



# POPULATION AND DEMOGRAPHY

V I E W P O I N T P A P E R

*Benefits and Costs of the Population and Demography  
Targets for the Post-2015 Development Agenda*

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# Benefits and Costs of the Population and Demography Targets for the Post-2015 Development Agenda

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Post-2015 Consensus

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## Introduction<sup>1</sup>

Echoing the Rio Declaration (principle 8) agreed at the United Nations Conference on Environment and Development in 1992 in Rio de Janeiro, Brazil, the Programme of Action (principle 6) of the International Conference on Population and Development (ICPD) held in 1994 in Cairo, Egypt, emphasizes two critical elements for sustainable development: The need for sustainable patterns of production and consumption – which is the hallmark of the green economy – and the need to address population dynamics.

More recently, the debate on sustainable development and sustainable development goals has put renewed emphasis on the importance of population dynamics and their determinants. Population dynamics and related population issues were emphasized in the outcome document of Rio+20 “The Future We Want” as well as the subsequent report of the United Nations Task Team “Realizing the Future We Want for All”. The emphasis on population dynamics in international debates and conferences, as well as intergovernmental and interagency processes, is mirrored by increasing concerns about population dynamics at the national level (UN DESA, 2013).

Against this background population dynamics became one of eleven major themes that were considered of particular relevance for the consultations on the post-2015 development agenda and sustainable development goals. The global consultation on population dynamics in the post-2015 development put forward two overarching messages:

1. **Demography matters for sustainable development.** Population dynamics affect the key developmental challenges that the world is confronting in the 21st century – the assurance of food, water and energy security; trends in poverty, employment and inequality; the provision of social protection, health, education and other goods and services; and the challenge of environmental sustainability, climate change mitigation and adaptation – and therefore population dynamics must be addressed in the post-2015 development agenda.
2. **Demography is not destiny.** Population dynamics can be shaped by policies, and these policies can and must respect and protect human rights.

The outcome report of the global thematic consultation elaborated concrete and actionable proposals on how to address, harness and integrate population dynamics in the post-2015 development agenda, which underlined the importance of rights-based and gender-responsive policies.<sup>2</sup> These recommendations were broadly grouped under two headings:

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<sup>1</sup> Viewpoint written by Michael Herrmann is Senior Adviser on Population and Economics and Manager of the Innovation Fund at the United Nations Population Fund (UNFPA). The views expressed in this paper however are those of the author and they do not necessarily reflect the views of UNFPA.

<sup>2</sup> For details, see the report on “Population Dynamics in the post-2015 Development Agenda”, which also includes the Dhaka Declaration. Unlike this report, which presents the views and recommendations of experts, the Dhaka Declaration is a negotiated outcome document by government representatives. In accordance, there are a few but important differences between the recommended actions for example as regards access to sexual and reproductive health care

Overarching recommendations which shape population dynamics but are of a more general nature – including the promotion of higher living standards and income security, the development of human capital throughout the life course; and the collection, analysis and use of population data and projections – and thematic recommendations which focus on specific population mega trends –high fertility and population growth, low fertility and population aging, migration, and urbanization.<sup>3</sup>

Although reference to population dynamics has dropped out of the zero-draft of the report of the Open Working Group (OWG) on Sustainable Development Goals (SDGs) to the General Assembly, several of the recommended actions are included therein. Before entering into a process of negotiations on the zero draft, it would be most useful to pause and to critically ask ourselves whether the zero-draft includes the right goals and targets, whether some targets that are included would better be reformulated or dropped, and whether others that are not included would suitably be added, to ensure a solid basis for negotiations. Ideally, such a review would be undertaken by experts -- including those brought together by the Copenhagen Consensus Initiative, the members of the Sustainable Development Solutions Network, and others leading researchers and analysts – rather than those implied in the political discussions and negotiations.

The Copenhagen Consensus initiative is proposing to identify priority targets for sustainable development through benefit-cost analysis. On the basis of benefit-cost considerations, the study by Kohler and Behrman suggests possible priorities for the area of population dynamics. The objective of this paper is to review the Kohler-Behrman study and their recommended priorities for the area of population dynamics. My comments focus on the use of benefit-costs analysis, the centrality of human rights, the dynamics of development, and key variables for population dynamics.

## **The Limits of the Methodology**

If their decision had been based on a benefit-cost analysis, would countries have abandoned slavery? I am afraid that not. Similarly, we need to ask ourselves whether we want to base decisions about future development goals and targets – which are supposed to lead us towards the world we want – on the considerations of costs and benefits? In my view, a benefit-cost analysis is not the appropriate methodology to assess overall economic implications – which should be the overriding concern of policy makers – and more fundamentally a benefit-cost ratio is not an appropriate criterion to set priorities for a better future.

For individual economic actors that operate with budget constraints, benefit-cost analysis is a useful instrument for identifying priorities. For this reason, benefit-cost analysis is most commonly used by enterprises, public sector entities or even households. However,

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information and services. The outcome reports can be accessed at <http://unfpa.org/public/home/publications/pid/16152>

<sup>3</sup> The long list of recommended actions was subsequently summarized by the Brief on Population Dynamics that was prepared by the UN Technical Support Team to the benefit of the members of the Open Working Group on Sustainable Development Goals (SDGs): <http://sustainabledevelopment.un.org/content/documents/18310406tstissuespopdyn.pdf>

while benefit-cost analysis makes sense for individual economic actors (partial equilibrium), it makes little sense for an economy as a whole (general equilibrium). It is simply not possible to use a partial analysis, such as the benefit-cost analysis, to derive at conclusions about general impact.<sup>4</sup>

In a closed economy, expenditures are but the flipside of income. In other words, everything that is a expenditure/ cost to some economic actors is inevitably an income/ benefit to others. For example, a directive to install carbon capture filters in coal power plants would result in expenditures for the operator of the power plant, but these expenditures would be an income for the producers of carbon capture filters, and therefore it cannot be said that such a directive would have negative net effects. Therefore saying that for a shift towards green technologies would cost X per cent of GDP is, in a closed economy or at the global level, the same as saying that such a shift will contribute X per cent to GDP.

To be clear, any policy change will alter the distribution of costs and benefits between individual actors, but policy changes do not need to have a negative net effect on the economy as a whole. While the governments of countries need to be mindful of the distributive implications of their policies – in order for example mitigate adjustment costs and compensate losers – governments should be primarily concerned with the overall economic implications of their policies. To evaluate overall economic implications of alternative development goals, targets and policies however requires a macroeconomic analysis, rather than a partial analysis, and such a macroeconomic analysis would also suitably guide the discussions on financing for sustainable development.

Furthermore, benefit-cost analysis cannot evaluate non-material benefits/ moral gains that can come with political decisions. The decision to abandon slavery and child labor, like the decision to eliminate child marriage and end gender-based violence, may be associated with relatively high financial costs – drafting and enforcement of new laws, change of practices, etc. – and may promise comparatively small or uncertain financial benefits. However, such decisions will help to protect fundamental human rights, which have an intrinsic value and do not demand justification, and it will create a world that provides more equal opportunities to individuals.

In short, it is not easy to estimate the monetary costs of a particular policy, but in many cases it is even more difficult to estimate the monetary benefits. In addition, it is rather complicated to identify an appropriate discount rate. Yet, these are critical elements for a benefit-cost analysis. Furthermore, while benefit-costs analysis is useful for individual economic actors, it is not the appropriate instruments to evaluate overall economic implications. The result of benefit-cost analysis cannot simply be added up to ever higher levels of aggregation.

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<sup>4</sup> In accordance, benefit-costs analysis is typically used to evaluate the financial implications of an individual project, but it is not used to evaluate the overall economic implications of policies. To better understand the broader economic implications of a project, benefit-cost analysis is often complemented by a broader economic analysis – input-output tables, social accounting matrices, and general equilibrium models – and in recent years the broader economic analysis has been complemented by social and environmental assessments.

## **The Centrality of Human Rights**

Against this background, any study that focuses on benefit-cost analysis will find it difficult to quantify the benefits of stronger human rights. The same is true for the study by Kohler and Behrman on population dynamics. While this study underscores some targets on human rights, including the elimination of child marriage, the study is more skeptical of other targets in this regard.

Indeed, child marriage is one of the principle reasons for teenage motherhood, serious health risks, limited educational attainment, limited labor force participation and persisting inequalities, which add-up to real economic costs for girls and women. Conversely, eliminating child marriage can significantly reduce teenage pregnancies, and delay child bearing, and support girls in getting higher education and better jobs.

Efforts to eliminate child marriage, together with efforts to end discrimination of women, notably the de jure and de facto exclusion from the formal economy, can have strong positive effects. Such measures contribute to the empowerment and equality of women, as well as a rise in household income and lower poverty levels. While the Kohler-Behrman-study recognizes the value of increased female labor force participation, it does not appreciate the linkages to gender-based violence and discrimination. In addition, higher levels of education and economic opportunities will also affect the timing, spacing and number of children, and lead to lower levels of fertility in high-fertility countries. Bongaart's decomposition model (Bongaart, 1978; Bongaart et al. 1984) shows that a delay in child bearing will make a marked contribution to fertility reduction in high-fertility countries, and IIASA's population projections (KC et al. 2010; Lutz et al. 2007) show that higher educational attainment will have the same effect.

Kohler and Behrman point out that lower fertility levels and slower population growth can make positive contributions to sustainable development. It will help support not only social and economic development in the less developed countries – for example by creating conditions for a demographic dividend – but will also contribute to sustainable development at the global level. In accordance, the Sustainable Development Solutions Network has proposed a target to achieve replacement level fertility in high-fertility countries, and along similar lines Kohler and Behrman propose a target to achieve a more sustainable net reproduction rate. Although the proponents of such targets make very clear that the targets are to be achieved through policies that respect human rights, the critiques of such targets maintain that such targets would legitimize coercive population controls that violate human rights. Rather than focusing on a set of demographic targets, it would be scientifically and politically justifiable and reasonable to focus on the determinants of demographic change.

Individual choices and opportunities add up to demographic changes, and demographic changes are best addressed by enlarging rather than restricting these choices and opportunities. To this end, it is critical that countries realize the right to sexual and reproductive health and ensure unrestricted and universal access to sexual and reproductive health care information and services. This will not only have many positive

implications for women, households and societies, it will also result in a natural reduction of fertility levels. This is especially true, if access to sexual and reproductive health care, including voluntary family planning, is accompanied by efforts to eliminate child marriage, empower women, and promote higher education.

## **The Dynamics of Development**

Development is a dynamic process that can benefit from virtuous cycles, or can be impeded by vicious cycles between key variables. However, a simple focus on benefit-costs analysis does not pay attention to such cycles. It ignores secondary effects of interventions – for example the effect of eliminating child marriage on fertility levels, education, employment and income – and it ignores feedback loops of interventions – for example the effect of lower fertility, higher educational attainment and better economic opportunities on the women’s empowerment.

Evidently, some of the proclaimed secondary effects and feedback loops may turn out to be spurious or weak, but others may be strong and truly transformative. Ideally, more effort would be put into quantifying the linkages between variables, based on rigorous empirical and theoretical analysis, and into identifying the key variables that need to be addressed by the new development agenda.

## **Key Targets for Population Dynamics**

Identifying key variables and targets to address and harness population dynamics is a particularly great challenge against this background. If population dynamics should not be addressed through targets as regards the size, location or age structure of populations, or targets with respect to fertility levels and net reproduction rates, how then can population dynamics be addressed? Basically, population dynamics would need to be addressed in two principle ways: Through policies that shape demographic trends through their determinants (health, education, empowerment, employment, social protection), and through planning for demographic changes that will unfold over the next years.<sup>5</sup> While the poorest countries will continue to see high population growth and rapidly growing youth population, many others will see decelerating population growth and a rapidly aging population. Furthermore, many developing countries will continue to see an accelerating urban population growth, and almost all countries will be increasingly affected by migration.

Many of these “determinants” of population dynamics are addressed in the current draft of sustainable development goals. This draft includes for example goals which cover employment, social protection, health, education, and urbanization, and some of the associated targets effectively respond to changing population size, age structure and location. They either avoid addressing the implications of demographic change by arguing that the needs of all people must be met -- this is for example the case with the emphasis on universal health coverage -- or they implicitly recognize the importance of demographic

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<sup>5</sup> The importance of strengthening human capital to address population dynamics is highlighted in the study by Koher and Behrman, as well as the report on “Population Dynamics in the Post-2015 Development Agenda”, which identifies investment in human development throughout the life course as an overarching objective.

change by underscoring the needs of a particular population group – this is for example the case with the emphasis on life-long learning. However, the targets on social protection and urbanization ignore population dynamics, although progress towards these targets is inseparably linked to population trends. The ability of countries to provide social protection, including pensions, is strongly influenced by demographic changes, including population aging. Likewise, it will not be possible to ensure sustainable urbanization without efforts to anticipate and plan for the urban population growth.

While the benefit-cost ratio may not support the expansion of social protection systems, as argued by Kohler and Behrman, I would argue that the expansion of social protection systems is critical for sustainable development. This is especially true for many developing countries, where social protection systems are rudimentary and weak. Over the next years, most developing countries will witness the unfolding of two major demographic changes: Urbanization (an increasing number of young people are moving to the cities and leave their parents behind), and population aging (an increasing number of older persons that depend on support). While many young people will be sending money home to their parents, many older persons will no longer enjoy the personal care of family members. These two demographic changes will gradually erode traditional, intra-family support system and will threaten to raise poverty and inequality if not replaced by more formal, public support systems. Furthermore, in a world characterized by a significant increase in human mobility, it is desirable that countries ensure the portability of acquired social security and pension benefits across borders.

In accordance, I would consider the objective to establish formal social protection systems, and the objective to ensure a broad coverage of such system to be important for sustainable development. Furthermore, neither of these objectives makes necessarily any prescriptions concerning the exact benefits. Indeed, while it may be possible to aim for a universal minimum level of benefits, it would be impossible to define benefits beyond this level. This is not only because of significant differences in the social and economic conditions of countries, but also because fundamental differences in the social and political consensus of their societies. For example, what is an acceptable level of social transfers in the Northern Countries of Europe today would never have the chance of approval in the United States of America (Herrmann, 2012 and 2014).

Just as significant country differences make it impossible and undesirable to prescribe uniform levels of benefits, country differences make it also impossible and undesirable to prescribe uniform responses to population aging or migration. In some countries it may make sense to postpone the retirement age or increase immigration, as suggested by Kohler and Behrman, but in others such measures may fail to address the social and economic challenges at hand. Rather than prescribing relatively rigid targets, countries may want to create space for flexible solutions. For example, instead of determining a certain retirement age or immigration level, countries could decide on development targets that allow employers to hire from the retired labor force or foreign labor forces when they have the need. A related target could focus on operationalizing Mode 4 of the General Agreement on Trade in Services (GATS) -- the movement of persons across borders for the purpose of supplying services.

Kohler and Behrman point out that most efforts to raise fertility levels in low-fertility countries have been costly and without clear effects. However, there is some evidence that families opt to have more children, if they have easy access to care facilities. Indeed, day care for infants, toddlers and children; after-school care for pupils; and public care facilities for the elderly, are of increasing importance today. Such measures will not only help to elevate fertility levels in low-fertility countries, they will also help to ease the burden of care giving. By reducing the burden of care, which largely rests on women, such measures also create opportunities for a larger labor force participation of women.

In short, the new development agenda should address and shape population dynamics by emphasizing the development of human capital throughout the life course, which also requires social protection measures throughout the life course, but in addition the new development agenda must place much greater emphasis on anticipating and planning for the population dynamics that will unfold over the next years. Neither the current draft of sustainable development goals nor the Kohler—Behrman study pays adequate attention to this need.

Any development strategy that seeks to improve the living conditions of people will fail if it is not informed by fundamental knowledge of population dynamics. Knowledge of how many people are living and how population numbers will change, how old people are and how age structures will change, and where they are living and how geographic distribution will change is essential for people-centered, transparent and accountable governance. Without such knowledge, countries cannot hope to understand and meet the needs of people, and cannot ensure that their policies help to reduce vulnerabilities and improve wellbeing.

In accordance, any target with respect to human development should be informed by the projected changes in the size, location and age structure of population; and in addition the post-2015 development agenda should include concrete and stand-alone targets on collection, analysis and use of population data and projections:

**By 2030 significantly increase the collection of vital population data, and the preparation of population projections**

- By 2030 increase the coverage of birth and death registration, as well as the registration of marriages and unions to X per cent.
- By 2030 ensure that X per cent of countries undertake a census every ten years.
- By 2030 ensure that X per cent of countries undertake DHS, MICS or Living Standard Surveys every five years.

**By 2030 ensure the systematic use of population data and projections for planning**

- By 2030 demographic analysis is included in all national development strategies.
- By 2015 begin to systematically disaggregate relevant development goals and targets by sex, age and location, and by 2030 ensure that progress towards all

relevant development goals and targets is separately reported by sex, age and location to show inequalities in achievement.

## **Conclusion**

Population dynamics cover a very large range of demographic issues (high fertility and population growth, low fertility and population aging, migration and urbanization) and are inseparably linked with a large range of social and economic challenges (health, education, gender equality, women's empowerment, employment and social protection. etc.). This makes addressing and incorporating population dynamics in the new development agenda a complex undertaking. However, the reports on population dynamics and the post-2015 development agenda make a number of concrete recommendations to this end, and the study by Kohler and Behrman helps to further narrow down the list of recommended actions. The study by Kohler and Behrman argues a reduction in infant and child mortality; efforts to ensure universal health coverage; universal access to sexual and reproductive health care information and services; the elimination of child marriage; a strengthening of female labor force participation have either phenomenal or good benefit-cost ratios. While I would agree with critical importance of these factors, I would discourage any target as regards demographic variables and would instead put forward targets that address demographic changes through their determinants.

Targets to shape population dynamics need to realize the right to sexual and reproductive health and ensure unrestricted access to sexual and reproductive health care information and services, including family planning. Progress towards the following targets will also help to shape and harness population dynamics for sustainable development: A significant reduction in infant, child and material mortality; access to comprehensive sexuality education and an increase in educational attainment; the elimination of child marriage and gender discrimination; the establishment and expansion of social protection systems and the international portability of acquired social security and pension benefits; the recruitment of professionals from the retired labor force and foreign labor forces; access to care facilities for infants, toddlers and children, as well as an increasing number of older persons; and the establishments of systems that formalize and regulate international labor migration and help protect migrant rights. Of course there are many reasons for why such targets are desirable and important, other than their influence on population dynamics. Most notably, these and similar targets are important to strengthen human capital and capabilities, and to strengthen the agency, choices and opportunities of people, including the most marginalized.

In addition to targets that shape population dynamics, it is important, but largely ignored, that there be targets on population data and analysis. As outlined above, one such target should focus on the collection of population data and the preparation of projections; another should focus on the analysis of population-development linkages and the use of population data for planning.

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