning management of domestic waste water. It was found that 69 per cent of surveyed migrant households do not have modern sanitation. Just 19 per cent of surveyed migrant households have a modern sanitation system. Furthermore, 10.8 per cent of migrant households practise a mixed management system which consists of combining the first two modes of management. There is a predominance domestic waste water being thrown away on the street. Site survey analysis showed the same chaotic management in each of the surveyed cities (figure 11).

Table 4: Assessment of housing ownership, possession of land titles and building permits of the surveyed migrant population (in %)

	Right of ownership of house	Possession of a land title	Possession of building permit
Douala	43.1	34.2	33.7
Yaoundé	23.7	19.6	23.7
Maroua	35.2	20.4	7.4
Ebolowa	14.0	10.0	16.0
Percentage in relation to the total number of surveyed migrants	31.8	24.6	25.2

Source: Field enquiry, November 2012.

Internal migration, urban economy and urban security

- Internal migration and urban economy

Urban migration has created a new form of economy in Cameroonian cities since the 1980s: the informal economy which today is the largest supplier of employment. Overall, 76.4 per cent of interviewed migrants work in the informal sector. Income from informal activities precedes a substantial improvement in living conditions: 56 per cent of migrants

have worked in this sector since their arrival in cities. These revenues also allow 32.8 per cent of surveyed migrants to carry out social projects. The informal sector today is one of the main income generators of territorial self-governed cities. Migrants therefore contribute to local development in the cities. Although not reported in the trade register, several informal activities also contribute to the bailout of State funds and to the consumption of economic goods.

Figure 10: Varied modes of household rubbish management within the investigated migrant household population (in %)

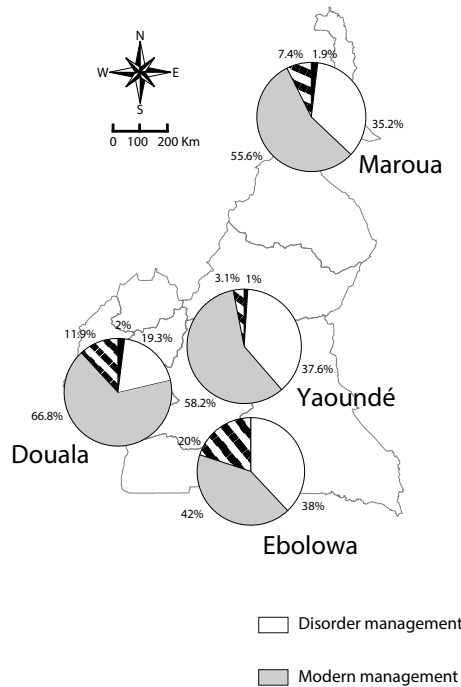
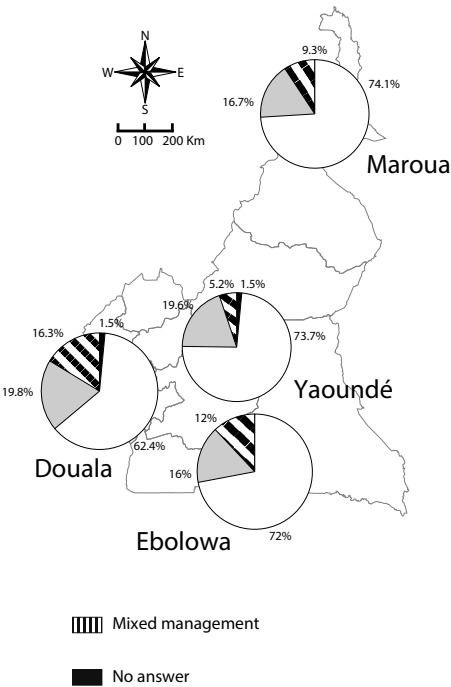


Figure 11: Variation modes of management of domestic used water with in the investigated household population (in %)



Source: Field enquiry, November 2012.

- Internal migration and urban security

The relationship between internal migration and urban security exists on three levels. The first relates to the perception of migrants as a factor of urban insecurity. Although 23.4 per cent of interviewed migrant households house at least one unemployed migrant (adult or adolescent), it is difficult to conclude

that migrants are a factor of urban insecurity without having material evidence. No migrant aggressor or thief has ever been identified directly or indirectly by denunciation. However, interviewed migrants spoke of cases of aggression without revealing the aggressors' identities.

The second level relates to the perception of migrants as victims of urban insecurity. At this point, 132

physical aggressions were identified in the last two years within the sample of surveyed migrant households. In general, 38.6 per cent of migrants are victims of aggression; 6.1 per cent has been victims four times, 6.1 per cent has been victims five times. A total of 23 sexual attacks were also registered: Douala: 60.9 per cent, Yaoundé: 34.7 per cent, Ebolowa: 4.3 per cent and none in Maroua. Despite a low turnout in the production of this information, it appears that migrants are exposed and vulnerable. In other words, they are victims of urban insecurity.

The third level relates to the perception of migrants as instigators of urban insecurity. Here, field observation indicates that migrants are active players in urban security. They participate in vigilance committees either physically or through financial contributions. These contributions are particularly important in view of the cosmopolitan nature of agents and defence forces in the surveyed cities.

5.3 Internal migration and urban health

This section analyses the influence of internal migration on the permanence of epidemiological risk and on the crisis of health care. It concludes with a comparative analysis of migrant health state before and

after migration in the current city of residence.

Internal migration and epidemiologic dynamics in urban centres

Internal migration takes place under conditions that do not always guarantee the health integrity of migrants and other urban populations. The development of spontaneous habitats and slums by migrants is one of the principal vectors of epidemiologic risk in the researched cities. These urban sites are epidemiological frameworks, given the promiscuity and multiform environmental pollution. Migrant slums were the sites of vibrio cholera and of all the cholera epidemics registered in Douala, Yaoundé, Maroua and Ebolowa. The risk of contamination is real because migrant spontaneous slums suffer from a lack of drinkable water supply. It is also true that 63.8 per cent of the surveyed migrant households consumes pipeline water as drinkable water. This migrants' pipeline water is still exposed to the same contamination associated with alternative sources of supply for other uses. If pipeline water is used as drinkable water, well water, drill water, stream water is used for cooking, washing, bathing etc. Pipeline water is not yet contamination/risk free. Meva'a Abomo (2006a) indicates the presence

of suspended solids in the pipeline water of Douala, which is responsible for its brownish colouration. These hygiene conditions are favourable to the development vector-borne diseases. Malaria was contracted by 57.6 per cent of migrants interviewed after their relocation. Among others, 10.8 per cent of interviewed migrants contracted typhoid fever, 1.2 per cent tuberculosis, 1.6 per cent dermatitis and 0.8 per cent a sexual transmitted disease. A Yaoundé migrant has testified to contracting HIV after her urban migration.

Internal migration and the system of public health care

There is an inverse relationship between internal migration and urban health-care systems. Firstly, by its quality and capacities, the availability of public health care in urban areas is an element that causes migratory dynamics. The strong presence of health-care services, information, education and communication, good hygiene, compliance with preventative measures and finally the geographic area and cost of accessibility to public health institutions and medicines are described as elements that trigger migratory flows to urban health systems. Access to health-care

management was highlighted by 53.4 per cent of migrants who witnessed a substantial improvement in their health since their arrival in the surveyed city. Secondly, public health-care systems in urban areas fall victim to migration.

Migration is a cause of urban overpopulation in Cameroon, resulting in a strong demand for health care without an adequate system of care provision. This system thus operates at overload. The emergence of an informal modern health-care system, the development of the culture of auto-medication and the emergence of traditional medicine are all induced effects of insufficient quantitative and qualitative public health care in the surveyed cities. Poor migrants in general, therefore use different routes and different therapeutic mechanisms of health management. In practice, 42.2 per cent of interviewed migrants admitted using presumptive diagnosis. Conventional medical diagnosis usually only occurs in complicated illnesses. Table 5 below presents the occurrence of each type of diagnosis in the different cities.

Table 5: State of the prevalence of illness diagnosis types within the surveyed migrant households (in %)

	Presumptive diagnosis	Legal medical diagnosis
Douala	39.1	57.9
Yaoundé	48.5	47.4
Maroua	38.9	42.6
Ebolowa	34.0	56.0
Percentage in relation to the total number who provided information	42.2	52.0

Source: Field enquiry, November 2012.

Table 6: Evaluation of requests for therapeutic treatment within the surveyed migrant households (in %)

	No answer	Legal modern medicines	Informal modern medicines	Self-medication	Traditional medicine	Mixed treatment	Religious healing
Douala	2.0	53.0	24.0	6.7	6.9	19.3	0.0
Yaoundé	2.6	45.8	28.9	7.7	10.8	8,8	0.0
Maroua	16.7	52.6	7.1	9.0	9.3	0.0	3.7
Ebolowa	12.0	45.4	12.0	5.4	8.0	4.0	0.0
Percentage in relation to the total number who provided information	4.8	49.2	18.0	7.2	8.8	11.6	0.4

Source: Field enquiry, November 2012.

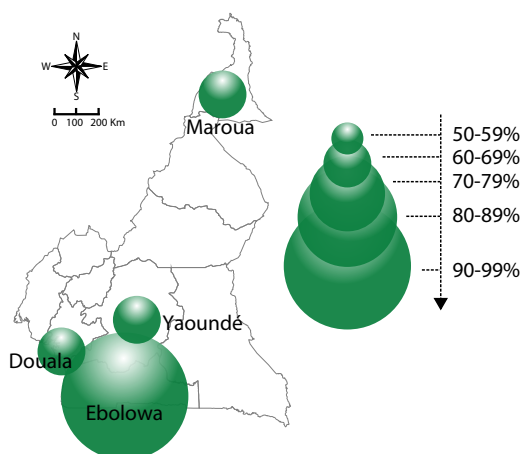
Six methods of managing migrants' health problems were identified (table 6). Modern legal medicines are used by 49.2 per cent of migrant households. Informal modern medicine is used via clandestine services, constituting 18 per cent of surveyed migrant households. Just 8.8 per cent of surveyed migrant households attested to using traditional medicine, 0.4 per cent requested religious healing in prayer groups, and lastly 11.6 per cent of migrant households used mixed medicine, that is, a combination of many methods.

There is a wide variety of locations that provide migrants with medicine. Four principal supply routes were identified: public pharmacies, community pharmacies or pro-pharmacies in hospitals, road pharmacies owned by informal providers, and outlets for traditional products. However, five drug supply routes were identified. 47.8 per cent of migrants interviewed used public pharmacies, 16.6 per cent pro-pharmacies, 28.2 per cent road pharmacies, 8.8 per cent in traditional medicine outlets and finally 11.6 per cent used a mix of supply routes.

Predominance of an improvement of the health of migrants once in town

Despite the status of internal migration as a lever of precariousness in urban areas, a comparative study of the health status of migrants between their former and current place of residence shows a substantial improvement. This improvement was reported by 53.4 per cent of migrants interviewed on average, 52.5 per cent of migrants in Douala, 45.3 per cent in Yaoundé, 74.1 per cent in Maroua and 66 per cent in Ebolowa. This improvement is a response to the observation of certain preventative measures, for example, the use of mosquito nets. In fact 70.2 per cent of interviewed migrant households have at least one mosquito net and 88.2 per cent of these mosquito nets have been impregnated. This strong appearance of impregnated mosquito nets is a solution provided by the distribution of this preventative material to pregnant women and children under five years in public hospitals. Figure 12, on the contrary, presents the proportion of these households in different cities.

Figure 12: Variation of proportions of migrant households having at least one mosquito net (in %)



Source: Field enquiry, November 2012.

5.4 Analysis of the results of the study

This section focuses on three points. It starts by an assessment of the methodology used, continues with the results analysis and ends with a presentation of the issues and challenges.

A methodological approach tested by generalizing the study results

The methodology applied in this study resulted in a better understanding of the interaction between internal migration, urbanization and health in the cities studied: Douala, Yaoundé, Maroua and Ebolowa. The qualimetric method used

the qualitative data collection technique (structured interviews) and dual analysis (qualitative and quantitative). The use of this method via the multidisciplinary and systemic approach allowed the development of categories, typologies and structures for links that relate to the study's objectives. These were derived from analysing popular discourse on the practised, experienced, perceived and represented urban migration patterns. Quantification of these elements through a structured qualitative analysis, followed by a fine-scale cartography of the research sites, reflects the success of the qualimetric method. However, generalizing the results to represent Cameroon as a whole highlights the

low statistical representativeness of the sample of cities studied (4) relative to the total urban population in the country (312). A more significant sample in terms of the number of researched cities (at least 5% of the total population of cities, about 16) would have produced more applicable results for the entire national territory.

Revealing the predominance of the positive impact of internal migration on urban and national development

The results of this study are generally indicative of an ambivalent function of migration in the four cities. On the one hand, this phenomenon is a multiscale challenge for urban development. It is the main factor of rapid population growth, simultaneously uncontrolled and uncontrollable. It is the lever for the emergence of spontaneous and dirty slums. It is inseparable from the causality matrix of the environmental crisis and health insecurity prevailing in the surveyed cities. These adverse effects are the result of a first paradigm of urban migration: *the migration of misfortune*. It is practised by a certain group: the disadvantaged migrants and the poor.

On the other hand, internal migration is not an issue for urban development:

- In sociodemographic terms, the demographic weight of the

researched cities is not only a factor limiting their development, it also has an undeniable impact on national development because this population represents a major flow of economic products. It induces a high consumption of goods and services that has a positive effect on the national economy. Both capitals Douala and Yaoundé, totalling more than a quarter of the total population of the country, also have the highest rate of urban consumption and labour provision in different forms. They are the lungs of the national economy.

- In terms of urban planning, it was noted in the field that sub-standard housing is not an exclusive neighbourhood for migrants. Neighbourhoods of non-migrants are also characterized by uncontrolled land use and squatter settlements. If the observed neighbourhoods of non-migrants are not spontaneous, they are not always planned, neither in part or in full. Several areas of non-migrants are much lower in quality and precarious than the migrant neighbourhoods. Moreover, *in-situ* observations reveal that migrants are proven developers of modern living, the best case being the resurgence of luxury buildings in residential areas of Douala (Bonapriso, Akwa, Bonamoussadi, Makepe), Yaoundé

(Bastos, Lake District, Mendong, Hippodrome, Odza), Maroua (Djarengol, Domayo, Palar) and Ebolowa (Angale, Mekalat). It is a way of living that follows urbanization standards that implicitly reconfigure the urban morphology of the research cities. In total, the migrant is not only a promoter of slums. He is also an engine of fast-growing residential areas in the studied regional capitals; an undeniable co-architect of modern and sustainable cities. This is a response to the migration of fortune, the second paradigm of urban migration practised by wealthy migrants.

- On the environmental front, migrants, regardless of their category, contribute to services in the inhabited space through maintaining their living quarters. In principle, their social integration is promoted by their involvement in certain community-orientated activities. Several health and safety committees have also been identified in the researched areas. Migrants invest in sanitation, release gutters, maintain roads and clear impassable roads in their living space. This dynamism is sometimes the only way of servicing the inhabited space in marginal urban areas (suburbs, marshy lowlands) that are difficult to access for health and safety

services (HYSACAM) and even for municipal officials in charge of city maintenance. Already, field visits indicate that non-migrants pollute as much as migrants. Piles of refuse in open areas, stagnant domestic waste water and polluted streams were identified in non-migrant quarters of Douala, Yaoundé, Maroua and Ebolowa. The uncontrolled management of refuse and domestic waste water are therefore not exclusive to migrants' quarters. Finally, migrants should not be considered as the only agents of degradation and pollution of the urban environment. They are also active players in the quest for regaining a sustainable urban environment. Their dynamism is also an undeniable development factor for sustainable development in Douala, Yaoundé, Maroua and Ebolowa.

- In terms of health, *in-situ* observations revealed that migrants are not particularly exposed or more vulnerable than non-migrants. Regarding the water hazard for example, interdependence and interpenetration of bodies of both surface and underground water ensure the spread of germs and contamination of all urban waters. The entire urban population (migrants and non-migrants) is

thereby exposed and vulnerable. The spread of germs in cities also occurs due to stray animals, people and contaminated objects. Public places frequented by both migrants and non-migrants are spaces of transmission of communicable diseases. The cholera epidemic of 2004 may be cited as an illustration. Starting from sub-standard wells (the main home of vibrio cholera) in a migrant neighbourhood in Douala (Bepanda TZF), the cholera first spread throughout the city, and then seven of the ten regions in the country (Assako Assako et al., 2005). Yaoundé, Maroua and Ebolowa were hit by the epidemics. Other field observations conducted during this study provide many informative elements that tell more about the epidemic dynamics. As mentioned above, in principle, non-migrant neighbourhoods are not always characterized by good health and safety conditions. The permanent risk of unhealthy disease is confirmed, as is the epidemic risk or spatial propagation. Ultimately, the health issue in the researched cities is not exclusive to spontaneous migrant slums nor is it inherent to migration.

- Urban migration is accompanied by deportation in cities using sociocultural practices such as traditional medicines. Despite its

drawbacks, the complementary role of this medicine is undeniable in the context of a mismatch between supply and demand for medical care services and of the general dysfunction of the urban health system. As underlined by Meva'a Abomo (2011, 2012a), the weak and unequal health coverage, the problem of financial accessibility to treatment and medication, the epidemiological supervising crisis and the paralysis of community health are indicative actors of dysfunction in the urban health system and justify the emergence of an increasing integration of traditional medicine in researched cities. Despite these shortcomings, the proximity of treatments offered in cities maintains a better sanitary situation for the surveyed migrant population. It is an undeniable factor towards the improvement of living conditions or human development of migrants. Hospital and clinics, public pharmacies, medical laboratories, in short the entire private sector of public health, is mainly controlled by migrants in Douala, Yaoundé, Maroua and Ebolowa. Most State officials working in the public health sector are also migrants. Traditional medicine makes a significant contribution to wellness. Similarly, the participation of migrants in community activities

of hygiene and sanitation in migrant and mixed (migrants and non-migrants) neighbourhoods reflects the contribution of this segment of the urban population to the promotion of community health.

- In terms of urban insecurity, the study results show that migrants are as much victims of urban insecurity as non-migrants. If the latter cannot be totally blamed as the cause of insecurity, it does not cause itself. Responsibility is rather shared between all urban actors. However, it has been established that migrants are preventers of urban insecurity through their participation in activities of vigilance committees created in the quarters since 1990. A substantial reduction of crime and burglary in houses has been registered since the introduction of this system of monitoring and community safety in the neighbourhoods. A system of self-financing was revealed by the vigilance committees. The inhabitants of the districts participated or financially supported the youths who patrolled each night. In addition, several thieves, bandits and aggressors are caught daily thanks to motorbike taxi drivers, the majority of whom are migrants. Their intervention in the form of a swarm of bees is generally faster than the police. Though not exonerating them of certain cases of aggression, urban migrants nonetheless contribute to urban security. There is therefore potential to improve the neighbourhood.
- On the socioeconomic level, it has already been underlined that urban migrants induce the informal sector, a provider of employment (although precarious) and thus a regulator of unemployment and its perverse effects. Despite its status as 'informal', the disadvantaged migrants who are the principal actors (motorbike taxi drivers, small traders) pay taxes to the municipality and also to the State. From this perspective, internal migration contributes significantly to the bailout of autonomous territorial communities and even of State funds. It is a driver of urban growth and also the national economy. Already the actors of the so-called 'formal' economy are mostly individuals from other places (migrants and some immigrants) in Douala, Maroua and Ebolowa where natives are today minorities.
- The massive displacement of young people at the end of their academic and professional training towards national university megacities such as Douala, Yaoundé, Maroua and Ebolowa promotes the development of more qualified and diversified human capital to fulfil the need for

higher professional qualifications for national socioeconomic development and the achievement of greater governmental ambitions relative to the transformation of Cameroon as an emerging country by 2035.

- Analysis of the interaction between gender and migrant health reveals a gender variation in the exposure and vulnerability of migrants. The urban activities practised by men sometimes expose them more than women. Handling, motorbike taxis and night security are some activities causing different levels of health risk exposure relating to gender in the researched cities. Men are subject to only one form of health care: self-care where they are the only guarantors of their own health. Women, on the other hand, benefit from two main opportunities: self-health care and health care provided by their spouses. Having a spouse becomes a secular and preventative policy that justifies the high birth rates registered in urban neighbourhoods highly populated by migrants. It also causes the proliferation of sexually transmitted diseases in these urban neighbourhoods. However, women have better financial access to health care because of the two above-mentioned possibilities. 42.2 per cent of interviewed migrants have partially or totally covered health care by their spouse, whatever the marital status. This allows them to save money and to make their migration profitable for their family left behind. In total, urban integration is generally easier and more harmonious for women than men.
 - In addition to health issues, it was found that under the same conditions of the general non-qualification of migrants, women integrate faster than men in the socioprofessional milieu. They may undertake gainful activities and be self-employed. They could equally benefit from support from their partners to initiate an activity. Others are easily recruited by companies through their spouses or another person who is sometimes more settled. The latter analysis is indicative of a change in the migratory experience regarding gender. However, this differentiation is linked to the abusive exploitation of women in the urban setting. This reality therefore raises a double problem on the dialectic of migration and gender in Cameroon: the integrity of female migration on the one hand, and the integration of urban migrants on the other hand.
- In short, at its best urban migration contributes to income generation and quality of life, and to development intrinsically linked

to urbanity. A positive impact of internal migration on urbanization and health emerges despite some limitations, shortcomings and many adjustable exceptions. From this perspective, urban migration becomes an opportunity to promote development.

Issues and challenges

The prevalence of migration's positive impact on urbanization and health as revealed by the present study refocuses economic, social, political and even scientific debates on the developmental issue of internal migration. This prevalence should not overshadow the more negative effects of internal migration. Placing a special emphasis on the disadvantaged and mixed migrants' neighbourhoods in the sample has its strategic reason with the aim of mobilizing and stimulating corrective actions. At the same time, the negative repercussions of the urban migration phenomenon that were noted remain at the basis of a fundamental problem. That is, it is a problem of control and management of this social fact in view of optimizing economic, social, cultural and environmental profitability. Internal

and especially urban migration have hitherto been kept apart as marginal social facts, marginalized in the public governance sphere and during economic and social development planning. For this reason, internal migration has produced devastating effects and contributed to a crisis in urban and even rural areas.

Regulating the negative impact and optimizing the fundamental development function of internal migration are emerging as the main challenges for governments, civil society, the population and researchers. In addition, the regulation of spontaneous and insalubrious slums, the promotion of decent social housing and sociocommunity infrastructures, the quantitative and qualitative improvement in the provision of health care in urban areas marked by the regulation of geographic and financial access, are all specific challenges in Cameroonian cities. Rural development and the promotion of income-generating activities in secondary cities or areas, rural towns and in the countryside are another array of challenges that this study highlights to regulate urban migration flows.

6. Conclusion and recommendations

The present study raises questions about the interaction between internal migration, urbanization and health in Cameroon. The qualimetric method was used. The structured interview technique was used for data collection in the four sampled cities through the combined effect of several eligibility criteria. The collected data were analysed using qualitative, quantitative and spatial techniques. At the end of this study, three principal affirmations could be formulated.

Firstly, urban migration is an undeniable factor of the urbanization crisis in general and the spontaneous and insalubrious urbanization model that prevails in the surveyed cities. It is a factor of overpopulation, emergence of slums and environmental crisis due to the lack of control of the spatial-demographic growth of the surveyed cities. In addition, methods of land use and urban practices of migrants turn internal migration into a lever for epidemiologic vulnerability in cities in a context where the urban health system is overloaded due to increasingly important and unmanaged migratory flows.

Secondly, internal migration is not only an issue and a constraint in urban and health development. It is also an undeniable lever to the contribution of migrants to urban functionality.

The high population of the surveyed cities develop into genuine consumers of goods and services relevant to urban, and even national, economies. Migrants are promoters of residential and luxurious neighbourhoods in the surveyed cities. They are consequently active players in the development of modern cities. They actively participate in maintaining the urban environment and community health. They are also promoters of the private sector of public health and constitute a majority within the public sector and public health personnel. They are the creators of an informal economy sector which is a vital part of the economy not only urban, but also and mostly national. Migration in the surveyed regional capitals is a means of improving migrants' life conditions regarding health-care, jobs, education, and academic and professional training. It is therefore a vector of the human development of the studied population. In total, urban migration contributes to the productive functioning of a better quality of life that is intrinsically linked to urbanity.

Thirdly, comparing the negative and positive impacts of urban migration generally leads to considering that internal migration has a more contributory than restricting role for urban and national development. A

reconstruction of the difficult chain of causality of urban migration has been made. It appears that they do not result from any natural feature of the migratory phenomenon, but instead results from the crisis of planning and urban governance in the surveyed cities. One of the great merits of migration is to compose and recompose urban structures continually, to revitalize urban functionality and to renew or regenerate indefinitely the productive function of human development, hitherto attributed to the city.

Meanwhile, these merits produce the opposite effect if the process of urban migration is uncontrolled, such as in Douala, Yaoundé, Maroua and Ebolowa: urban disintegration and disconnection, dysfunction of urban units, poor development, and a lack of appreciation of the potential positive impact of migration on development. The problem lies ultimately at the level of control and management of this social phenomenon, a phenomenon which is experiencing a management crisis. Faced with this reality, the present study prescribes a F-PGIM as an alternative. That is, a tool for decision making and a programme for action directly usable to optimize the economic, social and environmental benefits of urban migration for developmental ends, both in urban and rural areas.

The F-PGIM prescribed in this study has the goal of transforming internal

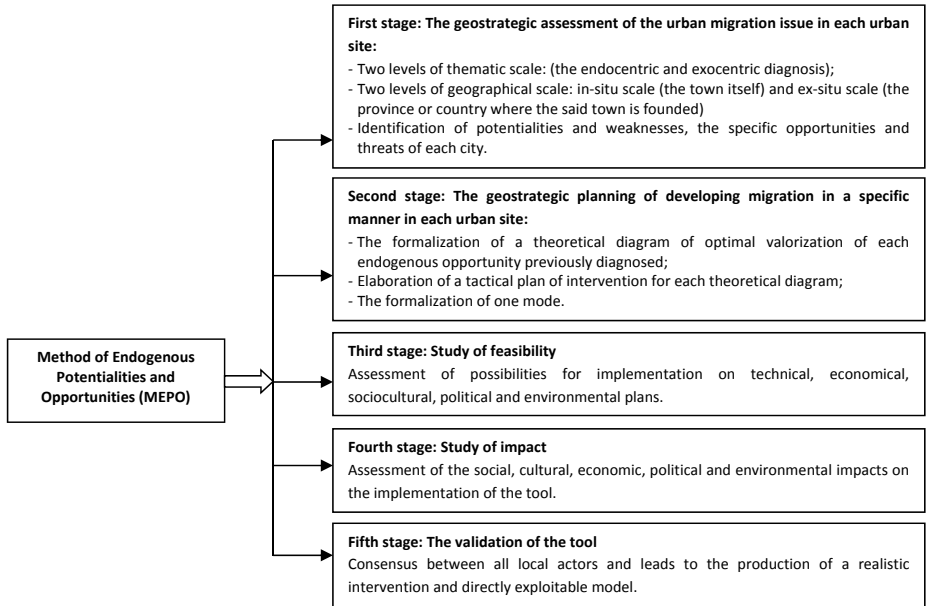
migration into an engine of balanced national development and equitable and sustainable human development. To achieve this goal, a fixed objective is to reinforce institutional capacities to improve the programmatic frames and strategic management of internal migration. In practice, seven pioneer recommendations were formulated for the implementation of the F-PGIM:

1. The creation of a national institution for the proactive governance of internal migration attached to the Ministry of Territorial Administration and Decentralization in cooperation with several other government ministries;
2. The development of a legislative and regulatory framework for proactive governance of internal migration;
3. The preparation of a national geopolitics for the proactive governance of urban migration implemented by the aforementioned institution. This geopolitics is based on two paradigms:
 - a) Proactive geostrategy in rural areas: promotion of urban development to stabilize the rural population and to encourage migrants settled precariously in the city to return:

- i) Creating sources of employment in the primary sector on the basis of opportunities in each locality;
 - ii) Intensifying the funding of income-generating projects for youth in the rural milieu (SMSE, CIG);
 - iii) Constructing infrastructure and sociocommunity facilities in rural areas (roads, primary, secondary and tertiary schools, primary health-care centres, hospitals, etc.);
 - iv) Establishing and strengthening the agricultural sector with a focus on improving farming techniques, access to subsidies and sales markets, facilitating the flow of production and optimizing the profitability of the agricultural service;
 - v) Creating training centres and vocational integration in rural areas (training in agriculture, fisheries and handicraft techniques and training in primary and paramedical health care, training in income-generating activities).
- b) Proactive geopolitics in urban areas:
- i) Developing and implementing a strict urban decennial planning while overseeing the new installation sites organized by the population before their arrival;
 - ii) Creating an urban migration brigade in the neighbourhoods, municipal services and law enforcement in the cities in order to identify migratory flows, anticipate anarchic settlements and play the role of helpline and daily monitor for migrants;
 - iii) Identifying and individualizing standardization of informal sector activities (motorbike taxis, urban agriculture, public phone booths, small businesses, etc.) for a better and more sustainable socio-professional integration of the migrants and for optimizing their contribution to economic development;
 - iv) Initiating a programme to decongest the cities based on the adopting and implementing incentives for assisted voluntary return migration (AVRM);
 - v) Promoting community health (creation and capacity building of health and sanitation committees in urban neighbourhoods, development and dissemination of information, education and communication for health, health training programmes

- for city dwellers in techniques of primary health care at the neighbourhood level, etc.);
 - vi) Capacity building of technical and vocational training of the National Fund for Employment;
 - vii) Extending health coverage in cities by increasing health centres in urban areas where it is lacking: in spontaneous, insalubrious and peripheral quarters;
 - viii) Establishing training centres and professional integration by autonomous local authorities;
 - ix) Promoting the development of secondary cities considered bottlenecks in the regulation of the rural exodus and interurban migration flows.
4. Integration of the internal migration phenomenon into the national strategy of poverty reduction and in any national development planning;
 5. The creation of a National Centre for the integrated monitoring internal migration; a related structure of the National Institution of Proactive Governance of Internal Migration based on studies and scientific research in collaboration with universities;
 6. Contextualized use of the Method of Endogenous Potentialities and Opportunities/MEPO (Meva'a Abomo, 2013a) in the operation phase. The MEPO is a procedure for the effective and sustainable resolution of local development issues. It recommends a five-step approach: geostrategic evaluation, geostrategic planning, feasibility studies, impact assessment and validation of the geostrategic assessment (figure 13);
 7. Collaboration and cooperation to promote the exchange of experiences with States and advanced institutions and organisms in the governance of internal migration.

Figure 13: Schematic overview on the Potentialities and Opportunities Method, adapted to the regulation of the internal migration issue (Meva'a Abomo, 2013a).



In spite of the negligible effect of the methodological shortcomings linked to a reduced sample of studied cities, the main objective of the study was “to achieve a structured analysis of the dialectic of internal migration, the urbanization crisis and health precariousness in urban areas, identifying the tangible opportunities that it offers to make it an engine of sustainable human development” has been achieved. According to the results, the first hypothesis which stipulated that “internal migration is a determinant of the crisis of urbanization and the health precariousness in

Cameroonian cities” has been verified in the researched cities. The second hypothesis which stipulated that “the strategically planned governance and the proactive vocation of internal migration as an engine of transformation of this societal phenomenon from a constraint into an opportunity of urban development in Cameroon” has also been verified in the researched cities. Despite the reduced sample of researched sites, it is still possible to identify the overall problem of interaction between internal migration, urbanization and health due to the high qualitative representation of

the four cities observed (Douala, Yaoundé, Maroua, and Ebolowa) in relation to the study's objectives. The results of this study allowed the development of the F-PGIM, a politically expedient managerial tool that is socially needed, economically feasible and culturally integrated. The aim of the study that was "to contribute to improving the institutional, programmatic and strategic management frameworks of internal migration in Cameroon" has

thus been reached. At this stage of the survey, a fundamental question emerges in relation to the feasibility of the F-PGIM: if internal migration is an opportunity for both urban and human development at the national level, shouldn't the mobilization of resources to carry out the F-PGIM be considered as a worthy public investment from the Cameroonian State?

7. References

Aktouf, O.

- 1992 *Méthodologie des sciences sociales et approche qualitative des organisations. Une introduction à la démarche classique et une critique.* Les Presses de l'Université du Québec, Montréal.

Alawadi Z.

- 2006 Problématique de la cohabitation inter- communautaire au Nord du Cameroun. L'expérience des communautés migrantes, *Revue internationale des Sciences Humaines et Sociales*, 1(1) : 319-349.

Amou'ou Jam, J.P., A. Melingui and A. Tchepannou

- 1985 *Géographie, le Cameroun*, Armand Colin, Paris, 128p.

Assako Assako, R.J., D. Meva'a Abomo and L.B. Tchuikoa

- 2005 Etude géographique de l'épidémie de choléra à Douala ou la qualité de vie à l'épreuve des pratiques urbaines. *Espaces, qualité de vie et bien être.* Presses Universitaires d'Angers, Angers.

Ba'ana Etoundi, M.L.

- 1996 *Dynamique et fragilité des pôles secondaires au Cameroun : le cas de Kribi.* Thèse de Doctorat de Géographie. Université Paris IV-Sorbonne.

Bekolo Engoudou, B.D.

- 2008 *La relation thérapeutique dans les interférences entre médecine conventionnelle et traditionnelle. Une lecture anthropologique à l'hôpital Laquintinie et à l'African clinic de Douala (Cameroun).* Mémoire de DEA d'Anthropologie de la Santé. Université de Douala.

Corvevin, M.

- 1993 *Archéologie africaine.* Maisonneuve et Larose, Paris.

Cheru, F.

- 2007 Mondialisation et urbanisation inégale en Afrique. *Alternatives Sud : Explosion urbaine et mondialisation – Points de vue du Sud.*

De Bruijin, M., R.Van Dijk and D. Foeken

- 2001 *Mobile Africa. Changing Patterns of Movement in Africa and Beyond,* Leiden, Brill.

Dongmo, J.L.

- 1980 Polarisation de l'espace camerounais : les champs migratoires des villes. *Revue de géographie du Cameroun*, I (2) : 145-160.

Dong Mognol, G.M.

- 2006 *Migrations internes et problèmes fonciers au Cameroun. Les cas de Makenene et Mbangasina dans la région du Mbam, de 1926 à nos jours.* Thèse de Doctorat/Ph. D en Histoire. Université de Yaoundé 1.

Eboussi Boulaga, F.

- 2012 Préface. In *Le Cameroun septentrional en transition. Perspectives pluridisciplinaires* (Alawadi Zelao and Bouba Hamman, eds). L'Harmattan, Paris : 7-9.

Evina, R.C.

- 2009 *Migration au Cameroun, Profil national.* Organisation Internationale pour les Migrations (OIM), Genève.

Fadibo, P.

- 2012 Femmes et santé au Nord-Cameroun (1902 à nos jours) : des consultations par personnes interposées aux visites médicales féminines directes. In *Le Cameroun septentrional en transition. Perspectives pluridisciplinaires* (Alawadi Zelao and Bouba Hamman, eds.). L'Harmattan, Paris : 231-353.

Gubry, P.

- 1996 Le retour au village est-il une solution ? Le cas du Cameroun, in *Crise et population en Afrique* (Cousy, J. et al., eds.). *Cahiers du CEPED*.

Institut National de la Statistique (INS)

- 2011 *Deuxième Enquête sur l'Emploi et le Secteur Informel au Cameroun (EESI 2) ; Phase 1 : Enquête sur l'emploi, Rapport principal.*

International Organization for Migration (IOM)

- 2007 *Glossaire de la migration No. 9.* OIM, Genève. <www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/published_docs/serial_publications/glossary9_fren.pdf>.

Kalenge Nguvulu, C.

- 2010 *Vue d'ensemble sur les migrations Sud-Sud, tendances du développement et besoins en termes de recherche au Cameroun.* <www.acpmigration-obs.org/sites/default/files/CamFinal.pdf>.

Lututala Mumpasi, B.

- 2007 Les migrations en Afrique centrale : Caractéristiques, enjeux et rôles dans l'intégration et le développement des pays de la région. Papier présenté à l'*Atelier sur les migrations africaines*, du 18 au 21 septembre, Accra.

Mbarkoutou Mahamat, H.

- 2012 Le banditisme urbain au Nord-Cameroun : entre archaïsme et professionnalisme, in *Le Cameroun septentrional en transition. Perspectives pluridisciplinaires* (Alawadi Zelao and Bouba Hamman, eds.). L'Harmattan, Paris : 151-168.

Meka'a, C.B.

- 2007 *Capital humain, migration interne et revenus au Cameroun*. Thèse de Doctorat nouveau régime en économie. Université de Yaoundé 2.

Meva'a Abomo, D.

- 2006a *Etude géographique de l'endémicité du paludisme dans l'interface Environnement et santé à Kribi*. Mémoire de DEA de Géographie. Université de Douala.
- 2006b *De l'abondance des ressources en eau à la rareté de l'eau potable, un indicateur pertinent de la crise managériale des villes littorales du sud: l'exemple de Douala au Cameroun*. Communication scientifique 7ème Conférence Internationale Conférence « Gestion démocratique des bien collectifs / Ville Management », CIDEGEF, A.U.F., C.U.D., University of Douala, 22-24 November 2006, Douala. <www.cidegef.refer.org/douala/mevaa_2.pdf>.
- 2006c *Logiques d'aménagement des marches urbains ou construction du risque environnemental dans les villes du Tiers-monde : l'exemple du marché Mboppi à Douala (Cameroun)*. Communication in the 7th International Conference: « Gestion démocratique des bien collectifs / Ville Management », CIDEGEF, A.U.F., C.U.D., University of Douala, 22-24 November 2006, Douala. <www.cidegef.refer.org/douala/Meva_Abom_o.pdf>.
- 2011 *Etude des facteurs d'endémicité du paludisme urbain à Douala (Cameroun)*. Thèse de Doctorat / Ph. D de Géographie, Aménagement, Développement Durable. Université de Douala.
- 2012a Dysfunctions study of epidemiological surveillance system of urban malaria in Douala (Cameroon). *African Journal of Social Sciences - AJOSS*.
- 2012b Géographie de la santé appliquée à l'étude des disparités spatio-sanitaires dans la plantation d'Hévécam au Sud – Cameroun, MUTUBE. *Annales de la Faculté des Lettres et Sciences Humaines (FLSH)*. Université de Douala (sous presse).
- 2013a La crise de l'eau potable dans les villes côtières du sud : résultats d'une étude menée à Kribi (Cameroun). *Revue Internationale des Lettres et des Sciences Sociales « ABA »*, N° 2. Editions Dianoïa, Chennevières-Marne.

- 2013b *Migration, environnement et changement climatique en Afrique Centrale (pays membres de la CEEAC)*. Communication à Atelier régional de planification de politique stratégique en matière de migration et développement, du 23-24 janvier 2013, Libreville, Gabon, 17p.

Meva'a Abomo, D., M. Fouda, B. Nguehan, G. Pola and A.A. Ebana

- 2011 *Répercussions du développement de l'agriculture urbaine sur la transition démographique des villes du sud : le cas du bassin versant du Mbanya à Douala (Cameroun)*. Laboratory of Research, Planning and Sustainable Development, Department of Geography, University of Douala (not published).

Meva'a Abomo, D., M. Fouda, B. Chofor Zoum and M. Kamwo

- 2010 *Analyse spatiale du risque d'inondation dans le bassin versant du Mbanya à Douala, capitale économique du Cameroun*. NOVATECH International Conférence, Lyon, 27th June – 1st July 2010. <<http://documents.irevues.inist.fr/bitstream/handle/2042/35645/11106-052MEV.pdf?sequence=1>>.

Meva'a Abomo, D. and D. Piñh

- 2007 *Précarité de l'emploi et insécurité socioprofessionnelle des femmes dans les villes du Tiers-monde : bilan d'une étude expérimentale menée à Douala, capitale économique du Cameroun*. Communication à la Conférence Internationale de l'Association Internationale sur le Sécurité Sociale (AISS), Warsaw (Poland), March. <www.issa.int/fre/Ressources/Rapports-de-conference/Precarite-de-l-emploi-et-insecurite-socioprofessionnelle-des-femmes-dans-les-villes-du-Tiers-monde>.

Mimche, H. and F. Fomekong

- 2008 *Dynamiques urbaines et enjeux socio-démographiques en Afrique noire : Comprendre le présent pour prévoir l'avenir. Revue Internationale des Sciences Humaines et Sociales. L'Afrique subsaharienne à l'épreuve des mutations*, 2(2). L'Harmattan : 241-264.

Ndione, B. and J.P. Pabanel

- 2007 *Définition d'un profil migratoire pour la région Afrique Centrale*. Rapport provisoire, Fonds européen du Développement - Afrique Centrale.

Ndjanteng, M.C.

- 2005 *Logiques des acteurs et gestion de l'espace périurbain : le cas de la zone Nylon et de Douala – Nord*. Mémoire de DEA de Géographie. Université de Yaoundé 1.

Sali, H.

- 2012 Habitat, urbanisation et problèmes fonciers dans la ville de Maroua : mutations et constances, de 1985 à nos jours. In *Le Cameroun septentrional en transition. Perspectives pluridisciplinaires* (Alawadi Zelao et Bouba Hamman, eds.). L'Harmattan, Paris : 327-348.

Seignobos, C.

- 2002 Les services de santé : des structures sous perfusion internationale. In *Éléments d'une stratégie de développement rural pour le Grand nord du Cameroun*, II-Notes thématiques. Ministère de l'Agriculture du Cameroun, SCAC Cameroun.

Tabapssi, F.T.

- 1999 *Le modèle migratoire bamiléké (Cameroun) et sa crise actuelle : perspective économique et culturelle*. Université de Leiden, Leiden.

Tendron, G.

- 2002 *Les problèmes environnementaux de l'eau et sa gestion à Douala (Cameroun)*, Mémoire de DEA Professionnel, Université de Caen-Basse Normandie.

United Nations Organization

- 2008 *Principes et recommandations concernant les recensements de la population et de l'habitat*. <http://unstats.un.org/unsd/publication/seriesM/seriesm_67Rev2f.pdf>.

Van Santen, J.C.M.

- 2012 The Mafa Dispersed: Migration, Citizenship and Access to land in Cameroon. In *Le Cameroun septentrional en transition. Perspectives pluridisciplinaires*, (Alawadi Zelao & Bouba Hamman, eds.), L'Harmattan, Paris : 255-288.

Watang Zieba, F.

- 2011 *Muskuwaari, immigration et mutations spatio-agricoles en pays guiziga (Extrême-Nord Cameroun)*. Thèse de Doctorat en Géographie. Université de Ngaoundéré.

Watang Zieba, F. and B. Gonne

- 2009 Le pays guiziga : de l'émigration à l'immigration ou « l'effet miroir » des migrations vers la vallée de la Bénoué. In Kaliao, *Revue de l'Université de Maroua*, Séries Lettres et Sciences humaines, 2.

Watang Zieba, F. and M. Lieugomg

- 2009 Mobilités et mutations agricoles dans la plaine du Diamaré : le cas des terroirs de Foulou et Mobono / carrière. In *Les migrations et mobilités spatiales dans le bassin du Lac Tchad* (Tourneux, H. and Woin, N., eds). IRD, Marseille : 443-459.

8. Annex: Direct interview guide

Remarks for the researcher:

Persons to be interviewed: all qualified individuals in migrant households,

Target persons: exclusive migrant population of households

Good morning Mrs. /Mr., my name is....., Researcher-lecturer at the University of Douala. Within our research, your neighbourhood was chosen for a study on the problem of urbanization and health in relation to internal migration. The African, Caribbean and Pacific State Observatory on Migration sponsored this study in collaboration with the Pan-African Agency of Builders. It will formulate concrete solutions to several problems found here in these neighbourhoods. So, with your permission, I wish to interview with you for a few minutes. You are not obliged to take part. Nevertheless, given the value of the information you can provide us, I ask you to participate with sincerity, and rest assured of the confidentiality of your information. Can we begin our interview?

THEME 1: CHARACTERIZATION OF MIGRATION

Thematic axis 1: Information on the migrants

1. What is your region of origin?
2. Can you tell us when you arrived in this city?
3. How long have you been gone from your primary area of residence?
4. What made you migrate or leave your initial residence to come here: Principal causes? Other causes?
5. Do you wish to return and live in your primary area of residence?
6. Are there preliminary conditions to fulfil for you to be motivated to return to your initial area of residence?
7. If yes, which?

Thematic axis 2: Information concerning the other migrants in the household

8. Are there other individuals in your household who are not natives?
9. If yes, how many are there?
10. Where do they come from?
11. Can you reconstitute the migratory itinerary of each person?
12. How long have they each been here in the house?
13. What made each one of them migrate or leave their primary area of residence to come here: principal causes? Other causes?
14. Do you think each one of them wishes to return to their primary area of residence?
15. If yes, how many?

16. Are there conditions that are necessary for a return to their place of origin?
17. If yes, according to you, which conditions do they require in order to be able to go back?

THEME 2: SOCIODEMOGRAPHIC CHARACTERISTICS

Thematic axis 1: Household structure

18. What is your marital status (single or cohabiting, married, divorced, widow/widower)?
19. What is your marital regime? (to be asked only to the married interviewees)
20. Do you have children? If yes, how many?

Thematic axis 2: Household population

21. What is the total number of migrants in your household?
22. Which is the number of migrants in your household in terms of age and sex group (0-5 years; 6-10 years; 11-20 years; 21-30 years; 31-40 years; 41-50 years; 51-60 years)?
23. What is the total number of your household members who are not migrants?
24. What is your level of education?
25. What is the highest level of education in your household?

THEME 3: INTERNAL MIGRATION/URBANIZATION

Thematic axis 1: Internal migration, urban planning and environment

26. Do you own this accommodation?
27. If yes, do you have a land title/deed?
28. What did you do to get this piece of land?
29. Do you have a construction permit?
30. Where do you pour your domestic waste water?
31. Do you have a modern shower system?
32. Where do you put your refuse?

Thematic axis 2: Economy (informal sector) and urban insecurity

33. What is your main activity?
34. Do you have secondary activities? If yes, what?
35. What are the main activities of the other migrant workers in your household?
36. What is your monthly income?
37. Can you estimate the monthly average income of the other migrant workers in the household?
38. Does this income allow you to carry out your social projects?

- 39. Do you feel better here than in your original place of residence?
- 40. Are there adolescent(s) or adult(s) migrants who do not have a particular occupation or is/are unemployed(s)?
- 41. Are there migrants who work at night in your household?
- 42. Have you or a migrant of your household ever suffered from physical aggression here in the city?
- 43. Have you or a migrant of your household ever suffered from sexual aggression here in the city?

THEME 4: INTERNAL MIGRATION AND URBAN HEALTH

Thematic axis 1: Exposure and epidemiology risk

- 44. Which water do you drink (tap, well, natural source, stream)?
- 45. Which water do you use for cooking (tap, well, natural source, stream)?
- 46. Which water do you use for bathing (tap, well, natural source, stream)?
- 47. Do you sleep under a mosquito net?
- 48. How many migrants sleep under a mosquito net?
- 49. Are the nets treated?

Thematic axis 2: Health treatment/disease management

- 50. Since your stay in the city, have you ever been ill?
- 51. What diseases have you suffered from?
- 52. How did you diagnose these disease(s) here in the city?
- 53. How was the illness treated?
- 54. Did you suffer from the illness before your arrival in the city?
- 55. If yes, which illness precisely?
- 56. Can you name some of the illnesses that migrants in your household have suffered?
- 57. Where do you and other migrants in your household get medication for your treatment?
- 58. Are there young migrants of school age who are mothers in your household?

This study emphasizes that internal migration constitutes an undeniable opportunity for development which unfortunately is hampered by a crisis of governance. The study aims at contributing to the management of internal migration and its transformation into an engine of balanced and sustainable national development.