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Data and research to inform global policy: the global compact for safe, orderly and regular migration

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Abstract

In December 2018, the UN General Assembly formerly endorsed the Global Compact for Safe, Orderly and Regular Migration. Louise Arbour, Special Representative of the Secretary-General for International Migration, said, "the formal endorsement of the Compact represents a resounding commitment to an international migration framework based on fact, not myth, and to an understanding that national migration policies are best implemented through cooperation not in isolation." While there are formidable challenges to the implementation of the Compact, the mandates for the role of evidence in policy and program formulation have been expressed from stakeholders, Member States, civil society organizations, and migrants, throughout the preparatory processes. This paper seeks to share those voices vis a vis the call for research concerning data, research and analysis concerning international migrants and displaced persons, and will consider the implications for scientific initiatives for migration research and analysis and for global policy and goals concerning migration and sustainable development.

Keywords: Global Compact on Safe, Orderly and Regular Migration, International Migration, Migration research, Migration Data, United Nations

Introduction

The 2016 New York Declaration for Refugees and Migrants set in motion the development of a global compact for safe, orderly and regular migration that was adopted by the UN General Assembly in December 2018. The Global Compact for the Safe, Orderly and Regular Migration (GCM) illustrates the elevation of human migration discourse within the United Nations.

¹The New York Declaration established the process of developing two compacts for international responsibilities regarding refugees and migrants, respectively. The Global Compact for Refugees has been developed through the offices of the United Nations High Commissioner for Refugees (UNHCR) and will be presented as a report to the UN General Assembly in December. The development of the Global Compact for Migrants (Safe, Orderly and Regular Migration) is an intergovernmental process culminating in consideration by Member States at the Intergovernmental Conference to Adopt the Global Compact for Safe, Orderly and Regular Migration, 10–11 December, Marrakech, Morocco. For an effective and cogent comparison of the two Compacts, see Aleinikoff and Martin (2018) Making the Global Compacts work: What future for refugees and migrants? Zolberg Institute on Migration and Mobility, New School for Social Research and Kaldor Centre for International Refugee Law, University of New South Wales, Policy Brief No.



In presenting his report "Making migration work for all," United Nations Secretary-General António Guterres argued explicitly that facts rather than myths – knowledge and research – are required for improved management of international mobility to protect migrants and promote the national and human benefits of migration (Guterres, 11 January 2018 (United Nations General Assembly [UNGA], 2018b)).

As considered below, arguments for the need for migration data, analysis and research for informed international migration policy and management are not new to the twenty-first century. We can well situate the call for evidence-based international migration policy within a broader framework of efforts to strengthen international, national and subnational data systems concerning international migration including forced migrations. However, the focus, if not priority, given to migration by the United Nations in relationship to inclusive goals for sustainable development is indeed new (see Sutherland, 2013; UNGA, 2015).

The extensive process of consultation and information gathering – characterized by comprehensiveness and inclusion - to inform the preparation of the global compact on migration was unprecedented. General Assembly resolution 71/280, adopted in April 2017, established a preparatory process of consultation with stakeholders in processes of international migration and mobility – Member States, UN entities, UN Regional Economic Commissions and civil society organizations, including scientific and knowledge-based institutions.

At the beginning of the process of consultation and preparation, the permanent representatives of the Mexico and Switzerland who were leading the intergovernmental preparations and negotiations, had indicated that the issue of data and evidence would be a central topic for the global compact on migration.

The preparatory process was implemented during 2017–18 and yielded compelling specificity in arguments for the need for data, research and capacity building regarding scientific analysis of international and forced migration within the interrelated policy contexts of sustainable development and human rights (see United Nations Development Program, 2009).

The community of population and migration scientists participated actively in this process of preparation and consultation. At the 28th International Population Conference in Cape Town, South Africa, the IUSSP² Ad Hoc Panel on Strengthening Migration Data and Research gathered input from conference attendees regarding priorities in international migration data collection, research and demographic training. This information was organized and incorporated into a statement from the IUSSP to contribute to the preparatory phase of developing the Global Compact for the Safe, Orderly and Regular Migration. The preamble to the IUSSP Statement provides the rationale for advancing the role and resources of population analysis in generating knowledge concerning international migration in this twenty-first century and is followed by 44 specific recommendations organized within three domains of international migration data collection, research and demographic training (the full statement is provided as an Additional file 1 to this paper).

 $^{^2}$ IUSSP is the acronym for the International Union for the Scientific Study of Population, a professional organization of population scientists. At the end of 2017 the organization was composed of nearly 2800 scholars and students from 125 countries. IUSSP holds consultative status with the United Nations.

This statement by population scientists represents just one voice among many corners of civil society making the case for evidence-based response and policy regarding international migration, refugee and forced migration and population displacement in the contemporary world. The preparatory process for the Global Compact for the Safe, Orderly and Regular Migration offers important insight to priorities for demographic research on international population movements from those commissions, organizations and researchers working most closely with international migrations and migrants. These inputs are critically relevant to considering priorities in other global population and development initiatives, specifically, the Programme of Action of the International Conference on Population and development (ICPD) and the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development.

The goal of this paper is to make explicit the insights, proposals and recommendations from stakeholders in the development of the Global Compact for Safe, Orderly and Regular Migration (hereafter, the GCM) regarding the role of evidence in effective international migration governance. In essence, we seek to communicate the results of the preparatory process for the GCM regarding international migration concepts, data, analysis and research to the wider community of migration scholars and students. Our analysis is fundamentally descriptive and reflects three assumptions. First, efforts to develop international approaches to promote safe and humane international migrations will benefit from demographic data, research and analysis. Second, assessment of progress towards international population and development goals will benefit from inclusion of input from migration scholars, organizations, both governmental and nongovernmental, working on international and internal migration, as well as migrants themselves. Third, and conversely, migration scholars and students will benefit from a systematic inventory of inputs from stakeholders regarding migration data, research and analysis (see Kraly & Abbasi-Shavazi, 2019).

We begin with providing the context for the need for international migration data in global migration governance, including international efforts to strengthen the empirical foundation for comparative international migration analysis in earlier areas. Second, we provide a brief description of the process of development of the final draft of the GCM that was adopted by UN Member States at the Intergovernmental Conference to Adopt the Global Compact for Safe, Orderly and Regular Migration, 10-11 December 2018 in Marrakech, Morocco and endorsed by the UN General Assembly on 19 December 2018. Third, documentation of the ways in which stakeholders in the preparatory processes for the GCM have articulated, themes and priorities for demographic research regarding international migration and displacement populations is provided. Fourth, the results of our analysis are provided in the form of an inventory of 'interventions' submitted through the consultation process with a focus on the thematic sessions which the General Assembly had organized as part of the preparatory process. Results are organized by domains of empirical analysis: conceptualization, measurement and data collection, descriptive analysis; explanatory research; and models and estimation of migration. Next, our organization of results is intended to express opportunities for engagement of social and population scientists in analyses that complement priorities and recommendations of stakeholders. But we also recognize the critical constraints, abuses,

³We thank one of the anonymous reviewers of this paper for this effective and appropriate phrase.

and limitations of policy relevant research: the fifth section of the paper offers a critical perspective on the promotion of an international data infrastructure for migration research.³ We conclude with identifying several domains of complementarity among the international initiatives concerning population, development and migration (ICPD Programme of Action, the SDGs, the New York Declaration for Refugees and Migrants and the Global Compact for Safe, Orderly and Regular Migration) and offer ideas for areas of analytic intersections in population data collection, research and training.

The place of migration data and research in international governance

A cogent general statement of the importance of global migration data in a globalizing world has been made by Willekens, Massey, Raymer and Beauchemin in their 2016 essay in Science. They outline the diversity and difference in effects of international migration on individuals, communities and social, economic, cultural and environmental contexts: "The impact of migration on the individual and on sending and receiving communities and countries is only partly understood. Economic effects can be very different from the impacts on society and culture; some gain from migration, whereas others lose. The lack of knowledge creates systemic risks and uncertainties and frustrates public debate and the formation of effective policies" (897). The Center for Global Development, for its part, underscored the need for a better understanding of the role of international migration in economic growth in relationship to very specific questions: "How will increasing selfselectivity in rich countries' immigration policies affect already tenuous professional services in the countries migrants come from? How much return migration or back-andforth migration occurs today, and what if anything should governments do to shape those movements? Are levels of irregular migration affected by opportunities for legal migration? (Center for Global Development, 2009, p. 1). UN Special Representative on International Migration Peter Sutherland identified five policy priorities for addressing the role of migration within a global agenda for sustainable development: "A) Managing crisisrelated movements and protecting migrants in vulnerable situations; B) Building opportunities for labour and skills mobility; C) Ensuring orderly migration, including return; D) Fostering migrant inclusion and development benefits; and E) Strengthening governance capacities" (UNGA, 2017a, para. 16).

The need to improve migration data and analysis to support the development of public policy has a relatively long history with origins in the large-scale northern migrations. Arguments for effective measurement and empirical analysis of international migration *at an international scale* emerged in the 1890s and have been re-articulated throughout the twentieth century. The 1891 International Statistical Institute recommended the development of common or standardized definitions of immigration and emigration for purposes of international comparisons of population movements as well *national* governance; subsequent conventions of the ISI as well as the International Labour Organization addressed the need for comparable statistical definitions of additional categories of international mobility – permanent and temporary, as well as workers (see Kraly & Gnanasekaran, 1987, pp. 969–70; see also Center for Global Development, 2009, pp. 3–4).

Advantages of bi- and multilateral comparability in international migration measurement and statistics emerged remarkably early in the history of the United Nations (UN) with the publication of *Problems of Migration Statistics* in 1949

(United Nations, Department of Social Affairs, 1949). Recommendations on international migration statistics were formally endorsed and published by the UN Statistical Commission in 1953; reformulation of the recommendations occurred in 1980 and again in 1998 (United Nations, Department of Economic and Social Affairs, Population Division [UN DESA], 1980, 1986; United Nations, Department of Economic and Social Affairs, Statistics Division [UN DESA], 1998; United Nations, Department of Social Affairs, 1953). These reports included recommendations for not only common statistical definitions of long and short migration, refugee migration and international mobility but also described effective and appropriate methods of data collection for the generation of stocks, flows and characteristics of migrant populations, as well as priorities in priorities in data dissemination (cross tabulations) of disaggregated migration data by age, sex, country of origin, and country of destination, at the very least.

Within the UN Department of Economic and Social Affairs, the Population and Statistics Divisions have worked from their respective beginnings to collect, consolidate, document and publish statistics and estimates on international migration flows and stocks. Flow data have largely reflected national administrative of in-migration and out-migrants, while stock data are largely based on national census data on the foreign born or foreign citizens collected through censuses, registration systems and national surveys. The UN Global Migration Database currently includes data on the foreign-born population, a measure of lifetime migration, for 214 of 232 countries from one source since the 2000 round of population censuses and approximately 188 countries have available information on country of origin of the foreign born since 2000 (UN DESA, Population Division, 2017, pp. 4-5). Based on these empirical data, the Population Division produces harmonized estimates of the number of international migrants by age, sex and country of origin for 232 countries and territories in the world.

National data on international migration flows are far less available. Within the UN Population Division database on international migration flows, statistics on arrival and departure of migrants are most recently available for 45 countries (UN DESA, Population Division, 2015), which is, to be sure, a large increase over the 29 countries in the 2008 UN compilation of national flow data. Furthermore, while the efforts were made to enhance comparability among countries of definitions for in- and outmigration according the 1998 UN recommendations on international migration statistics, documentation of national data on international population movements reveals differences in national practices regarding the reporting of long and short-term immigration and emigration, serving "...to raise awareness about the problems of comparability among available statistics" (UN DESA, Population Division, 2019).

Other organizations producing compendia of national levels and characteristics of international migrants, including refugees are the Organisation for Economic Cooperation and Development (OECD), and specifically its International Migration Database, the United Nations High Commissioner for Refugees (UNHCR) and the International Labour Office (ILO). The International Organization for Migration (IOM), which as of September 2016 joint the UN systems as a related organization, is most effective in its *World Migration Report* in documenting, integrating and synthesizing across and among these and additional databases, as well as integrating original analyses by demographic researchers to use compilations of national

data on international migration for the characterization and estimation of global and regional patterns of international (see International Organization for Migration [IOM], 2018, Part I and footnote 39; see also Abel & Sanders, 2014).

Advocacy by the UN Department of Economic and Social Affairs for national statistical offices to engage in the improvement of international migration statistics and analysis was originally framed by the need empirical information to inform national planning efforts, to promote the international exchange of comparable data on international population movements, and ideally, to contribute to the filling the gaps in demographic accounting for countries lacking international migration data. These rationales are still inherently in place in efforts to improve the empirical base for migration and population policy analysis of international population movements and migration. But international efforts to promote sustainable development in this current era have significantly expanded the arguments. The role of migration in social and economic development, and environmental change is a significant dimension of the international agenda of the UN Sustainable Development Goals.

The articulated need for more comprehensive and comparable data on international population movements gained momentum in the first decade of this current century, with exponential levels of progress since the 2006 UN High-level Dialogue on International Migration and Development and the organization of the first Global Forum on Migration and Development (GFMD) in 2007. The GFMD provided a new international space for considering the relationship between migration and development as "... a flexible, multi-stakeholder space where governments can discuss the multidimensional aspects, opportunities and challenges related to migration, development, and the link between these two areas" (Global Fund for Migration and Development [GFMD], 2019). Serving as UN Special Representative on International Migration from 2006 until his passing, and our loss, in 2018, Sutherland (2013) recognized the role of scientific research conducted in the 1990s on the role of remittances of international migrant workers on economic development in sending countries and in communities of origin. Amidst simmering anti-migrant voices in the early 2000s, Sutherland, and others, made the case, an empirical one, for the positive effects, and potential, for international migration and labour mobility to benefit social and economic development in regions and communities of origin as well as destination. Perhaps as, or more importantly, Sutherland underscored, and applauded, the significance of international leadership - specifically, secretaries-general, Kofi Annan and Ban Ki-moon - in elevation of the place of international migration and population movements in the re-envisioning of the Millennium Development Goals 'post 2015' (Sutherland, 2013). Sutherland's report, 'Roadmap for improving the governance of international migration," (UNGA, 2017b, p. 1), submitted to the UN Secretary General prior to the High-level Summit on Refugees and Migrants held in September 2016, situates migration, and the inclusion of migrants in receiving societies, economies and communities squarely within the context of the promotion of sustainable development.

A relevant symbol of the deepening integration of global and regional migration processes and dynamics within sustainable development exists in the return to efforts to improve national statistics on international population movements and migrant populations. Notably, the UN Statistical Division is revisiting the most recent (1998) iteration of *Recommendations on Statistics of International Migration* (UN DESA, Statistics

Division, 1998) in convening an 'Expert Group Meeting on Improving Migration Data in the Context of the 2030 Agenda for Sustainable Development and the Global Compact for Safe, Orderly and Regular Migration' in July 2019.

Evidence-based policy within the global compact for the safe, orderly and regular migration

The Report of the Secretary General, "In safety and dignity: addressing large movements of refugees and migrants," laid the foundation for the UN High-level Summit for Refugees and Migrants held in New York, 19 September 2016, and the social, economic, environmental and humanitarian issues demanding international dialogue and action. The need for data, research and analysis is made explicit:

To maximize the positive impact of migration, we must analyse trends on the basis of a solid evidence base. I call upon all Member States to invest in data collection, including sex- and age-disaggregated data, as well as information on both regular and irregular flows, the vulnerability of migrants and the economic impact of migration. The data should be analysed to plan for future migration and promote the inclusion of migrants (UNGA, 2016, para. 96).

As indicated above, the report of the Special Representative on Migration was a critical perspective on the High Level Summit as a 'roadmap for improving the governance of international migration" (UNGA, 2017b, p. 1). He advocated for the essential role of evidence in policy concerning migrants and refugees. Data were fundamental to the process, but research and analysis were - are - essential to go beyond description to reveal the causes and consequences of international population movements. Analytic strategies concerning international migration and population displacement, moreover, must also be considered within broader contexts of development and social, economic and environmental change. Initiatives in international migration cooperation must resonate with both the Sustainable Development Goals (SDGs) particularly those that are migration-related, as well as with international covenants concerning human rights. Ms. Louise Arbour, the Special Representative of the Secretary-General for International Migration guiding the preparations of the GCM, continued to affirm these perspective throughout the preparatory process for the 2018 Global Compacts for Refugees (GCR) and the GCM. To be sure, her remarks to the session of the International Population Conference in Cape Town emphasized the need for reliable data and rigorous analysis on which to base sound policy choices concerning the role of human migration and mobility in sustainable development, state security and human rights (see also UNGA, 2018a).

The objective of the consultative phase of the GCM preparatory process was "...to gather substantive input and concrete recommendations to inform the development of the global compact on migration". To this end, the UN developed a schedule of consultations during 2017: six thematic sessions organized by the General Assembly, regional preparations by the five UN regional economic commissions as well as several consultations with civil society organized by the President of the General Assembly. From these consultative processes emerged the first iteration of the Global Compact. Prepared by the co-facilitators leading the intergovernmental consultations and negotiations during

the preparatory process, the Permanent Representatives of Mexico and Switzerland to the United Nations in New York, the crafting of the Global Compact established guiding principles, and a "cooperative framework comprising of actionable commitments, implementation, and follow-up and review" (President of the United Nations General Assembly, 2018, p. 4).

The 'zero draft' of the Compact, issued in February 2018, closely reflected the preparatory and consultative processes. Of the 22 objectives of the zero draft, the first objective was to "collect and utilize accurate and disaggregated data as a basis for evidence-based policies". The zero draft was the basis for the intergovernmental negotiations, held by the General Assembly between February and July 2018. During this process negotiations, and especially relevant to coordinate the implementation of the GCM and the SDGs, was the addition of a 23rd objective to: "(23) (s)trengthen international cooperation and global partnerships for safe, orderly and regular migration" (see Fig. 1).

Subsequent revisions of the draft text of the GCM maintained the priority of the role of data and research in evidence based migration policies, and the general objective for "a robust global evidence base on international migration by improving and investing in the collection, analysis and dissemination of accurate, reliable, comparable data, disaggregated by sex, age and migration status (GCM, 2018, p. 5)." With the *first* of 23 objectives focusing on improving data, the call on the population sciences, social demography and the broader social sciences for solutions is unparalleled.

The GCM identifies several discrete yet interrelated activities for population and migration analysis and research: develop comparable concepts and statistical measures of dimensions of international migration and mobilities; foster capacity-building within and throughout nations for the analysis of migration processes; develop the means to coordinate, compare, and study international migration and population patterns, trends and processes; promote the collection of data related to international migration in national censuses and representative surveys; mine and adapt administrative data systems for information on migration; and encourage integration of migration research more generally within national policy development and planning (President of the United Nations General Assembly, 2018, pp. 5–6).

Several analytical activities were more clearly underscored and new activities added during the process of the revision of the subsequent drafts. Referring to Fig. 2, five changes introduced to the final version of the Compact are noteworthy: (1) The first action (a) as was modified in the revisions of the Compact to emphasize the need for a for comprehensive and inclusive strategy to broadly improve migration data at all levels of migration and migration governance; (2) The second action (b) more clearly argues

⁴The Global Compact for Refugees also includes dedicated recommendations addressing the need for data and research concerning refugees. Section 3.3 Data and Evidence of the final draft (26 June 2018) outlines the need for harmonized and disaggregated data for solutions, responses and responsibility sharing for refugees. Regarding data and analysis, the report states: "To support evidence-based responses, States and relevant stakeholders will, as appropriate, promote the development of harmonized or interoperable standards for the collection, analysis, and sharing of age, gender, disability, and diversity disaggregated data on refugees and returnees. Upon the request of concerned States, support will be provided for the inclusion of refugees and host communities, as well as returnees and stateless persons as relevant, within national data and statistical collection processes; and to strengthen national data collection systems on the situation of refugees and host communities, as well as returnees" (United Nations High Commissioner for Refugees [UNHC R], 2018, p. 9).

- (1) Collect and utilize accurate and disaggregated data as a basis for evidence-based policies
- (2) Minimize the adverse drivers and structural factors that compel people to leave their country of origin
- (3) Provide accurate and timely information at all stages of migration
- (4) Ensure that all migrants have proof of legal identity and adequate documentation
- (5) Enhance availability and flexibility of pathways for regular migration
- (6) Facilitate fair and ethical recruitment and safeguard conditions that ensure decent work
- (7) Address and reduce vulnerabilities in migration
- (8) Save lives and establish coordinated international efforts on missing migrants
- (9) Strengthen the transnational response to smuggling of migrants
- (10) Prevent, combat and eradicate trafficking in persons in the context of international migration
- (11) Manage borders in an integrated, secure and coordinated manner
- (12) Strengthen certainty and predictability in migration procedures for appropriate screening, assessment and referral
- (13) Use migration detention only as a measure of last resort and work towards alternatives
- (14) Enhance consular protection, assistance and cooperation throughout the migration cycle
- (15) Provide access to basic services for migrants
- (16) Empower migrants and societies to realize full inclusion and social cohesion
- (17) Eliminate all forms of discrimination and promote evidence-based public discourse to shape perceptions of migration
- (18) Invest in skills development and facilitate mutual recognition of skills, qualifications and competences
- (19) Create conditions for migrants and diasporas to fully contribute to sustainable development in all countries
- (20) Promote faster, safer and cheaper transfer of remittances and foster financial inclusion of migrants
- (21) Cooperate in facilitating safe and dignified return and readmission, as well as sustainable reintegration
- (22) Establish mechanisms for the portability of social security entitlements and earned benefits
- (23) Strengthen international cooperation and global partnerships for safe, orderly and regular migration

Source: UNOPGA 2018.

Fig. 1 Global Compact for Safe, Orderly and Regular Migration: Objectives

for international comparability among migration statistical concepts and operational definitions; (3) Action (d) was added underscore specifically the need to empirically document the contributions of migrants and diaspora to sustainable development and the goals of the 2030 Agenda; (4) The need for coordination among intra-national government units regarding migration data and analysis is noted in activity (i); and (5) Action (k) was added to affirm to recognize the role of the full range of stakeholders in knowledge generation concerning human migration.

As we will see below, these changes in the Compact regarding migration data, research and evidence resonate with the inputs offered during the preparatory process, in particular by civil society.

Themes concerning the role of data, research and analysis regarding international migration governance: the process of consultation

From the perspective of global migration governance what emerges is a proposal for a program of scientific, and policy relevant activities concerning the demography of global and regional population movements. These actionable commitments concerning international migration data collection and analysis derive from the substance of the processes of consultation: invited presentations, interventions from the floor, written interventions submitted to the Office of the President of General Assembly, summaries

OBJECTIVE 1: Collect and utilize accurate and disaggregated data as a basis for evidence-based policies

17. We commit to strengthen the global evidence base on international migration by improving and investing in the collection, analysis and dissemination of accurate, reliable, comparable data, disaggregated by sex, age, migration status and other characteristics relevant in national contexts, while upholding the right to privacy under international wham rights law and protecting personal data. We further commit to ensure this data fosters research, guides coherent and evidence-based policy-making and well-informed public discourse, and allows for effective monitoring and evaluation of the implementation of commitments over time.

To realize this commitment, we will draw from the following actions:

- a) Elaborate and implement a comprehensive strategy for improving migration data at local, national, regional and global levels, with the participation of all relevant stakeholders, under the guidance of the United Nations Statistical Commission, by harmonizing methodologies for data collection, and strengthening analysis and dissemination of migration-related data and indicators.
- b) Improve international comparability and compatibility of migration statistics and national data systems, including by further developing and applying the statistical definition of an international migrant, elaborating a set of standards to measure migrant stocks and flows, and documenting migration patterns and trends, characteristics of migrants, as well as drivers and impacts of migration
- c) Develop a global programme to build and enhance national capacities in data collection, analysis and dissemination to share data, address data gaps and assess key migration trends, that encourages collaboration between relevant stakeholders at all levels, provides dedicated training, financial support and technical assistance, leverages new data sources, including big data, and is reviewed by the United Nations Statistical Commission on a regular basis
- d) Collect, analyse and use data on the effects and benefits of migration, as well as the contributions of migrants and diasporas to sustainable development, with a view to inform the implementation of the 2030 Agenda for Sustainable Development and related textension and preparations of the local period and related textension.
- related strategies and programmes at the local, national, regional and global levels

 Support further development of and collaboration between existing global and regional databases and depositories, including the IOM Global Migration Data Portal and the World Bank Global Knowledge Partnership on Migration and Development, with a view to systematically consolidate relevant data in a transparent and user-friendly manner, while encouraging inter-agency collaboration to avoid duplication.
- f) Establish and strengthen regional centres for research and training on migration or migration observatories, such as the African Observatory for Migration and Development, to collect and analyse data in line with United Nations standards, including on best practices, the contributions of migrants, the overall economic, social and political bendits and challenges of migration in countries of origin, transit and destination, as well as drivers of migration, with a view to establishing shared strategies and maximizing the value of disaggregated migration data, in coordination with existing regional and subregional mechanisms
- g) Improve national data collection by integrating migration-related topics in national censuses, as early as practicable, such as on country of birth, country of birth of parents, country of citizenship, country of residence five years prior to the census, most recent arrival date and reason for migrating, to ensure timely analysis and dissemination of results, disaggregated and tabulated in accordance with international standards, for statistical purposes
- Conduct household, labour force and other surveys to collect information on the social and economic integration of migrants or add standard migration modules to existing household surveys to improve national, regional and international comparability, and make collected data available through public-use of statistical microdata files
- Enhance collaboration between State units responsible for migration data and national statistical offices to produce migrationrelated statistics, including by using administrative records for statistical purposes, such as border records, visa, resident permits, population registers and other relevant sources, while upholding the right to privacy protecting personal data
- j) Develop and use country-specific migration profiles, which include disaggregated data on all migration-relevant aspects in a national context, including those on labour market needs, demand and availability of skills, the economic, environmental and social impacts of migration, remittance transfer costs, health, education, occupation, living and working conditions, wages, and the needs of migration and receiving communities. In order to develop evidence-based migration policies
- k) Cooperate with relevant stakeholders in countries of origin, transit and destination to develop research, studies and surveys on the interrelationship between migration and the three dimensions of sustainable development, the contributions and skills of migrants and disappras, as well as their ties to the countries of origin and destination

Source: UNOPGA 2018

Fig. 2 Global Compact for Safe, Orderly and Regular Migration Final Draft, Objective 1

and recommendations from interaction discussions from regional commissions. The written statement by the IUSSP Ad hoc committee to improve migration data and research, discussed earlier, represents and illustrates a written intervention submitted on behalf of a professional organization holding consultative status with the United Nations Economic and Social Council (ECOSOC).

These inputs reveal a wide and rich corpus of ideas, both creative and critical, concerning the need for population data concerning international migration and population movements and displacement, and the role of population analysis in addressing critical dimensions of migration dynamics for countries ad communities of origin and destination, and for migrants themselves. We may consider these inputs as 'requests from the field' for demographic data, analysis and training that are more relevant to international and regional responsibility sharing regarding migrants and displaced populations. Accordingly, it is useful to take stock of the ideas concerning population data and analysis that have emerged in the consultative processes.

The process of consultation for the Global Compact for Migration was implemented between April and November 2017 and included thematic sessions held by the General Assembly, regional consultations organized through UN regional economic commissions and a series of consultations with stakeholders convened in Geneva and New York (see https://refugeesmigrants.un.org/thematic-sessions). Inherent in each of these consultations are policy issues deriving from global and regional consequences of migration. The thematic sessions addressed six substantive topics; regional commissions established specific foci for discussion and deliberation in relationship to development of a global compact on migration. Summaries of the inputs and discussion were prepared by facilitators of each of the thematic sessions.

Selections of the summaries concerning data collection, analysis, research and training are illustrated here for two of the six thematic sessions. For example, discussions in the session on human rights addressed issues in the measurement of the broad concept of intolerance, collection of data on hate crimes, critical attention to research design and representation of subgroups, and the need for research on the causes of racism and xenophobia:

Thematic Session 1 Human Rights

Co-facilitators' Summary:

1. Data The primordial role of credible data for evidence-based migration policies was repeatedly affirmed and delegations noted the important link between representative and disaggregated data and the wellbeing of migrants, as human rights violations are often the result of misinformed policies. Several participants pointed to a general lack of concrete information regarding the root causes of racism and xenophobia. Others cautioned against narrow interpretations of related forms of intolerance. As such, it was mentioned that data is a powerful means to dispel myths about migration.

Concrete issues and recommendations presented for consideration included:

- Improve disaggregated data collection, analysis and relevant policy making
- Collect data on hate speech and hate crimes at the national level
- Use existing data, for example from National Human Rights Institutions and UN treaty bodies

Thematic Session 2 Drivers of Migration

Co-facilitators' Summary:

g. Data The prevailing lack of and need for data, knowledge and evidence-based policy-making to effectively address the multi-layered drivers of migration in a holistic manner was noted as key issue to be considered in the global compact throughout all panels and discussions. Research and data collection, including longitudinal data, were noted as particularly relevant with view to better understanding and addressing the interrelations between migration and development, as well as migration and environmental factors, respectively. Data disaggregation was considered of particular relevance to targeting group-specific drivers and vulnerabilities. Furthermore, international coordination, harmonization and interoperability of data collection and analysis were highlighted.

Also extant in the documentary record are the interventions from the floor during the thematic sessions, including those offered by Member States as well as UN offices. For example, the statement from the representative of Canada included the following comments regarding data and research in relationship to the drivers of migration:

"...Member states should provide more support for research on climate change induced migration. ... Greater research could identify complex drivers of environmental migration, identify populations that are vulnerable and develop appropriate national and regional strategies. Better data collection, through tools such as IOM's Displacement Tracking Matrix, could also be useful in this regard. Research and data collection could be built into Global Compact national action plans based on the gaps. ..."

In the same thematic session UNHCR provided the statement:

"Finally, there is a critical need for reliable data. Without reliable data on the causes and consequences of climate change and disaster-related movements, we will not be in a position to fashion the necessary responses. Similarly, we must base our policies on concrete and successful practices on the ground, to ensure our responses are meaningful and practical."

Analytic issues emerging from discussions focusing drivers/causes of migration include multivariate perspectives, particularly concerning the relationships between environmental change and migration, specification of vulnerabilities, longitudinal research design and data collection to further knowledge concerning migration and development, and relatedly, the need for reliable data as a foundation for policy and response.

Convenings of UN regional commissions reflect themes and issues selected by governmental and nongovernmental leadership, and in so doing, underscore the importance of regional perspectives and priorities in migration policy domains, and in responsibility sharing for migrants as well as programs of data collection and research. For example, the Economic Commission for Africa held discussions for each of the six themes regarding migration and population displacement. Proposals and recommendations for data, research and analysis emerged from the themes of human rights, drivers of migration and contributions of migrants and diaspora:

Thematic Area 1 Human rights

- (a) Collect and exchange evidence on migration based on data that are collected and analysed in accordance with United Nations data standards, including on the contributions of migrants in origin, transit and destination countries in Africa and other regions;
- (b) Generate evidence and present scenarios on the changing structure of African labour markets in order to enhance understanding of the future supply and demand for labour, and the protection of migrant workers; ...
- (c) Encourage Member States to include refugees, undocumented migrants and other non-nationals in migration statistics. Support Member States in the timely collection

and dissemination of migration statistics and actively encourage them to apply United Nations standards to increase coherence and comparability of data and statistics.

Thematic area 2 Drivers of migration

- (a) Conduct research on the complex ways in which conflict, environmental factors and climate change may effect patterns and trends of migration, thereby increasing insight into how such factors may influence in different ways the ability of various social groups to migrant and the aspirations, ad how the effects of such factors may differ for long- and short-distance migration, and over the short, medium and long term;
- (b) Mainstream migration issues into policy development relating to environment, agriculture, urban planning, foreign investments, trade, industrialization and employment.

Thematic area 4 Contributions of Migrants and diaspora

- (a) Encourage national statistical offices in collaboration with researchers, national banks and other financial institutions to undertake regular surveys to assess the trends, use and impact of remittances, including informal remittances;
- (b) Increase the capacity of independent academic research in order to identify the structural conditions under which migration and remittances are able to reinforce positive development trends and innovation, and the conditions under which they rather seem to sustain economic stagnation and authoritarianism.

The summary of the meeting organized by the Economic and Social Commission for Asia and the Pacific noted that:

There was a consensus to improve collection and analysis of disaggregated data and information, including on age and gender, on all dimensions of international migration.

The Economic and Social Commission for Western Asia recommended:

 To strengthen the role of national statistical offices and build partnerships among various actors to gather and analyse evidence and data on migration drivers, patterns and trends, disaggregated by age, gender and migration status, among others, to create scientific grounds for the formulation of effective policies on migration.

The Economic Commission for Europe dedicated discussion and formed recommendation to migration statistics, measurement of migration and capacity-building, noting in its final report:

2. At its 94th meeting, convened on 6 November 2017, the Executive Committee (EXCOM) of the Economic Commission for Europe (UNECE) held a regional discussion to provide input to the global process. In view of UNECE's limited mandate on migration issues, and given the importance of better data and statistics for evidence-based migration policies, EXOM decided to focus its discussion on the work of UNECE on migration statistics, in particular on how to measure

- migration, key measurement issues in the regional, and capacity building activities in support of its member States.
- This Chair's summary, with the annexed background document constitute UNECE input into the intergovernmental stocktaking conference for the global compact which took place in Mexico in December 2017.

The first round of interactive hearings with civil society were held at the United Nations on 26 July 2017. A preliminary review of statements addressing issues of evidence and research reveals the following issues and recommendations expressed by the panelists:

Human rights of migrants

Issues of access to health care, education and labour rights

Differential access of migrants

linkages between human rights and development

[Multi-faceted] drivers of migration

Many causes of migration addressed through SDGs

Link GCM and SDG in review and monitoring.

Cooperation and governance

National, regional as well as international responses

Explore "private sector to contribute to better management of migration including data collection,"

Importance of registration of migrants

"Lack of adequate data was as a shared concern for majority of speakers, including lack of data on return and reintegration."

Contributions of migrants

Review of evidence of impacts of migration at different levels

Role of remittances in development

Demand for labor

Discrepancy between evidence and national discourse

The summary documentation of the consultation process reveals that stakeholders tool took seriously the role of evidence in effective and humane migration governance, as well as the value of analytic capacity in specifying the relationships among migration, displacement and sustainable development.

Proposals and priorities in migration data and research: an inventory of inputs and interventions

Intervention and inputs submitted during the consultative phase of the GCM embody proposals and priorities in international migration analysis. These resources thus hold potential to inform the development of programs and initiatives for migration data collection, research and training in the social and environmental sciences that are responsive to public sectors and civil society, globally and within regions. Our review of the various contributions prompts two questions. What have been the appeals to the social and environmental sciences emanating from

international dialogues regarding the goals of safe, orderly and regular migration? How do these requests vary by groups consulted, for example, Member States, UN Offices, Civil Society, Stakeholders, and potentially by region? Results presented here form a preliminary response to each question.

Our approach is that of textual analysis through processes of reading, listening and observing inputs and interventions submitted during the process of consultative and preparatory processes for the Global Compact for Safe, Orderly and Safe Migration. We have organized analysis around four dimensions of migration research:

- a) *Concepts and data* regarding international migration and displaced populations; issues of measurement, data gap, and methods of data collection
- b) Descriptive analysis: comparisons, trends, levels, composition and distribution
- c) *Explanatory analysis*: causes and consequences of migration; migration behaviors and decision-making
- d) Modeling migration; estimation, projections; monitoring and trajectories

To date we have applied this framework to summaries and inputs to each the six thematic sessions. Three sets of resources have been analyzed: The Issues Briefs prepared by the UN system; summaries of the session and intervention prepared by the cofacilitators; and stakeholders providing either verbal or written interventions.⁵ The stakeholders for the GCM included civil society organizations holding consultative status with the United Nations as well as other relevant CSOs, which had registered for the process.

To build bridges between the resources of the consultative processes and the scientific communities of population and migration researchers, the dimensions of migration research (concepts and data, descriptive and explanatory analysis, modeling, estimation, etc.) are expressed analytically rather than as quotes from the primary resources. To illustrate, results are shown in Table 1 for Thematic Session I "Human rights of all migrants, social inclusion, cohesion and all forms of discrimination, including racism, xenophobia and intolerance," and in Table 2 for Thematic Session II "Addressing drivers of migration, including adverse effects of climate change, natural disasters and human-made crises, through protection and assistance, sustainable development, poverty eradication, conflict prevention and resolution." Results for the remaining four Thematic Sessions are provided in Additional file 2.

The results shown in Tables 1 and 2 for these two thematic sessions reveal vibrant and creative perspectives on empirical analysis of migration. Recall that the respective summaries of the co-facilitators synthesize inputs from Member States, presentations during the sessions and submitted interventions. Accordingly, we expect greater specificity and detail in proposals for data and research from aggregation of the interventions submitted by civil society organizations. The number of interventions by stakeholders was

⁵https://refugeesmigrants.un.org/consultation-phase

⁶The (often long) lists of proposals and recommendations are somewhat ordered to aid in their review: proposals for concepts and data begin with concept specification, gaps and needs for data, population coverage, analysis, and issues of data management; proposals for descriptive analysis are ordered or grouped by scale (micro, meso, macro) and topic; proposals for explanatory research similarly by scale of analysis and also by outcome issue; and proposals for models and estimation are very roughly grouped by topic.

Table 1 Proposals for data and research: Thematic Session I Human rights of all migrants, social inclusion, cohesion and all forms of discrimination, including racism, xenophobia and intolerance

(a) Concepts and Data

Issues Brief:

Specification of concepts of situational and embodied vulnerability

Establish a common conceptual understanding of migrants in vulnerable situations

Need for data on deaths to migrants during migratory processes

Need for data on human rights violations to migrants

Need for data on detention of children, by grounds for detention, globally and nationally.

Need for data on reasons for migration

Need for data on vulnerability of migrants and changes in vulnerabilities over time

Need for data on vulnerability of migrants and changes in vulnerabilities over life course

Need for specification of vulnerabilities throughout the migratory processes (place of origin, en route, at borders and destination)

Need for data and monitoring of children during migratory process

Data on human rights violations and abuse of migrants; information on access to justice and protection

Need for disaggregated data on migrants in detention (age, sex and migratory status)

Maintenance of privacy and data collection principles

Co-facilitators Summary:

Broaden conceptualization of intolerance

Develop definitions of key migration terms, especially with regards to vulnerabilities

Collection of data to detect xenophobia, racism and discrimination (in partnership with human rights institutions and also migrants)

Specify and clarify concepts of migration, inclusion, integration and vulnerabilities

Data needed to support safeguarding of human rights of migrants

Data on levels and patterns of discrimination; data at the local level

Collection of data on hate speech and crimes

Information on degree to which government programs and practices adhere to international law

regarding human rights (i.e. identify gaps in coverage)

Collection of representative and disaggregated data on well-being of migrants

Collection of representative and disaggregated data on human rights among migrants

Stakeholders

Specification of concepts of voluntary return migration

Indicators of migration policy effectiveness

Coverage and characteristics of child migrant populations

improved data on irregular migration

Inclusion of migrants in process of data collection; inclusion of voices of migrants in data analysis

Use open-ended questions to determine claims of migrants

Attend to effective collection of information from persons among at risk groups of migrants

Accessibility of data on migration flows

Accessibility of data at local levels

Data analysis of migration must be placed in context

Development of indicators of child migration and child migrant welfare

Careful consideration of the interpretation of data on children and the specific identification and inclusion of adolescents among migrant children

Enhanced training in use of available data, migration analysis and interpretation of migration data and research

Maintain standards of data privacy

Monitor mis-use of data

Incorporate firewalls between migrant data sources and law enforcement

(b) Descriptive analysis

Issues Brief:

Levels of abuse, discrimination, exploitation among migrants, by migrant status (regular, irregular)

Levels of access to redress to human rights violations among migrants, by migrant status

(regular, irregular)

Experience of migrants in detention; conditions of detention; effect of detention

Need for data on variation of vulnerabilities by social and demographic characteristics

Trends in use of migrant detention in countries

Co-facilitators Summary:

Compare migrants and nationals in relationship to national legislations

Need for disaggregation by age, gender and disability status to compare vulnerabilities within context of national policies

Profile contributions of migrants at local, regional, national and international scale

Describe national policies on migrants' access to health care

Describe national policies on migrants' access to education

Describe health status and needs of migrant women, children and persons with disabilities

Table 1 Proposals for data and research: Thematic Session I Human rights of all migrants, social inclusion, cohesion and all forms of discrimination, including racism, xenophobia and intolerance (*Continued*)

Stakeholders

Migration decision-making among irregular migrants

Violence against migrants by social demographic characteristics

Levels and patterns of discrimination among migrant works, by gender and age

Levels of education, and educational opportunities among migrant children

Document housing and health characteristics of migrants

Specification of the migration characteristics and risks to adolescent migrants

Health status and risks of migrants, by migration status, demographic characteristics,

geography and over time

Geographic patterns of migration including irregular migration

Levels and patterns of privatization of detention facilities/programs

Patterns of human rights violations in country of flight

Representativeness of political parties within countries of immigration

National and intra-national variation in models of enforcement

Attitudes toward migrants and migration

Trends and geographic variation in opportunities for migration

(c) Explanatory Analysis

Issues Brief:

Relationship between conditions of migration (safe and regular) migration and benefits of migration for migrants

Relationship between conditions of migration (safe and regular) migration and benefits of migration for countries (of origin, and of destination)

Relationship between regularization of migrant status and vulnerability

Relationship between regularization of migrant status and social inclusion

Relationship between level of irregular migration and trust in state capacities to manage migration

Relationship of 'deep-seated xenophobia' to human rights violations against migrants

Relationship between social support for migrants and violation of immigration procedures

Relationship between policies of criminalization and exclusion and deterrence to irregular migration

Relationship between policies of criminalization and exclusion and well-being of migration

Relationship between policies of criminalization and exclusion and social inclusion of migrants in society

Relationship between the migration process and health of migrants

Effect of linguistic and cultural differences on migrants' access to and experience with law

and administrative processes.

Risks of statelessness among children born during migration ('migratory context')

Effects of migratory process on health of migrants, including those with pre-existing chronic health conditions

Relationship of conditions in countries of origin on changing vulnerabilities of migrants

Relationship of perception of level of irregular migration and negativity/response to migrants

Effects of detention on migrant health

Effect of migratory status of children on child labor force activities

Co-facilitators Summary:

Relationship between social inclusion of migrants and sustainable development

Human rights violations as a driver of migration

Effect of transit on human rights violations of migrants

Relationship between border control and detention policies and stigmatization of migrants

Relationship of whole of society approach to promoting social inclusion

Relationship between social demographic characteristics of migrants (age, gender, disabilities) and forms of discrimination

Effect of 'whole of government' approach in promoting social inclusion and integration among migrants

Role of public-private partnerships and migrant organizations in promoting social inclusion and

integration among migrants

Effect of stigma on social in/exclusion

Effect of [irregular] migration status on social inclusion

Effect of skills recognition on social inclusion

Effect of stigma on access to preventive care and on general public health

[Evidence on [under] utilization of health systems among migrants

Effect of [irregular] migration status on psychological well-being

Relationship between migratory status and access to integration support and service provision

Relationship between educational exclusion on well-being of migrant children

Effect of educational exclusion on social cohesion and discontent

Effect of exclusion on level of trust in communities

Relationship of level of willingness among migrants for integration and public perception of migrants

Relationship of coordination among governments and stakeholders to reducing discrimination

and intolerance

Analysis of root causes of racism and xenophobia

Relationship of access to social services and employments to patterns and levels of social inclusion

Table 1 Proposals for data and research: Thematic Session I Human rights of all migrants, social inclusion, cohesion and all forms of discrimination, including racism, xenophobia and intolerance (Continued)

More research on causes of intolerant rhetoric

Relationship between misperception in public discourse regarding migration and migrants and levels of racism, xenophobia and intolerance

Stakeholders

Relationship between human rights protections within migration and national policy and safety and protection of migrants

Role on migration policy and governance in creation of irregular status among migrants, particularly workers

Effect of electoral politics on levels of violence and xenophobia towards migrants

Effect of religious dogma on levels of violence and xenophobia towards migrants

Effect of gender equity on levels of societal inclusion and tolerance

Effect of religious instruction on levels of societal inclusion and tolerance

Migration as a determinant of health; health as a determinant of migration

Interrelationships among migration, communities of origin and destination, and public health Relationship between patterns of privatization of detention facilities/programs and violence against and security of migrants

The effect of level of migration flows on access to legal and judicial protections of migrants Effect of existence of human rights protection infrastructure on levels of trust between migrants and government office, particularly law enforcement

Effects of different models of detention and enforcement on migrants, and on host communities Relationship of gender-sensitivity in migration governance and human rights among women and gender equity

Relationship of concepts of migrant 'illegality' and general patterns of racial and ethnic tolerance and discrimination in society

Role of 'firewalls' on levels and nature of migrant inclusion in sectors of society

Role of migrants and migrant groups in developing and implementing programs of discrimination

Determinants of access to justice and protection, by migrant status (regular, irregular)

Role of stigma in process of reintegration of migrants into communities of origin

Comparative analysis of the relative social costs of migration between countries of origin and countries of destination

Relationship between labour market integration and social inclusion of migrants

Effect of informal economy on human rights violations on migrant workers

Effect of irregular status on human rights violations on migrant workers

Role of trade unions and workers' associations on social and economic inclusion of migrants

Role of political inclusion and participation of migrants in promoting social inclusion and democratic societies

Effect of migration and other dimensions of globalization on populist/nationalistic political activism Determinants of political participation of migrants

Role of citizenship/naturalization in promoting inclusion social, economic and political inclusion of migrants

Role of extending voting rights/opportunities among migrants in promoting social, economic and political inclusion of migrants

Factors contributing to fact-based dialogue about the effects of migration

Role of migrant and local governance and stakeholders in migration policy effectiveness

Role of 'interactive multiculturalist policy' in promoting national identity

Role of inclusion of migrant is city governance and administration on promoting inclusiveness as national level

Effect of attitudes toward migrants on maximizing positive effects of migration on society

Determinants of risks and vulnerabilities among migrants

Effects of anti-trafficking efforts on experience of women migrants

Effects of educational opportunities (and lack thereof) on development of child migrants

Effect of media and language on public opinion and attitudes toward migrants

Effect of public leadership on public opinion and attitudes toward migrants

Factors contributing to levels and nature of access to asylum applications

(d) Models and Estimation

Issues Brief:

Co-facilitators Summary:

Trend in rise of racism, xenophobia and intolerance

Trends and geographic variation in racism, xenophobia and intolerance against migrants

Trends in discrimination

Stakeholders

Emerging patterns of migration

Emerging patterns of xenophobia and intolerance

Independent monitoring of quality of migrant detention facilities and programs

Emerging trends and patterns in aspirations of migrants (and non-migrants)

Table 1 Proposals for data and research: Thematic Session I Human rights of all migrants, social inclusion, cohesion and all forms of discrimination, including racism, xenophobia and intolerance (*Continued*)

Trends and new patterns of migrant vulnerabilities (and resilience)
Monitor effectiveness of the implementation of policy
Role of migration in complementing national demographic change
Monitor trends in arbitrary detention
Human rights as a cross cutting theme in analysis and monitoring of migration
Gender as a lens in analysis and monitoring of migration
Inclusion of civil society, including migrant organizations, in monitoring, setting of benchmarks
and accountability of policy implementation and evaluation

34 in Thematic Session 1, and 32 In Thematic Session 3 (see Tables 1 and 2, and Additional file 2). In addition to a tendency for specificity of analytic focus concerning data and research, we also observe themes of gender, age (children), migration status, human rights, and issues of migrant welfare reflecting the respective mandates of civil society organizations (see https://refugeesmigrants.un.org/thematic-sessions).

It may be useful to consider variation in proposals for migration data and research by organizational characteristics, for example, mission, size and assets, geographic focus. But as a first pass, this exercise serves to set forth perspectives on relevant evidence and analysis to inform effective migration governance, policy and governance, notably at different levels of governance and implementation: international, national, regional and local. Migration scholars and students seeking to contribute to policy relevant research will find points of resonance with States and stakeholders.

Alternative and complementary perspectives on the promotion of an international data infrastructure for evidence-based migration policy

In her paper, 'New directions in migration studies: towards methodological denationalism' prepared and included in this special issue of Comparative Migration Studies, Bridget Anderson has asked whether "perhaps we are experiencing not an 'age of migration' but an age of migration research" (Anderson, 2019, p. 2). Anderson proceeds to eloquently interrogate "...why migration research matters and how we can study human mobility without turning it into a problem (2). Previous sections of the present have outlined why international and state actors consider international migration and population movements as broadly and specifically relevant to the promotion of sustainable development. Results of our analysis of inputs from Member States and civil society reveal policy as well as substantive domains of needed data, research and analysis, and explanation concerning migrants and displaced populations, and communities of origin and destination.

Among many salient recommendations, Anderson asks for denationalization of migration research and data, and de-problematizing of the migrant, to encourage wider lens on processes of international migration mobility. As an alternative, analytic focus should be given to documenting/measuring the mobility and transitional experiences of all persons and groups of people within populations. In fundamental ways Anderson's argument is consistent with a classical demographic perspective on international migration, one that seeks to measure mobility behaviors and experiences among all members of a population, and the causes and consequences of migration and mobility at different scales of analysis, rather than limiting inquiry to persons identified through entitlements and status under sovereign/national law and administration. Anderson's case for

Table 2 Proposals for data and research: Thematic Session II Addressing drivers of migration, including adverse effects of climate change, natural disasters and human-made crises, through protection and assistance, sustainable development, poverty eradication, conflict prevention and resolution

(a) Concepts and Data

Issues Brief:

Comprehensive, comparable and disaggregated data are needed for understanding of causes of migration Need for longitudinal data to adequately grasp longer-term processes and evolutions driving migratory patterns, such as climate change, demographic transitions, and structural transformation.

Need to strengthen all national data resources to include gender and age disaggregation in national censuses, surveys and administrative sources.

Promote international cooperation among countries and other stakeholders in data collection, analysis and dissemination of migration data

Co-facilitators Summary:

Specification of concepts of human-made crisis

Specification of armed conflict as driver of migration

Specification of causes of migration vis a vis failure to adapt to changing conditions versus adaptation strategies.

Need for longitudinal data on environmental change and migration

Need for data disaggregation for group specific vulnerabilities, risks and propensities

Need for international coordination, harmonization and interoperability of data collection and analysis Critical analysis of migration categories in relationship to climate change and environmental crises

Analysis of migration as a multi-causal phenomenon

Information on gaps in protection of populations

Promote research and data collection, including longitudinal data, that reflects multi-dimensional nature of migration

Collect migration data at local and household levels

Integrate qualitative and quantitative data on migration

Collect migration data over time, and longitudinally

Harmonize methodologies of data collection and analysis among national institutions, and among

Promote sharing of data and approaches to analysis within and among nations

Strengthen the capacities of national institutions to ensure data gathering, disaggregation and analysis

Stakeholders:

Definition of migration within context of freedom of movement

Specification of concepts of environmental migration

Specification of concepts of adaptation

Develop methods of climate risk analysis

Blurring of categories of forced migration

Documentation of reasons for migration

Data on levels and locations of armed conflict

Data on climate, environmental and population change, by geography

Data on reasons for migration

Need for data on slow onslaught environmental change in relationship to migration

Data on population displacement (internal and international) due to environmental disasters

Collection of data on obstacles to migration

Need for data on unprotected groups of forced migrants and their characteristics

Need for longitudinal data and analysis of migration and development

Need for longitudinal data and analysis of migration and development

Migration processes in rural and agricultural areas

Improve comparability of migration data for regional analysis

(b) Descriptive analysis

Issues Brief:

Description of characteristics, vulnerabilities of migrants versus resident populations at different stages of crisis

Co-facilitators Summary:

Description of needs and vulnerabilities of all migrants, not just those qualifying as refugees under the Convention

Gender differences in characteristics of all migrants, including refugees and nonrefugees

Determination of needs and characteristics of different types of migrants, including refugees and nonrefugees

Gender differences in the migration process

Develop accurate and country-specific migration profiles

Stakeholders:

Social and economic characteristics of persons displaced by environmental crises, by length of displacement

Document role of women in peace keeping and peace building projects and sustainable development

Table 2 Proposals for data and research: Thematic Session II Addressing drivers of migration, including adverse effects of climate change, natural disasters and human-made crises, through protection and assistance, sustainable development, poverty eradication, conflict prevention and resolution (*Continued*)

Recognition of contribution and resilience of women migrants

Description of resilience, capacity of communities and community organization vis a vis climate and environmental change

Description on migration processes in rural and agricultural areas

Trends in sudden onset hazard events by geography

Regional analysis of migration

Regional analysis of response to migration and migrants

Patterns of innovation in agricultural sectors

(c) Explanatory Analysis

Issues Brief:

Research on scalar dimensions of drivers of migration (geographic scale, location, distance and duration) in relationship to the effects of migration (to inform) effective efforts both protect migrants and increase the benefits of migration

Interactions between drivers of migration and migration decision-making regarding channels and means of migration

Improved understanding of the variation in perception of risk of effects of climate change

Effects cross border environmental change and crisis on migration and mobility

Particular vulnerability of migrants with regions with emerging conflict and unrest.

Longer-term effects of conflict on livelihoods, health and security

Co-facilitators Summary:

Interrelationships between migration and development

Relationship between demographic changes (change in growth, distribution and age composition) as cause of migration

Improved understanding of the drivers of migration that promote development

Relationship between slow-onset climate change and socioeconomic vulnerabilities

Effects of environmental disasters on internal displacement and on international migration

Relationship among climate change, disasters, and migration

Multi-dimensional and intersecting drivers of migration requires a holistic perspective on causes (and consequences) of migration

Drivers of internal displacement and effects on other forms of migration

Relationship between conditions of migration to development effects of migration

Analysis of migration at different scales – household and national, regional

Analysis of migration as a family livelihood strategy in response to poverty

Effects of global skills partnerships on increasing the benefits of migration in meeting labour market needs

Conceptualization of migration as adaption strategy within context of climate change

Relate [multidimensional, holistic] perspectives and research on migration to frameworks relating to Address gender dimensions of the drivers of migration, at all stages of the migratory process

Stakeholders:

Drivers of dangerous migration

Role of armed violence in forced migration

Determinants of risk-related migration

Determinants of non-migration

Social determinants of migration

Role of lack of economic opportunities as driver of migration; breakdown of social contract

Perception of lack of opportunity as motivating factor migration

Constraints on maximizing economic opportunities

Human rights abuses as driver of migration

Effects of working conditions (decent jobs) on push for out migration

Effect of levels of engagement of humanitarian law on levels and nature of forced migration

Role of perception of environmental change in mobility decision-making

Role of local governments in promoting positive effects of migration

Role of community and regional contextual factors on migration decision-making

Effects of on slow onset environmental change on migration

Role of households in migration decision-making within context of environmental change

Relationships among poverty, length of displacement by environmental disasters and human rights abuses

Linkages between climate change and international migration

Factors contributing to building community resilience and adaptive strategies

Effects of development infrastructure and land use change on population movements

Role of remittances in household responses to environmental change, hazards

Assess role of women in peace keeping and peace building projects and sustainable development

Role of civil society organizations in response to migration and protection, needs of migrants

Contextual analysis of drivers of migration; regional analysis

Role of diaspora in supporting return migration

Mixing and multiple drivers of migrations as a challenge for migration policy

Table 2 Proposals for data and research: Thematic Session II Addressing drivers of migration, including adverse effects of climate change, natural disasters and human-made crises, through protection and assistance, sustainable development, poverty eradication, conflict prevention and resolution (*Continued*)

Interregional differences in migration

Role of non-economic factors influencing migration; importance of social, transnational networks

Implications of countries of origin becoming countries of destination

Effects of investment climate on the effects of remittances

Factors contributing to the transfer and effects of social remittances

Two-way relationships between migration and development

(d) Research Design, Models and Estimation

Issues Brief:

Population growth and dynamics in relationship to prospects for development at national, and regional scales

Models of migration propensities, plans and behaviors

Estimation of future migration flows in relationship to the effects of climate change

Modeling positive choice in migration decision-making in relationship to different stages, forms of environmental change

Modelling effects of trends in development, political stability and migration opportunities in relationship to different forms of migration

Modelling effects of improved governance (human rights protection, nondiscriminatory labor practices, provision of health and welfare services) on migration and the effect of migration

"Promote international repositories of analysis on migration drivers and enhance the use of evidence for policy formulation and programme design, including in monitoring and evaluation systems."

Co-facilitators Summary:

Projection of population movements resulting from environmental change (need for longitudinal data) Monitor emergence and decline of crises in relationship to displacement and migration Predication/anticipation of conflict and crisis at national and local levels

Stakeholders:

Models of adaptive strategies for environmental change

Models of different forms and spatial-temporal patterns of environmental change

Need for transdisciplinary, multidisciplinary perspectives on environmental change and migration

Projection of population and labour force, by geographic region

Models of environmental disasters and migration

Implementing climate risk analysis

Modeling trends in poverty reduction and migration ('migration hump' analysis)

Imagining migration as a choice versus necessity

Modeling national mitigation strategies in relationship to environmental migrations

Estimation of vulnerable households and communities at risk of displacement by environmental disasters Modeling interactions among population growth, urbanization, rising consumption and population displacement

Projection of population by vulnerabilities of children to effects of climate change, and exacerbation of inequalities among and within countries

Incorporate voices of migrants as 'experts in their own conditions' in monitoring, research and analysis Establish indicators for accountability

Identify/monitor issues which are under researched

Promote action research concerning migration

Adopt robust results framework

Conduct case studies of innovations and best practices in migration governance, and fostering positive effects of migration for development

changing our approaches to conceptualization, data collection and research on international migration and mobilities is just one positive example of the productive value of engaging critical perspectives in our respective projects.

In this regard, three critical frameworks on migration and other population analyses are relevant to our goal to promote priorities in international migration research and data. Here we consider (i) critical perspectives on refugee and forced migration research, including feminist perspectives and methodologies; (ii) the role of population data in human rights violations; and (iii) and somewhat related, the role of 'big' data in migration and mobilities research. These selected frames are not exhaustive of scholarly, epistemological and ethical grounds for critique, nor is our truncated

consideration of each comprehensive. Our hope is to embed the case being made here – that is, the case made by stakeholders in the GCM processes, for the role of migration research and analysis in migration governance and management – within the broader scholarly context of migration and population studies.

A first critically beneficial perspective is that of *policy irrelevance*. In what we believe to be a robust message in 2008, Oliver Bakewell argued for the generation of knowledge concerning dimensions of refugee migration categories that do not necessarily flow from the needs of refugee policy and program implementation and monitoring, an argument consistent with those of Anderson's perspectives of de-nationalize of migrant data and research (Bakewell, 2008; see also Van Near, 2012; Zetter, 2007, 2019). The 'dual imperative' of refugee and forced migration studies (see Jacobsen & Landau, 2003; see also Landau, 2019) to meet the standards of social scientific theory and method as well as the needs of policy makers resounds in current chorus of call for evidenced based policy for the broader field of international migration studies. These analytic issues have been well interrogated by Crawley and Skleparis (2017) within the context of the European migration 'crisis' in recent years (see also McGrath & Young, 2019).

Migration research that derives directly from the collection of migration data to serve national migration policy and programs goals, aspirations for international comparability in international migration statistics, progress towards the SDGs, or all of the above, run the risk of missing extant as well as emerging dimensions of migration and mobility and potentially entire groups of migrants, movers and the displaced. Nationalistic tendencies in data and information systems effectively problematizing the migrant (cf. Anderson, 2019). Hence, there is a critical role for the application of migration theory, and the attention of the social sciences generally, in tandem with migration policy, in guiding migration data collection and research, and in implementing approaches to data collection and analysis that are effectively and flexibly grounded in the social and demographic reality of migration.

Continuing with the critical vantages of refugee and forced migration studies, feminist perspectives give focus to the voices and experiences of persons omitted from data collection, analysis and research. In scholarship that has transformed refugee and forced migration studies, Wenona Giles and Jennifer Hyndman, and their colleagues critique the tendencies of refugee policy and policy-relevant inquiry to privilege the evidence generated for persons recognized officially as refugees, and even displaced persons. The result is invisibility of persons in who are officially 'out-of-place' in the international refugee regime - for example, persons not in camps, persons in protracted refugee situations, persons who have died (see Giles & Dippo, 2019; Giles & Hyndman, 2004; Hyndman & Giles, 2011, 2016) The analytic contributions of Hyndman and Giles are joined with the (hard) work of many scholars who have generated a rich critical literature on the constraints of conventional, too often patriarchal approaches to migration studies (see, for selected examples: Baines, 2004; Donato and Gabaccia 2015; Edwards, 2010; Holliday, Hennebry, & Gammage, 2018; Martin & Tirman, 2009; Mountz, 2011) By engaging this literature, efforts to establish a robust and resilient foundation regarding international migration and mobilities, sustainable development and human rights may rightly learn from these lessons in both feminist studies and forced and refugee migration research. Recognition by stakeholders in the GCM

process of the need for basic research on migration and mobility and the causes and consequences diverse and emerging patterns of international population movements bolds well for responsive, inclusive and innovation analytic approaches to research and data collection.

A third framework that provides a relevant degree of contest to the push for policy relevant international migration research originates in a very different corner of the scientific community. Over the past two decades some international statisticians and historians of statistics have organized around issues concerning the role of statistical systems in human rights, including both protections and abuses (see Asher, Banks, & Scheuren, 2008). In a cogent introduction to the issues, Seltzer and Anderson (2001) complement the myriad positive uses of public statistical programs, notably national census taking and vital registration systems with the 'dark side' of population data systems in permitting "...the identification of vulnerable subpopulations within the larger population, or even the definition of entire populations as "outcasts" and a threat to the overall health of the state" (Seltzer & Anderson, 2001, p. 482). Building on historical inquiries into use of social statistics to promote nationalism (see for example, Scott, 1998), historian of population censuses Margo Anderson and demographer William Seltzer, formerly of the UN Statistical Division, have collaborated in a series of historical case studies to demonstrate the record of human rights abuses deriving from population data systems. Population data systems are defined as: (a) one-time comprehensive data-gathering operations such as regular population censuses or special censuses; (b) one-time or periodic inquiries carried out on a sample basis; or (c) comprehensive administrative reporting systems, with or without a major statistical component, such as national population registration systems, that attempt to maintain a continuous record, including current address, for each member of the population or well-defined population subgroups (Seltzer & Anderson, 2001, p. 483; see also Seltzer and Anderson, 2002; Anderson and Seltzer 2009). Interrogation of population data systems occurs at the broadest - macroscale, to the level of regions and communities, and to the individual or microscale and the body. Examples of detailed case studies include the role of macro, meso and micro level data systems employed in the execution of the European Holocaust, the Rwandan genocide, forced migration of Native Americans in the nineteenth century, 'protection' and management Australian Aboriginal peoples in colonial and early federation Australia, and the use of 1940 US census data in processes of internment of Japanese Americans (for a review, see Kraly & McQuilton, 2005; Seltzer & Anderson, 2007, 2008). The results of these and other historical analyses detail the role of population data in processes of decision-making regarding vulnerable populations and provide a firm empirical foundation for cautionary guideposts to statisticians and others working within programs of data collection and statistical analysis about the potential for population targeting and control, and the extremes of human rights abuses (see Anderson and Seltzer, 2009).

In an important sense the emergence of 'big data' as a source of information on international migration and mobility provides a relevant illustration of the concerns of each of the critical perspectives selected for consideration within the context of evidence-based international migration governance and policy. During the consultative phase of the GCM the achievements, both realized and potential of data collected through the monitoring of social media and other forms of social and spatial information for 'big data' modeling and estimation was raised by stakeholders as a new opportunity for observing international population movements and mobilities, measuring the strength

of inter- and transnational relationships and connections, and anticipating future patterns of international mobilities.

Such analytic assets of big data for migration research analysis have been anticipated in recent decades. Assessments of its potential have been conducted by the Independent Expert Advisory Group on a Data Revolution for Sustainable Development (2014). The data revolution was defined as the "...explosion in the volume of data, the speed with which data are produced, the number of producers of data, the dissemination of data, and the range of things on which there is data, coming from new technologies such as mobile phones and the "internet of things", and from other sources, such as qualitative data, citizen-generated data and perceptions data..." The benefits for sustainable development of new sources of data was the integration "... with traditional data to produce high-quality information that is more detailed, timely and relevant for many purposes and users, especially to foster and monitor sustainable development" (United Nations Secretary General, Independent Expert Advisory Group [IEAG], 2014, p. 6; see also Martin & Singh, 2019 and Willekens, Massey, Raymer, & Beauchemin, 2016, p. 898). Entities such as the European Commission and the International Organization for Migration (IOM) have further documented and advanced the potential of sources of big data for specifically measuring and estimating population movement, settlement and integration (see IOM, 2018; see also IOM, 2017, pp. 187-188). Martin and Singh (2019) address the benefits, as well as the challenges of the use of big data in anticipating, warning and monitoring of forced displacement and flight.

Recognition of the pitfalls of 'big data' analyses are consistently considered in these analyses. For example, the IESG noted that data revolution for sustainable development can "...increase in the usefulness of data through a much greater degree of openness and transparency, avoiding invasion of privacy and abuse of human rights from misuse of data on individuals and groups, and minimising inequality in production, access to and use of data..." (IEAG, 2014, p. 6). The issue of people and places omitted from 'big data' systems analysis is a point of discussion in analyses of the potential for nontraditional forms of population and migration data; the challenge of population coverage, of course, is not unique to big data systems analysis. Mechanisms for safeguarding privacy and informed consent for purposes of research are also current and emerging domains of migration and mobility research using social media and other forms of e-information.

Each of these issues in the role of big data in migration search resonate with critiques of policy-relevant migration research by raising issues of inclusion, omission, exploitation of persons of interest, and of power and agency in participation in the use of data, research and research results. Furthermore, beyond migration policy relevance and policy for whom, remains the second of the (dual) imperatives: scientific rigor. In addition to issues of population coverage and research ethics of using mobile phone data in mobility research, Taylor raises the critical question about lack of information concerning the context of behaviors and activities 'observed' using big data analysis (Taylor, 2016). Again, not a new issue for social science, distance between the researcher and the research looms large for remotely generated data and poses challenges to validity and ground truth, as well as reliability of interpretation of research results.

Engagement of critical data studies throughout the processes to develop an 'international data infrastructure for migration research' is warranted (cf. Dalton, Taylor, & Thatcher, 2016). The preparatory process to the drafting of the Global Compact for Safe, Orderly and Regular Migration aspired to be inclusive and participatory of

stakeholders in global migration now and in the future, including migrants, displaced persons, including youth. Migration data research and analysis in support of humane and effective migration policy and programs deriving from the implementation of the GCM might well reflect those aspirations. Colleagues at the IOM describe those sensibilities well in the *World Migration Report 2018* in encouraging policy relevant research to reflect the agency of migrants, and non-migrants and household in decision-making, to incorporate the dynamic dimension of migration and mobility into research design and data collection, and "[h]arnessing the opportunities as well as managing the risks that new research technologies continue to present" (IOM, 2017, p. 189).

Intersections among international initiatives concerning population, development and migration

In recognizing the role of demographic data and research for governance regarding migration, the Global Compact for Migration underscores the salience of population dynamics in global, national and regional affairs. The complementarity between the ICPD Programme of Action, and the Global Compact for Safe, Orderly and Regular Migration is revealed in the critical relationship among international migration and population displacement and goals for human rights, welfare and place-based security, and for communities that are sustainable and free from discrimination and conflict. In this regard, it is noteworthy that the Actionable Commitments of Objective 1 Collect and utilize accurate and disaggregated data as a basis for evidence-based policies of the first - 'Zero Draft' (February 2018) - of the GCM was expanded to include a recommendation to:

k. Cooperate with relevant stakeholders in countries of origin, transit and destination to develop research, studies and surveys on the interrelationship between migration and the *three dimensions of sustainable development*, the contributions and skills of migrants and diasporas, as well as their ties to the countries of origin and destination (emphasis added).

The inclusion of this action within the Objective for research and analysis is significant as an obligation for migration data, research and training to be coordinated *among* stakeholders and *within* international frameworks of conceptualizing population and development.

The ICPD Programme of Action adopted at the International Conference on Population and Development in Cairo in 1994 gave dedicated focus to international migration, including documented and undocumented migrants, and refugees. In reviewing the status of the implementation of the Plan of Action in 2014, the UNFPA has provided a framework recognizing "the motivations for development are generated by human aspirations for dignity and human rights, for good health, and for both security of place and mobility" (UNFPA, 2014, p. 4). 'Place and mobility' emerges and stands firmly as one of the pillars of the population-development nexus:

The importance of place and mobility as a thematic pillar resides in linking the large-scale trends and dynamics in population – in household formation and composition, internal migration and urbanization, international migration and land and

displacement – to the achievement of both human dignity and well-being, and sustainable development (UNFPA, 2014, p. 6).

The signatories of the Millennium Declaration, adopted by the UN General Assembly in September 2000, resolved to protect the rights of migrants and to foster responsibility sharing regarding the settlement and return of refugees:

"take measures to ensure respect for and protection of the human rights of migrants, migrant workers and their families, to eliminate the increasing acts of racism and xenophobia in many societies (UNGA, 2000, para. 25)." Regarding refugees, the Declaration resolved to "strengthen international cooperation, including burden sharing in, and the coordination of humanitarian assistance to, countries hosting refugees and to help all refugees and displaced persons to return voluntarily to their homes, in safety and dignity and to be smoothly reintegrated into their societies (UNGA, 2000, para. 26)."

The UNFPA Framework of Actions for the follow-up to the Programme of Action of the ICPD Beyond 2014 (United Nations Fund for Population [UNFPA], 2014) and the Global Compact for Safe, Orderly and Regular Migration are complementary to each other in their respective consistency with international declarations and covenants concerning human rights. Second, in recognizing the increasing diversity and heterogeneity within global and regional migrations and population displacements, in terms of characteristics, drivers and as a result, impacts, the 2014 review of the ICPD PoA intersects with the recommendations from UN Regional Commissions for context specific analysis and response to international and interregional population movements (see UNFPA, 2014).

Very critically, the 2014 review emphasizes the importance of robust knowledge and knowledge generation for implementation of actions to achieve goals:

654. Sustainable development cannot be achieved without evidence-based governance. Effective governance demands good statistics to monitor progress and to hold leaders accountable for their activities and achievements. Investing in statistical capacity in demography, public health, human rights, migration, economic growth, employment or climate change makes it possible to understand their linkages and impact on sustainable development, and to shape the policy process (UNFPA, 2014, p. 178).

This thesis is consistent with the arguments of the GCM.

Somewhat more specifically, the 2014 review intersects with the actionable commitments of the GCM in several specific analytic goals for demographic data, research and training regarding international migration and population displacement. Again, a provisional list, shown in Table 3, includes the critical importance of: disaggregation of population groups of inquiry by age and gender; specification of historical, spatial and temporal frames; research on drivers of migration and displacement within the context of population dynamics; comprehensive analysis of effects of migration and population displacement in place and over time; comparative and longitudinal analysis; coordination, cooperation and comparability in population and migration data, concepts and analysis.

Table 3 Intersecting themes in demographic analysis of the Global Compact for Migration

Data and Data Collection

- -disaggregation of data by age, gender, migration status
- -longitudinal data
- -common statistical concepts, standardization,
- -qualitative data as well as social demographic data
- -common methodologies
- -migration data through national data systems (censuses)
- reasons for migration
- -use of administrative data; registration data
- -issues of privacy in data collection and storage

Research

- -causes, drivers of migration
- -causes of racism, xenophobia
- -relationship between irregular migration and labor needs
- -relationship between economic trends and smuggling
- -effects of remittances of developments; gender differences
- -inter- and multidisciplinary approaches to data analysis
- -sharing of evidence, and results of research

Training and Capacity

- -integration of migration
- -public-private partnerships

Unlike the Millennium Development Goals (MDGs), the SDGs, adopted in 2015, address the implications, challenges and opportunities of urbanization and the components of urban growth for sustainable development as well as the role of international migration and population movements in global development. Recent SDG monitoring, as expressed in the *Sustainable Development Goals Report 2018*, places human migration and mobility at the intersections among the goals. Migration is one of six processes forming critical 'linkages' among the SDGs by fostering 'inclusion' and sustainability at the global, regional and local scales. The reduction if not elimination of conflict, and the promotion of security also addresses issues of forced migration and population displacements. Recognition of these intersections among the SDGs reflect the essential role of 'place and mobility' as a foundation or 'pillar' of the interrelationships between population and development.

Critical consideration of progress toward the SDGs, moreover, addresses several features of international migration that resonate directly with the GCM. A partial list of intersections includes the universal framework of human rights for all persons and all categories of migrants, the benefits of migration for economic and social capital in both sending and receiving societies and communities, increased understanding of the causes and consequences of racism and xenophobia, and the recognition of dimensions of vulnerabilities and resilience associated with gender, age, and location, and notably the effects of climate change on secure residences and livelihoods.

The Sustainable Development Goals Report 2018 also draws attention to several characteristics of contemporary international migration that may warrant further consideration in the implementation of the Global Compact for Migration as well as avenues

⁷For an overview of the relation between migration and the SDGs, see: United nations Department of Economic and Social Affairs, Population Division (December 2015). *Integrating migration into the 2030 Agenda for Sustainable Development*. Population Facts No. 2015/5 (https://www.un.org/en/development/desa/population/migration/publications/populationfacts/docs/MigrationPopFacts20155.pdf).

for increasing the intersections between the SDGs and the GCM. The 2018 report raises the question of the degree to which migrants, both internal and international, bring entrepreneurship to economies of destination, with potential positive effects at the local, national and global levels. Importantly, the Report recognizes the potential if not actual role of migrants as leaders within civil society, the economy and in government and draws attention to the role of longer-term and shorter-term migration in relationship to social and economic development in ways more explicit than the GCM (United Nations, 2018).

Adoption of the Global Compact for Safe, Orderly and Regular Migration has set in motion a process of implementation and monitoring of actionable commitments agreed upon at the International Conference for Safe, Orderly and Regular Migration, held in Marrakech, Morocco in December 2018. Coordination of the GCM commitments with implementation and monitoring of migration related actions of the Sustainable Development Goals and Programme of Action regarding population will serve each global initiative, respectively and specifically, and will serve the promotion of human migration and also mitigation of population displacement more generally. Global, regional and local stakeholders in international population movements, including migrants themselves, have and continue to offer experienced perspectives concerning the role of demographic data, research and training in these efforts to promote evidence-based response, support and solutions in matters of population and development. The community of population scientists is a stakeholder critical to these efforts for responsibility sharing for global well-being and sustainability.

In working to complete this inventory we have sought to communicate the vibrancy of proposals for migration data and analysis expressed during the preparatory processes for the Global Compact for Migration, placed within the context of evolving perspectives on the place of international migration in national planning and international development goals. There is much to be done to tap the resources underlying the preparation and evolution of the Global Compact for Migration in relationship to strengthening the empirical foundation for migration policy and the generation of new knowledge concerning the causes and consequences of international and interregional migration in this century. Sharing these creative resources – from informed and committed stakeholders in the intersections among migration, development and human rights – with social and population scientists may serve to advance the implementation of the Global Compacts, progress toward the Sustainable Development Goals, and the roadmap for humane migration.

Supplementary information

Supplementary information accompanies this paper at https://doi.org/10.1186/s40878-019-0166-y.

Additional file 1. Statement by the International Union for the Scientific Study of Population (IUSSP) on Strengthening Migration Data, Research and training, in the Context of the Global Compact for Safe, Orderly and Regular Migration.

Additional file 2. Proposals for Data and Research, continued: Thematic Session III International cooperation and governance of migration in all its dimensions, including at borders, on transit, entry, return, readmission, integration and reintegration. Thematic Session IV Contributions of migrants and diasporas to all dimensions of sustainable development, including remittances and portability of earned benefits. Thematic Session V Smuggling of migrants, trafficking in persons and contemporary forms of slavery, including appropriate identification, protection and assistance to migrants and trafficking victims. Thematic Session VI Irregular migration and regular pathways, including decent work, labour mobility, recognition of skills and qualifications and other relevant measures.

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EPK conducted the inventory and analysis of textual and oral sources. EPK and BH prepared sections of the original and revised manuscript. Both authors read and approved the final manuscript and its revisions.

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Competing interests

The authors declare that they have no competing interests.

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References

Abel, G., & Sanders, N. (2014). Quantifying international migration flows. Science, 342, 1520–1522.

Aleinikoff, T. A. & S. Martin. (2018). *Making the Global Compacts work: What future for refugees and migrants?* Zolberg Institute on Migration and Mobility, New School for Social Research and Kaldor Centre for International Refugee Law, University of New South Wales Policy Brief No. 6. April.

Anderson, B. (2019). New directions in migration studies: Towards methodological de-nationalism. *Comparative Migration Studies*, 7, 36.

Anderson, M., & Seltzer, W. (2009). Federal statistical confidentiality and business data: Twentieth century challenges and continuing issues. *Journal of Privacy and Confidentiality*, 1, 7–52.

Asher, J., Banks, D., & Scheuren, F. J. (Eds.) (2008). Statistical methods for human rights. Berlin: Springer-Verlag.

Baines, E. K. (2004). Vulnerable bodies: Gender, the UN and the global refugee crisis. Hants: Ashgate.

Bakewell, O. (2008). Research beyond the categories: The importance of policy irrelevant research into forced migration. Journal of Refugee Studies, 21, 431–453.

Center for Global Development (2009). Five steps toward better migration data. Washington, D.C: Report of the Commission on International Migration Data for Development Research and Policy.

Crawley, H. F., & Skleparis, D. (2017). Refugees, migrants, neither, both: Categorical fetishism and the politics of bounding in Europe's 'migration crisis'. *Journal of Ethnic and Migration Studies*, 44, 48–64.

Donato, K., & Gabaccia, D. (2015). Gender and International Migration. New York: Russell Sage.

Dalton, C. M., Taylor, L., & Thatcher, J. (2016). Critical data studies: A dialog on data and space. *Big Data & Society*, *3*, 1–9. Edwards, A. (2010). Transitioning gender: Feminist engagement with international refugee law and policy 1950-2010. *Refugee Survey Quarterly*, *29*, 22–45.

Giles, W., & Hyndman, J. (Eds.) (2004). Sites of violence: Gender and conflict zones. Berkeley: University of California.

Giles, W., & Dippo, D. (2019). Transitions from knowledge networked to knowledge 87 engaged: Ethical tensions and dilemmas from the global to the local. In S. McGrath, & J. E. E. Young (Eds.), *Mobilizing global knowledge: Refugee research in an age of displacement*, (pp. 87–106). Calgary: University of Calgary.

Global Compact for Migration (GCM) (2018). Global compact for safe, orderly and regular migration. Zero Draft. 5 February. Global Fund for Migration and Development (GFMD) (2019). gfmd.org.

Holliday, J., Hennebry, J., & Gammage, S. (2018). Achieving the sustainable development goals: Surfacing the role for a gender analytic of migration. *Journal of Ethnic and Migration Studies*. https://doi.org/10.1080/1369183X.2018.1456720.

Hyndman, J., & Giles, W. (2011). Waiting for what? The feminization of asylum in protracted situations. *Gender, Place and Culture*, 18, 361–379.

Hyndman, J., & Giles, W. (2016). Invisible lives and silent disasters. In *Living on the edge: Refugees in extended exile*. London: Routledge. International Organization for Migration (IOM) (2017). *World migration report 2018*. Geneva.

International Organization for Migration (IOM) (2018). Big Data for Migration. Data Bulletin: Informing a Global Compact for Migration. (Summary of report from the workshop, Big Data and alternative data sources on migration: from case-studies to policy support, jointly organized by the European Commission's Knowledge Centre on Migration and Demography (KCMD) and IOM's Global Migration Data Analysis Centre (GMDAC). Ispra, Italy. 30 November 2017). Geneva: International Organization for Migration.

Jacobsen, K., & Landau, L. B. (2003). The dual imperative in refugee research: Some methodological and ethical considerations in social science research on forced migration. *Disasters*, 27, 185–206.

Kraly, E. P., & Abbasi-Shavazi, M. J. (2019). The promise and potential of the demography of refugee and forced migration. In S. McGrath, & J. E. E. Young (Eds.), Mobilizing global knowledge: Refugee research in an age of displacement, (pp. 169–192). Calgary: University of Calgary.

Kraly, E. P., & Gnanasekaran, K. S. (1987). Efforts to improve international migration statistics: A historical perspective. International Migration Review, 21, 967–995.

- Kraly, E. P., & McQuilton, J. (2005). The 'protection' of aborigines in colonial and early federation Australia: The role of population data systems. *Population, Place and Space*, 11, 225–250.
- Landau, L. B. (2019). Capacity, complicity, and subversion: Revisiting collaborative refugee research in an era of containment. In S. McGrath, & J. E. E. Young (Eds.), *Mobilizing global knowledge: Refugee research in an age of displacement*, (pp. 25–44). Calgary: University of Calgary.
- Martin, S. F., & Singh, L. (2019). Big data and early warning of displacement. In S. McGrath, & J. E. E. Young (Eds.), Mobilizing global knowledge: Refugee research in an age of displacement, (pp. 129–150). Calgary: University of Calgary.
- Martin, S. F., & Tirman, J. (2009). Women, migration and conflict. Netherlands: Springer.
- McGrath, S., & Young, J. E. E. (2019). Introduction: Mobilizing global knowledge in forced migration studies and practice. In S. McGrath, & J. E. E. Young (Eds.), *Mobilizing global knowledge: Refugee research in an age of displacement*, (pp. 1–22). Calgary: University of Calgary.
- Mountz, A. (2011). Where asylum-seekers wait: Feminist counter-topographies of sites between states. *Gender, Place and Culture, 18,* 381–399.
- President of the United Nations General Assembly (2018). Global compact for migration. In *Global compact for safe, orderly and regular migration* Final Draft. 11 July.
- Scott, J. C. (1998). Seeing like a state: How certain schemes to improve the human condition have failed. New Haven: Yale University Press.
- Seltzer, W., & Anderson, M. (2001). The dark side of numbers: The role of population data systems in human rights abuses. Social Research, 68, 481–513.
- Seltzer, W., & Anderson, M. (2002). NCES and the patriot act: An early appraisal of facts and issues. In *Paper prepared for presentation at the annual Joint Statistical Meetings, New York, August 10-15, 2002.*
- Seltzer, W., & Anderson, M. (2007). Census confidentiality under the second war powers act (1942-1947). In Paper prepared for presentation at the annual meeting of the Population Association of America, New York, March 29-31, 2007.
- Seltzer, W., & Anderson, M. (2008). Using population data systems to target vulnerable population subgroups and individuals: Issues and incidents. In J. Asher, D. Banks, & F. J. Scheuren (Eds.), *Statistical methods for human rights*. Berlin: Springer-Verlag Chapter 13.
- Sutherland, P. (2013). Migration is development: How migration matters to the post-2015 debate. *Migration and Development*, 2, 151–156.
- Taylor, L. (2016). No place to hide? The ethics and analytics of tracking mobility using mobile phone data. *Environment and Planning D: Society & Space*, 34, 319–336.
- United Nations (2018). The sustainable development goals report 2018. NewYork: United Nations.
- United Nations, Department of Economic and Social Affairs, Population Division (UN DESA) (1980). Recommendations on statistics of international migration. Statistical papers series M, no. 58 (ST/ESA/STAT/SER.M/58). New York: United Nations.
- United Nations, Department of Economic and Social Affairs, Population Division (UN DESA) (2015). International migration flows to and from selected countries: The 2015 revision (POP/DB/MIG/Flow/Rev.2015)
- United Nations, Department of Economic and Social Affairs, Population Division (UN DESA) (2017). Trends in international migrant stock: The 2017 revision. (United Nations database, POP/DB/MIG/Stock/Rev.2017).
- United Nations, Department of Economic and Social Affairs, Population Division (UN DESA) (2019). Monitoring global population trends: International migration. www.un.org/en/development/desa/population/migration/data/empirical2/migrationflows.asp
- United Nations, Department of Economic and Social Affairs, Statistical Division (UN DESA) (1986). *National data sources and programmes for implementing the United Nations recommendations on statistics of international migration, studies in methods, series F, no. 37. (ST/ESA/ STAT/SER.F./37).* New York: United Nations.
- United Nations, Department of Economic and Social Affairs, Statistics Division (UN DESA) (1998). Recommendations on statistics of international migration. Statistical papers series M, no. 58, rev. 1. New York: United Nations.
- United Nations, Department of Social Affairs (1949). *Problems of migration statistics. Population studies no. 5.* New York: United Nations.
- United Nations, Department of Social Affairs (1953). International migration statistics. Statistical papers series M, no. 20 (ST/SOA/SER. M/20). New York: United Nations.
- United Nations Development Program (2009). Human development report 2009. New York: United Nations.
- United Nations Fund for Population Activities (UNFPA) (2014). Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development Beyond 2014. Report of the Secretary-General United Nations A/69/62
- United Nations General Assembly (UNGA) (2000). United Nations Millennium Declaration. Resolution adopted by the General Assembly. A/RES/71/1. A/RES/55/2. 18 September.
- United Nations General Assembly (UNGA) (2015). Transforming our world: The 2030 agenda for sustainable development. A/Res/70/1. United Nations General Assembly (UNGA) (2016). New York Declaration for Refugees and Migrants. Resolution adopted by the General Assembly on 19 September 2016. A/RES/71/1. 3 October.
- United Nations General Assembly (UNGA) (2017a). Making migration work for all report of the Secretary-General. A/72/643. United Nations General Assembly (UNGA) (2017b). Report of the special representative of the secretary-general on migration. A/71/728. 3 February.
- United Nations General Assembly (UNGA) (2018a). International migration and development report of the Secretary-General. 1 August. A/73/286.
- United Nations General Assembly (UNGA) (2018b). Remarks at launch of report "Making migration work for all". https://www.un.org/sg/en/content/sg/speeches/2018-01-11/launch-reportmaking-migration-work-all-remarks.
- United Nations High Commissioner for Refugees (UNHCR) (2018). Global compact on refugees. A/73/12 (Part II).
- United Nations Secretary General, Independent Expert Advisory Group (IEAG) (2014). A world that counts: Mobilising the data revolution for sustainable development. New York and Geneva: United Nations.
- Van Near, N. (2012). Forcing the issue: Migration crises and the uneasy dialogue between refugee research and policy. Journal of Refugee Studies, 25, 2–24.

Willekens, F., Massey, D., Raymer, J., & Beauchemin, C. (2016). International migration under the microscope. *Science*, 352, 897–899

Zetter, R. (2007). More labels, fewer refugees: Remaking the refugee label in an era of globalization. *Journal of Refugee Studies*, 20, 172–192.

Zetter, R. (2019). Conceptualising forced migration: Praxis, scholarship and empirics. In A. Bloch, & G. Donà (Eds.), Forced migration: Current issues and debates, (pp. 19–43). London: Routledge.

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