



SELINUS UNIVERSITY
OF SCIENCES AND LITERATURE

**WORLD POPULATION GROWTH – FROM CONFLICT
TO CONSENSUS: THE ROLE OF THE UNITED NATION
POPULATION FUND**

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A Dissertation

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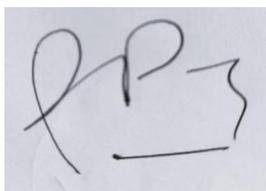
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DECLARATION

“I do hereby attest that I am the sole author of this project/thesis and that its contents are only the result of the readings and research I have done”.

Student's Signature

A handwritten signature in black ink on a light blue background. The signature is stylized and appears to be 'PJ' followed by a flourish.

Pedro Jairo Palacio

Abstract

Around 1950, the world population began a period of exponential growth due to a rapid fall of the mortality rates, while fertility rates continued high, across most developing countries. Social scientists and political leaders expressed their concerns because this rapid population expansion was a restraining factor towards development. Natural science specialists also viewed very rapid population growth as a worldwide menace to environmental and resource conservation.

Since its early stages, in 1948, the United Nations created a political body, the Population Commission, to advise the Organization on demographic matters. The same year a technical body, the Population Division, was also created to produce aggregated population data to support the monitoring of population dynamics at country, regional and worldwide levels.

However, during the 1950's and the 1960's the United Nations and the United Nations Specialized Agencies including the World Health Organization (WHO), the United Nations Organization for Education Science and Culture (UNESCO) and the Food (FAO) could not implement technical or financial support to countries in family planning and related programs due to ideological opposition based on political and religious grounds.

In 1967, after long debates and advocacy, the UN Secretary General created a population trust fund that two years later became the UN Population Fund (UNFPA) to support countries in achieving population stability and family planning as a human right.

This dissertation aims to assess the role and impact of the United Nations Population Fund UNFPA during its first 55 years (1967-2022) and aims, to identify strategies that could strengthen its impact.

INTRODUCTION

During the period 1960-1970 several global crises became evident to politicians, social and economic planners, and the academic community. These crises included, among others, poverty, environmental degradation, depletion of natural resources, the extinction of animal and plant species, hunger, nuclear proliferation, terrorism, and accelerated population growth.

It was also recognized that those crises were closely interconnected, in relations cause-effect, and it was clear that they represented a great risk to the planet and specially to humankind. The United Nations (UN), according to its mandate, initiated political, technical, and institutional actions to strengthen national capacities to address the problematic issues.

The Problem's Origen

The period 1950-1970 also witnessed significant advances in mortality reduction in developing countries, resulting from the expansion of public health, implementation of preventive medicine, and therapeutic technologies. Sanitation, availability of drinking water, development of new vaccines and antibiotics were some of the advances resulting from national and international efforts.

Administrative structures and strategies to improve both efficiencies and effectiveness of the health care systems started to be an important component of public policy in developing countries. At the same time the green revolution made available to poorer

countries, an expansion to the availability of food which reduced famine recurring episodes.

While the impact of disease, epidemics and hunger considerably reduced mortality during period 1950-1970 fertility maintained its traditional high levels due to ancestral traditions, low educational levels, the subordination of women and the unavailability of modern contraceptive methods.

The Problem

The population, that had expanded its number at a low pace during most of history, by 1950 started to grow faster because of notable mortality reductions in developing countries, combined with high fecundity levels which allowed the rate of population growth to increase close to 2.0% per year, considered as very high level by demographers. The rapid rate of population growth by 1950-1970 and the consequent high potential for total population increment was a major concern for the academic community and for public policy officers in some countries.

One characteristic of rapid population growth is the exponential nature of its numbers. When the population duplicating time is less than 40 years for the world -but less than 20 years for poor countries- the numbers become very large. It was observed that the demands for goods and services would increase exponentially and the impact on the quality of the environment could be very severe.

Not only in the long run but also in the short term, rapid population growth caused an increase in social and economic demands which were immediately sensed by state

planners. Despite an expansion of the existing institutional infrastructure it was insufficient to serve the immense demands of those in need, with the added burden of the rapidly increasing numbers.

Poor peasants started migrating to cities in search of better living conditions. Demographic growth in cities became even more rapid because migration added to their natural demographic growth, resulting in population duplication times of 10 to 12 years. Slums, poverty, and social stress resulted in many developing countries that were unable to procure the required urban and social infra-structure.

Another undesired consequence of population growth and urban conglomerates is pollution and exhaustion of renewable natural resources. The monocultures associated with the green revolution were considered as a reversal of ecosystem's natural evolution whose stability is only guaranteed by means of intensive use of fertilizers and pesticides.

The United Nation Responds

The first UN response in 1946 was the creation of the Population Commission composed of 47 Member States that met every two years to advise the UN Economic and Social Council (ECOSOC) on population matters. The same year the UN created the Population Division to conduct the production of demographic knowledge and insights of the implications of these realities.

In 1962 the Second Committee of the UN General Assembly did not approve a proposal submitted by four countries and the Population Commission to support technical assistance to requesting countries. The efforts of UN delegates to mobilize responses to

the population growth challenges from concerned UN Agencies and from the UN Secretariat itself encountered fierce opposition from other delegations due to political or religious reasons.

Between 1962 - 1966 there was ample and successful mobilization of UN delegations, national authorities, and other national and international bodies. These efforts led the UN General Assembly in 1966 to unanimously adopt a resolution requesting the Secretary-General, ECOSOC, the Population Commission, the Economic Commissions and the specialized agencies, to continue the implementation of a program of action meant to support countries and regional authorities, in training, research, information and advisory services on population matters.

Following the 1966 UN General Assembly Resolution, in 1967 its Secretary General, Mr. U Thant, decided to create a Trust Fund with voluntary contributions, to strengthen the potential of United Nations bodies and agencies, to support countries requesting population assistance.

UNFPA Emerges

Two years later the UN Trust Fund became the United Nations Population Fund for Population Activities (UNFPA), later renamed United Nation Population Fund (UNFPA), whose mandate was the support of other UN agencies, also promoting and leading consensus regarding the importance of addressing population issues, gender issues , and reproductive health issues, including family planning, in a very complex political and

ideological context. Resource mobilization, Institutional strengthening, and the support to member states to address population matters was also a central mandate for UNFPA.

Dissertation Goals

This thesis aims to examine the role that UNFPA has played during its 55 years of existence in the shaping of national and international responses to population challenges. Although the magnitude of a formal evaluation is out of the reach of a thesis, and an experimental framework is not considered as a part of the UN institutional development, an assessment of UNFPA's achievements will allow for some conclusions regarding the role played by this institution and also to propose some new strategies to improve its future impact.

Dissertation Structure

The body of the thesis contains five chapters. The first chapter presents an overview of the population dynamics during the main history eras until 1970. This background includes 8 historic periods since Pre-History until 1970, when the United Nations involved itself in addressing the unprecedented growth of the population.

During most of history, Pest, famine, and war kept the population under low levels of demographic growth. Interestingly, in every period of history, population issues have been addressed with great vigor by political leaders and the scholars as well, and some debate matters remained still alive until well advanced the 20th century.

Besides Prehistory, this chapter includes the Classical Era, the Middle Ages, the Early Modern Era, the Modern Era and the Contemporary Era (1920-1970), when the

population growth became exponential, but conservatives from the political left and religious leaders refused collective actions by the United Nations, under moral arguments and political positions considering population as a neutral factor to development.

The second chapter offers a review of the rapid population growth consequences on sustainable development and the quality of the environment. The third chapter presents the background under which the United Nations responded to the challenges coming from the explosive population growth. Opposing angles regarding the nature and consequences of population dynamics delayed the response of the United Nations until 1967 when its involvement was approved by the General Assembly by small margins. As stated earlier, UNFPA started as a trust fund in 1967, and its operations and institutional framework were strengthened to begin field operations at country level in 1969.

Chapter Four is devoted to the discussion about UNFPA's achievements and limitations on each mandate area including resource mobilization, settlement of conceptual controversies, institutional strengthening at country level and other national and international institutions, and the evolution of demographic variables. Conclusions and Recommendations are presented in Chapter Five.

Limitation to the assessment

Formal evaluations of UN institutions are not common practice within this intergovernmental system. It is possible that some internal reports are prepared to improve future planning, but they are not a matter of public information. Evaluations are reserved only to projects, and to sectorial programs under the normal programming

cycles. Therefore, an assessment of the UN institutions does not find abundant support from institutional records.

Dissertation perspectives and adopted style

My close association as United Nations staff member for 33 years and consultant for 5 years, since its very beginning in 1969, in several capacities going from technical roles to country representative and division deputy director, have provided me the knowledge about UNFPA's work, impact, and limitations. This doctoral dissertation pretends to reflect that.

Regarding the formal presentation of this Dissertation, the American Psychological Association style (APA) has been selected, with minor adjustments decided by the author, always under the main APA guidance.

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Bibliography

Alonso, J. (2016). Blog de Ciencias Sociales. Instituto de Ciencias Sociales Lope de Vega

<https://jaimelopedevegasociales.wordpress.com/author/jaimegeografiaehistoria/>

Aristotle. (1932). *Politics*. (H. Rackman, trans). Loeb Classical Library Bk. I, para 1; book II, paras. 6-10; Bk II, paras. 6-11; Bk VI para 5; Bk VII, paras 4-5 (Original book published ca 354 B.C.E.)

Biraben, J.N. (1980). An Essay Concerning Mankind's Evolution, Population. *Journal of Human Evolution*, 9(8), pp. 655-66. [http://doi.org/10.1016/0047-2484\(80\)90099-8](http://doi.org/10.1016/0047-2484(80)90099-8)

Botero, G. (1606) *The Greatness of Cities. A Treatise Concerning the Causes of the Magnificency and Greatness of Cities, book three*. (Robert Peterson, trans.,). Bookyards, the Library of the World. (Original work in Italian, 1598). <https://www.bookyards.com/en/author/page/2865/Giovanni-Botero>

Brazan, M. (2018). Controlling their Bodies: Ancient Roman Women and Contraceptives. *The UTSA Journal of Undergraduate Research & Scholarly Work*. 4 (p. 12). Retrieved 24 Jun 2022 from <https://rrpress.utsa.edu/handle/20.500.12588/63>

Brown, L. (1967). The world food situation – 1930-1980: Chronology of a Crisis. Alma College Perspective Spring. Volume 3, number 2.

Chen, N., Valente, P. & Zlotnik, H. (1998). What do we know about recent trends in Directions and urbanization? in M. Bilborrow (ed). *Migration, Urbanization, and Development: New Directions and Issues*, United Nations Population Fund (UNFPA) and Kluwer Academic Publishers. (p. 80, Table 2–6).

Childe, G. (1954). *Los orígenes de la civilización* (E. Gortary, trans). [Man makes himself]. Fondo de Cultura Económica, México D.F. (Original work published 1936).

Coale, A & Hoover, E. M. (1958). *Population growth and economic development in low-income countries*. Princeton University Press.

Davis, K. (1968). Population. In L. B. Young (Ed.), *Population in Perspective*. Oxford University Press. (Original work published 1963)

Declaration of Population. (1967). The World Leaders Statement. *Studies in Family Planning*, 1(16), pp.1-1. The Population Council. <https://doi.org/10.2307/1964890>

Dumond, R & Rosier, B. (1969). *El Hambre: Futuro del Mundo*. (E. Rimbau, Trans.). [Nous Allons a la Famin]. Editorial Nova Terra.

Dunlop J. (2000). John D. Rockefeller 3rd, statesman and founder of the Population Council. *Population today*, 28(6), 3. <https://pubmed.ncbi.nlm.nih.gov/12349764/>

Erlich, P.R., & Erlich, Anne, H. (1970). *Population, Resources, Environment. Issues in Human Ecology*. W.H Freeman and Co.

Food and Agricultural Organization of the United Nations (FAO) (2019, May 20) Declining bee populations pose threat to global food security and nutrition [Press release on the occasion of the 2019 World Bee Day]

Feen, R. H. (1984). The Historical Dimensions of Infanticide and Abortion: The Experience of Classical Greece. *The Linacre Quarterly*, (51/3/8), pp.249-252. <http://www.epublications.marquette.edu/lnq/vol51/iss3/8>

Gay, S. (1974). Confucius, ses disciples et la population. *Population*, 9(4/5), pp. 771-794. <http://Doi.org/10.2307/1530399>

Giltaij, J. (2019). Lex Iulia de Maritandis Ordinibus. *Oxford Classical Dictionary*. (2019, Feb. 25). Oxford University Press. Retrieved 21 Mar. 2022 from <https://doi.org/10.1093/acrefore/9780199381135.013.8270>

Graunt, J. (1939). *Natural and political observations made upon the bills of mortality*. (Walter F. Willcox, ed.). Johns Hopkins Press. (Original work published in 1662).

Hale, M (1677). *The Primitive Origination of Mankind, Considered and examined according to the Light Nature*. London, William Shrowsbery at

the Sign of the Bible in *Duke-Lane*.

<https://historyofinformation.com/detail.php?entryid=4267>

Halley, E. (1942). *Degrees of mortality of mankind*. Edited by (Lowell U. Reed, ed.) Baltimore, Johns Hopkins Press. (Original work published in 1693).

Harkavy, O., Roy, K. (2007). Emergence of the Indian National Family Planning Program. In C. Robinson & John Ross, (Eds.), The Global Family Planning Revolution: Three Decades of Population Policies and Programs (pp. 301-323). The World Bank.

Hollingsworth, T.H. (1983). Demografía Histórica (Aurora Garrido, trans). [Historical Demography]. Fondo de Cultura Económica, México D.F (Original book published in 1969)

John Paul II, 1981 Apostolic exhortation to the episcopate, to the clergy and to the faithful of the whole Catholic Church on the role of the Christian Family in the modern world, The Holy See Web Site: https://www.vatican.va/content/john-paul-ii/en/apost_exhortations/documents/hf_jp-ii_exh_19811122_familiaris-consortio.html

Johnson, L.B. (1965) Annual Message to the Congress on the State of the Union. The American Presidency Project Online by Gerhard Peters and John T. Woolley, <https://www.presidency.ucsb.edu/node/241819>

Johnson, S.P. (1987) *World Population and the United Nations. Challenge and Response*. Cambridge University Press.

Johnson, S.P. (1994) *World Population Turning the Tide. Three Decades of Progress*. Graham & Trotman.

Jones Rachel K. and Joerg Dreweke (2011), Countering Conventional Wisdom: New Evidence on Religion and Contraceptive Use. Guttmacher Institute. p. 4-5

Kantner, J.F, Kantner, A. (2006). An Overview of Major Donor Organizations Currently Providing International Population Assistance. In: *The Struggle for International Consensus on Population and Development*. Palgrave Macmillan. https://doi.org/10.1007/978-1-137-09699-9_6

Kautilya. (1992). *The Arthashastra* (L.N. Rangarajan, Ed. & Trans.). Penguin Books India (P) Ltd.. Bk 3, para. 372; Bk. IV, para 423; Bk V, para 459-461. (Original work published ca. 300 B.C.E.).

List of Catholic Church by Country (2022, November 27). In Wikipedia. https://en.wikipedia.org/wiki/Catholic_Church_by_country#:~:text=The%20country%20where%20the%20membership,at%20the%20end%20of%202018.

List of epidemics and pandemics by death toll. (2023, March 5) In *Wikipedia* https://en.wikipedia.org/wiki/List_of_epidemics#By_death_toll

List of famines by death toll (2023, February 26) In *Wikipedia* https://en.wikipedia.org/wiki/List_of_famines

List of wars by death toll (2023, March 2) In *Wikipedia* https://en.wikipedia.org/wiki/List_of_wars_by_death_toll

McNamara, R. (1969). Address to the University of Notre Dame. World Bank, Washington, DC. <https://openknowledge.worldbank.org/entities/publication/d1c58901-4216-5921-b28c-9d553d689789>

Malthus, T. (1998). *An Essay on the Principle of Population*. Reprinted by the Electronic Scholarly Publishing Project (Original work published in 1798) <http://www.esp.org/books/malthus/population/malthus.pdf>

Marx, K. (1976). *Capital Volume 1: A critic of Political Economy*. (Ben Fowkes, trans.). Penguin Books. (Original work published in German in 1867), http://www.lamarre-mediaken.com/Site/EAST_527_files/Marx_Capital_1.pdf

Meadows, Donella H, et al. (1972). *The Limits to Growth; A Report for the Club of Rome's Project on the Predicament of Mankind*. Universe Books.

Mesarovic, M. & Pestel, E. (1974). *Mankind at the turning point, the second report to the Club of Rome*. (First edition), 1974 ISBN-10: 0-525-15230-X / 052515230X

Mirkin, B. (2005). *Evolution of National Population Policies Since the United Nations 1954 World Population Conference*. *Genus*, 61(3/4), 297–328.
<http://www.jstor.org/stable/29789279>

Moatsos, M. (2021). Global Absolute Poverty: Present and Past since 1820. In J. L. van Zanden (Ed.), *How Was Life? Volume II* OECD Publishing. <https://www.oecd-ilibrary.org/sites/e20f2f1a-en/index.html?itemId=/content/component/e20f2f1a-en>

Nungent, R., Bloom, D., & Musinguzi, J. (2011). Working Group on UNFPA's Leadership Transition. Center for Global Development. <https://www.cgdev.org/page/working-group-unfpa%E2%80%99s-leadership-transition>

Organization for Economic Co-operation and Development, OECD. (2021) Data update to the 2021 Financing for Sustainable Development Report, following the 13 April release of 2020 ODA / data 1

Omran, A.R. (1980). *Population in the Arab World Problems & Prospects*. United Nations Population Fund & Croon Helm Ltd.

Paul VI. (1968). *Humane Vitae* [Encyclical Letter of the Supreme Pontiff]. St. Peter's, Rome. https://www.vatican.va/content/paul-vi/en/encyclicals/documents/hf_p-vi_enc_25071968_humanae-vitae.html

Petersen, William. (1988). "Marxism and the Population Question: Theory and Practice." *Population and Development Review*, vol. 14, pp. 77–101. *JSTOR*, <https://doi.org/10.2307/2808091>. Accessed 6 sept. 2022

Petty, W. (2014). *Essays on Mankind and Political Arithmetic*. (David Price, ed). [ebook] The Project Gutenberg eBook # 5619. (Original work published in 1687) (p.117) <https://www.gutenberg.org/ebooks/5619>

Plato. (1934). *Laws* (A.E. Taylor, trans). (London, Dent & Sons Ltd, eds). Collection Duke Libraries americana Bk. IV, paras. 707-709; Bk V, para. 736; Book.VI, para. 754 (Original work published ca. 347 B.C.E.). https://archive.org/details/lawsoplato01plat_0

Ravenholt R. T. (1969). A.I.D.'s Family Planning Strategy. *Science* 163(3863), 124-127.

DOI: 10.1126/science.163.3863.124

Roos, D. (Writer). (2021). How Early Humans Survived the Ice Age [TV series episode]. In *History Stories*. The Arena Group (Executive producers), A&E Television Networks, LLC.

URL: <https://www.history.com/news/ice-age-human-survival>

Rockefeller, J.D. III. (1972). Report of The Commission on Population Growth and the American Future to the U.S. Congress. 1972, March 27. The Center for Research on Population and Security. https://www.populationsecurity.org/rockefeller/001_population_growth_and_the_american_future.htm

Max Roser, Hannah Ritchie, Esteban Ortiz-Ospina and Lucas Rodés-Guirao (2013) - "World Population Growth". Published online at OurWorldInData.org. Retrieved from: '<https://ourworldindata.org/world-population-growth>'.

Sadler, M.T. (1830). *The Law of Population: A Treatise, in Six Books*. (John Murray, Ed.) Albemarle-Street, London, Pub by Google books

Salas, R (1979). *International Population Assistance: The first Decade*. Pergamon International Library.

Sanger, M. (2018). *An Autobiography*. Project Gutenberg EBOOK # 56610 (Original work published in 1938) <https://www.gutenberg.org/files/56610/56610-0.txt>

Singh, J.S. (1998). *Creating a new Consensus on Population*. The International Conference on Population and Development. Earthscan Publications Ltd

Spengler, J.J. (1969). Population Problem: In search of a Solution. *Science* 166 (3910), 1234-1238. American Association for the Advancement of Science DOI: 10.1126/science.166.3910.1234

Süssmilch, J. (2011). Divine Law to Human Intervention (J. Nipperdey, Trans. & ed.). *Population*, 66(3). <https://www.muse.jhu.edu/article/476358>

Tauber, I. (1963). Population Growth in Underdeveloped Areas. In Philip Houser (ed.), *The Population Dilemma* (pp. 29-45). The American Assembly. Prentice-Hall Inc.

Taylor, O. H. (1960). *A History of Economic Thought*. McGraw-Hill Book Company

UNFPA 2021a Annual Report – Delivering on the transformative results – Programs and Institutional Budget.

https://www.unfpa.org/sites/default/files/pub-pdf/EN_AR2021.pdf

UNFPA 2021b Annual Report 2021: Setting the Stage for Sustainability - Contraceptives Provided by UNFPA Worldwide.

https://www.unfpa.org/sites/default/files/pub-pdf/EN_AR2021.pdf

UNFPA 2021c Annual Report 2021: Setting the Stage for Sustainability - Delivering worldwide. https://www.unfpa.org/sites/default/files/pub-pdf/EN_AR2021.pdf

United Nations. (1945). Charter of the United Nations. <https://treaties.un.org/doc/publication/ctc/uncharter.pdf>

United Nations. (1946). Population Commission. Economic and Social Council, Resolution 3 (III), 1946, October 3th)

<https://www.un.org/development/desa/pd/content/CPD>

United Nations. (1953). *Determinants and Consequences of Population trends* (Population Studies, No 17). Department of Social Affairs Population Division ST/SOA/Series.

https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un_1953_determinantsandconsequencesofpopulationtrends_0.pdf

United Nations. (1954). Proceedings of the World Population Conference, Rome, 31 August-10 September 1954. E/Conf.13/417.

https://www.unfpa.org/sites/default/files/event-pdf/icpd_eng_2.pdf

United Nations. (1965). World Population Conference, Belgrade, 1965. *Journal of the Institute of Actuaries* (1886-1994), 92(1), 91–96.

<http://www.jstor.org/stable/41140145>

United Nations. (1966/1967). U.N. General Assembly Statements on Population Policy. *Studies in Family Planning*, 1(16), 2–12 1967. <https://doi.org/10.2307/1964891>

United Nations (1968). International Conference on Human Rights. Teheran 22 April to 13 May 1968 pp. 14,15). A/CONF.3 2/41 <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N68/958/82/PDF/N6895882.pdf?>

United Nations, ECOSOC (1970a). Resolution 1484 (XLVIII) International Conference on Population and Development, Bucharest

United Nations, ECOSOC (1970b). Resolution 1485 (XLVIII) Designation of 1974 as the World Population Year

United Nations. (1972) Yearbook. <https://www.un.org/en/yearbook>

United Nations, ECOSOC (1981). Resolution 1981/87 International Conference on Population and Development, Mexico City

United Nations. (1994). World Population Prospects 1994 revision, Department of Economic and Social Affairs, Population Division Online Edition. https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un_1994_world_population_prospects-1994_revision.pdf

United Nations (1985). The Mexico City Conference. The Debate on the Review and Appraisal of the World Population Plan of Action. Compiled by the Population Division.

https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un_1985_mexico_city_conference.pdf

United Nations (1974). International Conference on Population and Development, Bucharest 19-30 August 1974. Report / Plan of Action. E/CONF.60/19. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N75/388/20/PDF/N7538820.pdf?OpenElement>

United Nations (1984). Report of the International Conference on Population and Development, Mexico City 6-14 August 1984. E/CONF.76/19.

<https://digitallibrary.un.org/record/74631#record-files-collapse-header> and
https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/unpd_recommendations_e_conf.76_19_e.pdf

United Nations (1989) Resolution 1989/91 26 July International Conference on Population and Development El Cairo. ECOSOC
<https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/documents/2021/resolution-1989-91.pdf>

United Nations (1994). Programme of Action Adopted by the International Conference on Population and Development (ICPD), Cairo, Vol 1 . Department for Economic and Social Information and Policy Analysis ST/ESA/SER.A/149

United Nations (1995). Report of the International Conference on Population and Development. Cairo 5-13 September 1994. A/CONF. 171/13/Rev 1
https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/a_conf.171_13_rev.1.pdf

United Nations (1996) Report of the Executive Board on its work during 1996 – E/1996/33 – 1997 Executive Board of the United Nations Development Programme / United Nations Population Fund, p. 295 – (ESCOR, 1996, Suppl. No. 13)

United Nations. (1999). The World at Six Billion. Department of Economic and Social Affairs, Population Division, ESA/PIWP.154
https://www.un.org/development.desa.pd/files/files/documents/2020/Jan/un_1999_6billion.pdf

United Nations (2000). Millennium Development Goals.
<https://www.un.org/millenniumgoals>

United Nations (2016). Sustainable Development Goals.
<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

United Nations (2017). United Nations Population Fund Strategic Plan 2018-2020, Second regular Session UNDP/UNFPA Executive Board 2017, DP/FPA/2017/9.

United Nations (2019). World Population Prospects 2019, Department of Economic and Social Affairs, Population Division Online Edition. Rev. 1. https://www.un.org.development.desa.pdf/files/files/documents/2020/Jan/un_2019_wpp_vol1_comprehensive-tables.pdf

United Nations (2021). UNFPA Strategic Plan 2022-2025, UNFPA/UNDP Executive Board. Second regular Session, DP/FPA/2021/8.

United Nations. (2022). World Population Prospects 2022. Demographic indicators by region, subregion and country, annually for 1950-2021. Department of Economic and Social Affairs, Population Division. Online Edition. [http://WPP2022_GEN_F01_demographic_indicators_Rev1\(1](http://WPP2022_GEN_F01_demographic_indicators_Rev1(1)

World Population. (2023, April 15) In Wikipedia. https://en.wikipedia.org/wiki/Human_history

Chapter 1 - History of population growth: an overview

Our present is, to a great extent, the result of past events. Crossing the history of our past phenomena allows a better understanding of our present events. In the population field, historic perspectives provide a valuable framework that helps to gain a better perception of current events. Understanding how past societies, systems, ideologies, governments, and cultures operated in the population field provides a clearer picture regarding the immense demographic challenge the world faced by the middle of the twentieth century. We refer to what has been coined as “population explosion”.

This chapter will briefly revisit six history periods from pre-history until 1970 when the United Nations became fully involved in supporting the world community in addressing the emerging challenge created by the very rapid population growth.

Throughout history, peoples and nations have conceptualized about population theories; they have envisioned what they believed were their required policies¹. Population size has been considered as a power apparatus to safeguard land, and to expand territories and commerce. In turn, religions, and ideological movements, in their struggle for supremacy, have assigned great value to increasing the numbers of their adherents.

Furthermore, it is interesting to realize that still under statistical constraints, many ancient concepts and assertions often match current thinking, that now profits from demographic and sociological research. It is of especial interest that many of the issues

¹ Population theories are concerned with the causes and consequences of the population size, structure and distribution and the dynamics of demographic change; population policies are concerned with the means to modify selected aspects of a population, for the purpose of achieving specific goals.

and concerns that were part of the political and philosophical thinking, in ancient civilizations, have persisted along successive history periods.

Throughout most of history the population has experienced very low growth rates due mainly to the impact of wars, epidemics, and famines which have maintained high mortality rates and, in some cases, have reduced fertility potentials.

Prehistory (From 230.000 BCE to 3.000 BCE).

Prehistory is the largest period of human evolution; it covers about 99 per cent of the Homo sapiens permanency in earth, of which records are very limited. Modern men emerged in Africa probably between 230,000 to 300,000 years ago.

The tribes of Homo sapiens made their living by hunting, scavenging, and gathering. Therefore, population size depended on food availability and the competition with other predators. Diseases from parasites and bacteria, care difficulties for children and elders in nomadic life, also acted as growth limiting factors.

Along Prehistory, various cultural innovations shaped the conditions for demographic increases. Controlling the use of fire (125,000 BCE); development of language (by 50,000 BCE) and tools (by 35,000 BCE); invention of the sewing needle (by 30,000 BCE), allowed its numeric expansion by increasing food availability, protecting from whether inclemency and improving group integration and collective actions (Roos, 2021).

By the year 10,000 BCE, human foragers and hunters became farmers. This, the first agricultural revolution, changed the course of human history regarding issues such as how humans ate, settled, and interacted: men could broaden his food supply, settle in permanent dwellins and develop rich group interactions beyond the family. It also

allowed societies to enlarge and share knowledge, develop arts, and introduce trade (Childe, 1936).

Population Dynamics

Each technological advance had demographic impacts. Table 1.1 illustrates the evolution of the population size and its associated variables during prehistory. Thanks to the use and control of fire, the population took approximately 275,000 years to increase its numbers from 100,000 individuals around year 300,000 BCE to 400,000 by the year 35,000 BCE. (Biraben, 1980). The mean demographic growth for this period was only 0,0005 percent per year.

Table 1.1

Demographic variables for the Prehistory Era

Demographic index	300,000 BCE	35,000 BCE	10,000 BCE	3000 BCE
Population (Millions)	0,1	0,4	5.0	14.0
Mean Annual growth (%)		0,0005 (a)	0,007 (c)	0,013 (e)
Mean Doubling time. (Years)		140,000 (b)	10,000 (d)	5.400 (f)

Sources: (Biraben, 1980) Annual growth rates and doubling times were calculated by the author.

Notes: (a) During 300,000-35,000 BCE; (b) During 300,000-35,000 BCE; (c) During 35,000-10,000 BCE; (d) During 35,000-10,000 BCE; (e) During 10,000-3000 BCE; (f) During 10,000-3000 BCE

Subsequently, between 35,000 BCE and 10,000 BCE, thanks to the development of language and the use of the sewing needle, the population grew from 400,000 individuals to 5.0 million (Biraben, 1980). The mean demographic growth for this period was almost fourteen times higher compared to the former period, at 0,007 percent per year.

In a third period when agriculture spread, from the year 10,000 BCE to the year 3000 BCE, the population increased from 5.0 million people to 14,0 million (Biraben, 1980). The mean demographic growth for this period doubled compared to the former period, reaching 0,013 percent per year.

Classical civilizations (From 3000 BCE to 476 CE)

Historians recognize that this period starts with the invention of writing about 3,000 BCE and lasted until the fall of the Western Roman Empire which occurred in 476 CE. Many civilizations emerged during this time-lapse, including Mesopotamia, Egypt, India, China, Rome, Greece, Persia, Andes, and Mesoamerica. During this period, stable communities emerged, becoming states, nations, and empires. Centralized governments, organized religions, social classes, arts, and writing evolved in those societies.

Population Dynamics

Population growth during the ancient world benefited the agriculture and urban life expansions. As shown in Table 1.2 the world population at the beginning of the Ancient World is estimated at around 14 million people. Three millenniums later, by Christ birth time, the number of people reached around 255 million people (Biraben, 1980).

At the end the Period, according to (Biraben,1980), the world population descended from 255 million by the year 1 CE to 206 million by 476 CE due to the considerable death toll by wars, famines, and pests.

Table 1.2*Basic demographic variables during the Classical Period*

Demographic index	3000 BCE	1 CE	476 CE
Population (Millions)	14	255	206
Mean Annual growth (%)		0.057 (a)	-0.047 (c)
Mean Doubling time Years		1,228 (b)	

Source(Biraben, 1980). Annual growth rates and doubling times were calculated by the author.

Notes: (a) during 3000 BCE - 1 CE; (b) years during 3000 BCE - 1 CE; (c) during 1 CE - 476 CE

As already indicated in the previous paragraph, high mortality rates shaped the demographic evolution during this period. Table 1.3 registers the deadliest wars, epidemics, and famines. The expansion of imperial governments brought frequent, long, and bloody wars, with a heavy dead toll. At the same time, urban life, and poor sanitation, opened the door to frequent and deadly epidemics. Historians register six major epidemics, most with unknown number of fatal victims. Famine also has been a significant recurring contributor to high death rates, even after the agricultural revolution.

Table 1.3

Deaths due to wars, epidemics, and famines

Cause	Place of occurrence	Dates	Casualties (Millions)
Wars			
	Punic - Romans and Carthaginians	264-146 BCE	2.5 - 3.3 million
	Civil Roman Wars	91-30 BCE	+ 3.0 million
	Jewish-Roman	66-136	1.27-2.12
	Three Kingdoms in China	184-280 CE	36 - 40
Epidemics			
	Antonine (smallpox), Roman Empire	165-180 CE.	5 - 10
Famines			
	4.2-kiloyear famines, Ancient Rome	circa 2200 BCE 441 BCE	Worldwide collapse Devastation

Sources: "List of wars, 2023"; "List of epidemics, 2023"; "List of famines, 2023"

Population theories and policies

In ancient civilizations, views about population were based more in intuition, inferences, and daily life observations. Examples of population related concerns can be found in the writings of Confucius (China), Kautilya (India), Ibn Khaldun (Arab), Plato and Aristotle (Greece), and on precepts like those in the Hebraic's biblical canons.

In China, the teachings of Confucius (551-479 BCE), while finding solutions to the problems of subsistence, he advocated the intervention of the State on the relations between population and natural resources (Gay, 1974). The Hindu philosopher Kautilya

(350-283 BCE), in his treatise Arthashastra² stated that a large population is a source of political, economic, and military strength for a nation (Kautilia, ca 300 BCE/1992).

In ancient Greece, the earliest thinkers favored the expansion of population, mainly in terms of defense and security. To achieve governance, Plato and Aristotle considered the question of optimum population size.

Plato (427-347 BCE) recommended policy measures for both the promotion of population growth and for its restraint. If a higher birth rate was required, he proposed rewards, stigmas, advice, and censure to the young men from their elders. He also proposed to encourage immigration to replenish a population greatly diminished by wars or epidemics (Plato, ca. 347 B.C.E/1934). When the population size became too large, Plato proposed to regulate births by reproduction restrains and by emigration to colonization sites.

Aristotle (384-322 BCE) summarizes his thinking on population by declaring that a great state is not the same as a populous state. He asserted that poverty affected those families growing beyond the means of the parents to support their children. He also believed that excess of population was a threat to democracy because of civil pressures. Therefore, its control was a duty of the state. He suggested controlling measures for over-population, including abortion and infant abandonment (Aristotle, ca 354 B.C.E./1932).

In Greece, babies would often be rejected if they were illegitimate, unhealthy, or deformed; if they had the “wrong sex”, or they were too great a burden on the family.

² Arthashastra, written in India, circa 300 B.C, is one of the finest ancient treatises on politics, governance, economic policy, and military strategy.

Exposure of these newborns was widely practiced in was not considered to be a murder. (Feen, 1984).

Romans constrained their interest on population to considerations of size as a means of guaranteeing territorial expansion and lasting exploitation of conquered resources. Augustus (63 BCE-14 CE), in 23 BCE requested legislation attempting to increase the population by encouraging marriage and parenthood. The social status of men who fathered three (or more) male children was elevated and families with several children were awarded tax privileges. On the other hand, celibacy faced increased taxation, as well as censure to marrying-age celibates and young widows, by prohibiting inheritances and the attendance to public games (Giltaij, 2019).

Despite the official pronatalist laws and rewards, history also registers opposing views. There were women wanting to avoid pregnancies. Romans developed new herbal contraceptives and utilized contraceptive methods already developed in Greece (Brazan, 2018). Also, in the Roman society not only children born frail or suffering from a deformity were abandoned but also unwanted healthy children -largely female infants- were neglected.

The Middle Ages (From 476 CE to 1450 CE)

The Middle Ages lasted from 476 with the fall of the Western Roman Empire to 1400-1450 with the fall of Constantinople. During this period, civilizations spread, prospered, and some collapsed. Food supplies were uncertain during Middle Ages due to climate alterations; rural life was predominant, and poor quality of life was a common phenomenon.

At the same time, during the Middle Ages crucial technological advances took place, including the adoption of gunpowder, vertical windmills, spinning wheel, astrolabe, eyeglasses, compass, and mechanical clocks. During this Era new building techniques were developed, the printing press was invented, and the first human rights legislation was enacted: the Magna Carta.

Population dynamics

Demographic expansion during the Middle Ages was irregular; it varied broadly “from one region to another and at different times within a region, sometimes with alternating increases and decreases” (United Nations, 1953, p. 21). It is known that most medieval settlements remained small, with agricultural land and large unpopulated forests. Also, it is known that this period is characterized by high mortality rates due to famine, epidemics, and war. (Hollingsworth, 1969, pp. 275-286).

By the year 476 CE the world population probably was in the vicinity of 206 million people; initiating the first millennium, the world population increased to 310 million; by 1450 CE it arrived to 500 million (Biraben, 1980, pp. 655-666). According to these figures the population growth rate for the period 476 to 1000 CE was 0.13% per year. For the period 1000 to 1450 the growth rate was 0.10% per year, lower than the previous one. The corresponding doubling population time for these two periods was 538 and 700 years respectively. (Table 1.4)

Table 1. 4*Basic demographic variables during the Middle Ages*

Demographic index	Year 476 CE	Year 1000 CE	Year 1450 CE
Population (Millions)	206	310	500
Mean Annual growth (%)		0.13 (a)	0.10 (c)
Mean Doubling time (Years)		538 (b)	700 (d)

Source: (Biraben, 1980). Annual growth rates and doubling times were calculated by the author.

Notes: (a) during 476-1000; (b) during 476-1000; (c) during 1000-1450; (d) during 1000-1450.

As in previous eras, Wars, epidemics and famines were main contributing factor to high mortality rate during the Middle Ages. (Table 1.5). Along this period, along 13 major war events, more than 100 million people lost their lives (“List of wars,”2023). Recurrent epidemics also took a considerable death toll during most Middle Ages (List of epidemics,” 2023). Famine was another significant contributor to high death rates. Many countries have records of the phenomena but only a few accounted their fatalities. In some countries and regions, casualties climbed to millions.

Table 1.5*Deaths due to wars, epidemics, and famines during the Middle Ages*

Cause	Place of occurrence	Dates	Casualties (Millions)
Wars			
	Reconquest (Iberic Peninsula) took between million lives.	711 to 1492	7.0 - 10.0
	Lushan Rebellion (China)	755 to 763	13.0 - 36.0
	Mongol Conquests (Eurasia)	1095 to 1291	30.0 - 40.0
	Conquest of Timur (Eurasia)	1370 - 1405	8.0 - 20.0
Epidemics			
	Bubonic plague (Justinian) North Africa, Europe and Western Asia.	541 - 549	15.0 and 100.0.
	Bubonic plague in Europe, Asia and North Africa	1346 - 1353	75.0-200.0 .
	Combination of plague and starvation China	1393	Population decreased from 123 to 65 million.
Famines			
	Famine in Japan.	1230 - 1231	2.0
	b. Famine in Europe	1315 - 1317	7.5
	c. From famine caused the death to million in China	1333 - 1337	6.0

Sources: "List of wars, 2023"; "List of epidemics, 2023"; "List of famines, 2023".

Population theories and policies

During the Middle Ages the prevailing tendency of social and political leaders was to encourage population increase. High mortality rates, which were found throughout the world, and the constant risk of sudden depopulation, oriented medieval thinkers to

promote population growth by increasing fertility, to guarantee population stability and eventually its expansion.

The Arab historian Ibn-Khaldun (1332-1406) cited by Omram (1980) proposed a clear cyclic model to explain population dynamics, integrating political, social, economic, and cultural factors. Khaldun affirmed that a population cycle begins with the formation of a robust, well-organized government, where prosperity conduces to higher reproduction. According to Khaldun, improved social conditions, nutrition, housing, and cleanliness, lessen mortality. To Khaldun, immigration of those who wish to enjoy the prosperity of a wealthy nation contributes to rise the rate of population growth by increasing fertility and declining mortality (Omram, 1980, pp. 45-46)

Medieval Hebrew religious writers, based on the Biblical teachings, preached its believers to multiply and populate the earth. Christian doctrines also considered questions of population from a moral and ethical standpoint, condemning abortion, infanticide, child-exposure, divorce, and polygamy. Christian teachings praised virginity and continence and for certain persons, celibacy was regarded superior to marriage.

Islam, like Judaism and Christianity, has also called upon its believers to procreate and populate the earth. Some social norms allowing polygamy and child marriage, encouraged population increase. But Islam did not advocate numbers as a power tool and did not prioritize quantity over quality.

During the Middle Ages prominent Islam jurists provided strong arguments in favor of family planning, basically under grounds of child and women health, and family wellbeing.

Medicine texts include treatises on contraception, covering methods that were “reasonably effective and more or less workable” (Omram, 1980, p. 34, para. 46). On the other hand, some jurists have spoken against family planning; the most prominent was Ibn-Hazm (994-1064) who lived in Arab Spain where the Caliphate of Cordoba was at the risk of annihilation (Omram, p. 33, para. 2)

Early Modern Period (1450 to 1790)

This period starts with the fall of the Byzantine Empire by the Ottomans in 1453 and ended with the French Revolution in 1789. During this period, the world witnessed the falling of the feudal system, while the Ottoman Empire consolidated its power. The Sengoku period was initiated in Japan; the Europeans arrived in America, initiating extensive migratory movements, including slavered persons traded from Africa. Between Europe and America intense cultural and technological interchanges took place, including language and religion, but also precious metals, plants, animals, and diseases.

Several relevant movements happened during this era including the renaissance, the protestant reformation, and the enlightenment. Leonardo da Vinci, Johan Sebastian Bach, William Shakespeare, William Penn, and Martin Luther are some of the personalities that marked this era.

Population Dynamics

During the Early Modern Era, the knowledge about population variables was still based on indirect methods including data from archaeological, economic, civil and

administrative records. This fact explains the discrepancy among authors regarding population trends for this historic period.

At the beginning of the Early Modern Age, the world population was estimated at 420 million; by 1600 it reached 579 million, which results in a population growth rate of 0.21% per year. By 1750 the population size was 770 million, which results in an annual population growth rate of 0.19% per year (Table 1.6)

Table 1.6

Basic demographic variables – Early Modern Period

Demographic index	Year 1450 CE	Year 1600 CE	Year 1790 CE
Population (Millions)	420	579	770
Mean annual growth (%)		0.21 (a)	0.19 (c)
Mean doubling time (Years)		304 (b)	336 (d)

Sources: (Biraben, 1980). Annual growth rates and doubling times were calculated by the author.

Notes: (a) during 1450 -1600; 9b); (b) during 1450 – 1600; (c) during 1600 -1790; (d) during 1600 - 1790

Although the population growth rate is higher than the growth rate in all previous periods, the increment of the population also was affected by high mortality rates due to famine, plagues, and war. On occasions, the elevated number of deaths caused the sudden depopulation of cities, countries, and larger regions.

Wars contributed to slowing down population growth; epidemics were also a major contributing factor in controlling population growth; in America, most of its native population (up to 90%) died from transmissible diseases. Famines also contributed to

slowing down population growth. Some famines with a death toll higher than 200,000 victims and main wars and epidemics, are listed in Table 1.7.

Table 1.7

Deaths due to wars, epidemics, and famines during the Early Modern Era

Cause	Place of occurrence	Dates	Casualties (Millions)
Wars			
	Conquest of America	1519 to 1632	36.0
	French Religion Wars	1562 to 1598.	2.0 - 4.0
	Transition Ming to Qing War China	1616 to 1683.	25.0
	Thirty Years War in Europe ().	1618 to 1648	4.5 - 12.0
	Deluge Campaigns in Poland	1655 to 1667	3.0
	Mughal Maratha million deceases (1658 to 1707	5.0
	Seven years' war Great Britain/France	1756 to 1763	0.69 - 1.4
Epidemics			
	Three major bubonic outbreaks, Europe.	1563 - 1743	
	Transmissible diseases, Americas	XVI Century	56.0
Famines			
	Russian famine	1601-1603	2.0
	Deccan famine, India	1630-1632	7.4
	Kyungshin famine, Korea	1670-1671	1.5
	Grand famine, France	1693-1694	1.3
	Famine in Deccan, India	1702-1704	2.0
	Great Bengal, India, Bangladesh	1769-1773	10.0
	Chalisa & Doji Bara, India	1783-1793	22.0

Sources: "List of wars, 2023"; "List of epidemics, 2023"; "List of famines, 2023".

Population Theories and Policies

As in previous ages, during this period there was predominance of arguments in favor of high fertility to secure population growth. To Mercantilism, the dominant economic school, wealth expansion through the production and export of goods was its main policy. To Mercantilism large population size and rapid population growth were pre-requisites to achieve high production volumes and to ensure large and growing demand of goods. Mercantilism hold that population growth boost national income, since it decreases the hourly pay rate, giving the workers an incentive to work longer hours. In consequence, it favored measures to stimulate such growth, encouraged through large families, early marriage, and immigration (Taylor, 1960).

On the other hand, some social writers anticipated scarcity of the means of subsistence, and therefore, the need for population growth checks was suggested. The development of mercantilism was concurrent with the beginning of scientific analysis of population trends, thanks to the work of several demography founders who emerged during this period.

Demography pioneers initiated the collection and systematic utilization of vital statistics to calculate basic demographic parameters. They also advanced in the development of population projection models, theories and policies, to be used as tools to modify populations variables. A short reference of some of them follows.

Giovanni Botero (1544–1617), an Italian priest_and humanist, is considered one of the precursors of Mercantilism. Botero (1606/1598) also proposed that the human population tends to increase as per the highest degree of fertility while the means of

subsistence can only be increased slowly. To this scholar, poverty, and starvation result from the discrepancy between population growth pressing on the means of subsistence. To Botero, population growth could only be controlled in two ways: One is high mortality through starvation, plague, or wars. Second, the decision to abstain from marriage and procreation. This is clearly a prelude to thesis to be exposed by Malthus, two centuries later.

Matthew Hale (1609-1676) observed that the population increased geometrically and could double in as few as 35 years. In such a case, the available means of subsistence could not sustain demographic growth. He concluded that the growth of population would be controlled by wars, famine, floods, pestilence, and earthquakes (Hale, 1667, Chap. IX).

John Graunt (1620-1674) is considered as the first professional demographer. He made a mortality table for the city of London, observing regularity in the number of deaths and births, by age group. He categorized mortality by cause, for sequential periods and geographical areas (Graunt, 1939/1662, p. 69).

William Petty (1623-1687), in a pioneering work, explored the interconnections between population and economics. He also projected that in 2000 years the world would have a demographic density of one person for every two acres of habitable land (assuming a doubling time of 360 years) and, in consequence, wars, deaths and suffering would be the result (Petty, 2014/1687).

Edmund Halley (1656-1742), improved Graunt's mortality table allowing its use to calculate the probability of death for each age groups (Halley, 1693/1942). His work brought new lights to health promotion efforts and to the insurance markets.

Johann Peter Süssmilch (1707-1767) wrote the first complete essay on population. He estimated that, in the long term, there is a constant sex ratio of 1,000 female births to 1,050 male births. (Süssmilch, 1741/2011, pp. 611-636). He also projected that population size tends to double every 100 years. Süssmilch proposed a demographic model that estimated the world population was 1,000 million people, and the earth's carrying capacity to be 4,000 to 5,000 million people. From this, he inferred that population could grow for at least 200 years or more. He also, independently from Botero, suggested that population growth was regulated by pestilence, war, earthquakes, floods, and starvation, but also it could be controlled by celibacy and deferred marriage, concepts that would be further explored 58 years later by Robert Thomas Malthus.

Modern Era (from 1790 to 1920)

The period starting in 1790 to our days, has been denominated, by many Historians, the Modern Era. Nevertheless, for the convenience of this narrative, this period is partitioned into two sections: the first, denominated Modern Era, comprehends from 1750 until 1920, when World War I ended. The second part -denominated Contemporary period- comprehends from 1920 to 1970, when the advances and inventions of the modern era opened the door to the rapid reduction of the death rate, whose evolution has marked the growth of the population size, along history.

Probably the industrial revolution is the most important breakthrough at the beginning of this history period. The French revolution (1789), and several independence revolutions took place during this period, including the American (1775-1783), the Latin American (1808-1826), the Italian Revolutions 1848-1849, 1859, 1866), and the Greek (1821-1832) revolutions. Also, from 1800 to 1914, France, Britain, Spain, the Netherlands, and the United States colonized other nations in different continents. Other relevant events took place during this period, including the Second Industrial Revolution (1869 to 1914) and World War I (1914 to 1918).

The Modern Era witnessed the emergence of new ideas, knowledges, and social movements symbolized by the end of slavery. The world benefited from the increasing role of science and technology, which brought many inventions such as the steam machine, the light bulb, the telephone, the development of radio telecommunications, the airplane, and the Model T automobile, among others. The works of Robert Hook (1635-1703), Von Leeuwenhoek (1632-1723), Edward Jenner (1749-1823) and Luis Pasteur (1822-1895) advanced public health due to the recognition of the until then, invisible microorganisms. Once the role of these organisms on the propagation of diseases and pests was recognized, the first vaccines were developed.

Population Dynamics

It was this period when around 1850 the world population reached the first 1,000 million. Thanks to the public health advances in Europe, it was possible to achieve a slow but progressive reduction in mortality rates, in those countries with better degrees of

economic and social progress such as England, France, Germany, and Italy. During this period, in most Europe, life-level conditions improved in response to the industrial revolution, agriculture advances, sanitation improvements, including vaccinations. For the rest of the world, those advances were going to have an impact only years later, during the twentieth century.

In 1750, the world population reached 770 million people; by 1850 it reached 1260 million and by 1920 the world population was 1.860 million people (Biraben, 1980). These figures indicate that for the period 1750 to 1850 the annual population growth rate was 0.40%; subsequently, for the period 1850 to 1920 the annual population growth rate was 0.55% (Table 1.8).

Table 1.8

Basic demographic variables - Modern Era

Demographic index	Year 1750	Year 1850	Year 1920
Population (Millions)	770	1.260	1.860
Mean annual growth (%)		0.40 (a)	0.55 (c)
Mean doubling time (Years)		160 (b)	116 (d)

Sources: (Biraben,1980). Annual growth rates and doubling times were calculated by the author.

Notes: (a) period 1750-1850; (b) period 1750-1850; (c) period 1850-1920; (d) period 1850-1920

Although faster than in previous periods, the population growth rate was still low, due to the impact famines, plagues, and wars, which severely afflicted many countries, causing high number of fatal victims. As in previous eras, estimations have an ample range due to data source discrepancies.

War, epidemics and famines, likewise other historic period, left high number of victims.

The deathliest episodes are listed in Table 1.9

Table 1.9

Deaths due to wars, epidemics, and famines during the Early Modern Era

Cause	Place of occurrence	Dates	Casualties (Millions)
Wars			
	Tây Son rebellion Asia	1771-1802	1.5 -2.0
	Napoleonic Wars	1803-1815	3.5 - 7.5
	Mfecane war in Africa.	1787-1828	1.5 - 2.0
	d. China the Three Wars	1850-1873.	33.0 -95.0
	World War I	1914-1918	16.0 -40.0
Epidemics			
	Bubonic plague Persia	1772-1773	2.0
	Typhus epidemics Russia	1812	0.3
	Third bubonic plague Russia	1855-1860	12.0
	Fourth Cholera Pandemic Middle East	1863-1875	0.6
	Spanish Flu, Worldwide	1918-1920	17.0 - 100.0 (a)
	Sixth Cholera Pandemic, Europe, Asia and Africa.	1899-1923	0.8
	Typhus Epidemics, Russia.	1918-1922	2.0-3.0
Famines			
	Four famines, China	1810-1849	45.0
	Taiping famine, China	1850 -1873	60.0
	Famines in India, China, Brazil and northern Africa	1873-1876	19.0
	Famines in East-Central China	1907–1911	25.0
	The Persian famine in Iran	1917-1919	10.0

Sources: "List of wars, 2023"; "List of epidemics, 2023"; "List of famines, 2023".

Notes: (a) Second deadliest in human history after the bubonic plague of 1346

Population Theories and Policies

Thomas Robert Malthus (1776-1834) brought a new dimension to the advance of population theories and to the political thinking on population issues³. In 1798, anonymously, Malthus published his first population essay. In 1803 his essay was reedited and expanded, now with his signature. Four more editions were published in the years 1806, 1807, 1817 and 1826.

In his Essay Malthus (1798/1998) stated that the increase of the human species, if unchecked, would be much greater than any increase previously known. This postulate was not new in the history of demographic thought, but the relevance of Malthus's work lies in the formulation of a mathematical model. He estimated that the population doubled every 25 years, presenting exponential growth, while food, at best, exhibits linear growth .

Malthus went beyond as he postulated that poverty, misery, and inequality that plagued the workers of the countryside was the result of rapid population growth, which was faster than the increase of food production. Malthus argued that the imbalance between population growth and increased food production would lead to conflict and famine.

Consequently, Malthus proposed several mechanisms to regulate population growth. He identified voluntary acts like self-control, marriage delay, and celibacy, which he

³ Malthus was influenced by the writings of those intellectuals of the early modern era, but also, he was greatly influenced by his contemporaries Adam Smith (1723-1790), William Goodwin (1756-1836) and David Ricardo (1772-1823)

denominated preventive checks, because they are effective for the reduction of fertility rates. If preventing checks were unsuccessful, then inevitably famine, disease, and war, would control the population. He named these factors "positive checks" because they increase mortality. He envisaged other positive checks like floods and earthquakes.

Malthus was aware that the idea of limiting the number of children was already present in the United Kingdom middle class, but he thought that if the poor and the workers could be convinced to do the same, this would be the only way to improve their living conditions and those of the society.

Malthus who also was a prominent economist, was very influential in the economic, political, social, and scientific thought of the time. Nonetheless, the debates about his theory have continued to the present and particularly to the period between 1960 and 1970, when his ideas were the subject of intense controversies.

Karl Marx (1818-1883) vehemently questioned Darwin's positions on population. He argued that the genesis of overpopulation is to be found in the nature of the capitalist society. To him population size and growth depend on the economic and social conditions. To him the problems of overpopulation and resource limitations are associated with the capitalist system of production. Marx concluded that starvation has nothing to do with population growth. To him, it was caused by the unequal distribution of the wealth and its accumulation by capitalists (Marx, 1867/1976, pp. 782–802)

Karl Marx postulated that when the capitalistic mode of production was replaced by a socialistic mode of production, the population pressure would decrease. The rise in the standard of living would bring down inequalities which will encourage birth and death

rates declination. To him, moral restraint would also be strong under new social and economic conditions. (Petersen, 1988)

M.T. Sadler (1830, book 1, p. 185) also disagreed with Malthus to whom he qualified as pessimistic. Sadler stated that the birth rate was lower in densely populated counties; he also argued that it was because the more densely populated counties enjoyed a higher standard of living, and that prosperity, not poverty, was the more effective population growth reduction strategy.

Contemporary Period from 1920 to 1970

The period 1920 to 1970 is a remarkable lapse-span in human history. After overcoming a great economic depression between 1929 and 1939, the accumulation of past wisdom allowed humanity to achieve relevant advances in the fields of science and technology. In social and humanistic sciences also advances were achieved, but some challenges are still pending.

In fact, human beings were able to travel to the space and walk on the moon's surface. The computer and the TV were invented; the atom and the genes were split, and organs were successfully transplanted. But, on the other hand, the atomic bomb was invented and exploited; bloody and destructive wars did not cease; wide sectors of the world society lived under hunger; while the battle against diseases was still under way, segregation by gender, color, race, and ideologies, affected millions of people.

In the field of agriculture, a new revolution started around 1950 with the development of new technologies which were supported by advances in microbiology, genetics,

chemistry, and hydrology. New seed varieties, machinery, irrigation, new chemical fertilizers, and strong insecticides allowed a massive increment in food production. These innovations are known “the Green Revolution”.

The Green Revolution was a decisive factor for the mitigation of famine, malnutrition and infant mortality, around the globe. Nevertheless, advances in food security were constrained by purchasing capacity limitations and long distances between production and consumption sites.

Similarly, during the period 1920-1970, mainly after 1950 public sanitation achieved wide-world improvements. Drinking water, public latrines, toilets, sewage collection, and sewage treatment systems, protection of water wells, very rapidly expanded to countries in Asia, Africa, and Latin America, in what could be designated a public sanitation revolution. Poverty and food transport restrictions still deprived millions of people of their daily meals

Despite the notable advances in public sanitation, wide gaps still remained mainly in less developed countries. Rapid population expansion, and even faster urbanization processes, explain in part those gaps.⁴

The period 1920-1970 also witnessed significant advances in preventive medicine, in curative practices and in the administrative structures and strategies to improve both

⁴ Even to this date more than 40 percent of the world’s population—about 2.5 billion people, primarily in rural areas—still practice open defecation or use pit latrines that do not safely contain their waste. Another 2.1 billion people who live in urban areas are only containing their waste and not disposing of it safely (Gates Foundation, 2010)

efficiency and effectiveness of the health systems. The impact of such advances is most notable on the reduction of mortality.

During this period, the development of new vaccines was a key factor for the prevention of communicable diseases, including tuberculosis, yellow fever, typhus, influenza and additional twelve diseases. Antibiotics were produced as well as key drugs including oral contraceptives.

Population Dynamics

According to the United Nations (1999), during the period 1920-1970 the growth of the population experienced successive decadal increments. Along the first three decades the net population increments were 210 million people during 1920-1929, 230 million people during 1930-1939, and 220 million people during 1940-1949. Thereafter, according to the United Nations (2022) population growth experienced a faster growth during 1950-1959 when the net demographic increment was 515 million and during 1960-1969, when the population increment was 665 million (Table 1.10).

Table1.10*Basic demographic variables - Contemporary period (1920-1970)*

Demographic index	Year 1920	Year 1930	Year 1940	Year 1950	Year 1960	Year 1970
Population (Millions)	1,860	2,070	2,300	2,520	3,035	3,700
Decadal net change		210	230	220	515	665
Mean annual growth (%)		1.06	1.05	0.97	1.79	1.97
Mean doubling time (Years)		66	66	72	39	35

Source: United Nations (1999), United Nations (2022)

Other demographic variables also illustrate the acceleration of population growth in the 20th century and particularly after 1950. During 1920-1950 the mean population growth rate was around 1.0% per year. Afterwards during the 1950 decade the growth mean rate raised to 1,79% and during the following decade of 1960s the mean growth rate raised to 1.97% per year. (Table 1.10)

The population doubling time also illustrates the new impetus of the population growth. During the period 1920-1950 the population would double its size in time-lapses going from 66 to 72 years. Subsequently the population doubling time shortened to 39 years during the 1950s decade and only to 35 years during the 1960s decade.

Alike to what happened during the past history eras, wars, famines, and hunger have shaped the speed of population growth during the period 1920-1970. For the first part of this period (1920-1950), a series of wars and famines had an impact on the mortality rate which kept the demographic growth level around 1% per year. (Table 1.11) For the second part of the period (1950-1970) the impact of wars, epidemics and famines on mortality

was compensated by the human lives saved thanks to the advances in public health and food production, which allowed the rate of population growth to rise close to 2.0% per year, which was considered by demographers, a very high and troublesome level.

Table 1.11

Deaths due to wars, epidemics, and famines during the Early Modern Era

Cause	Place of occurrence	Dates	Casualties (Millions)
Wars			
	Russian Civil War	1917-1922	5.0 - 9.0m
	Chinese Civil War	1927-1932	8.0 - 12
	Second Sino-Japanese War	1937-1945	20.0 - 25.0
	Second World War	1939-1945	85.0
	Korean War	1950-1953	1.5 - 4.5
Epidemics			
	Influenza, worldwide	1957-1958	1.1
	Hong Kong Influenza, worldwide	1968-1969	1.0
Famines			
	Famines in China.	1928, 1936 and 1959	25.0-72.0
	Famines, Soviet countries in famine took between	1921, 32, 41 and 46	13.5 - 20.5

Sources: "List of wars, 2023"; "List of epidemics, 2023"; "List of famines, 2023".

Regional Perspectives. When regional considerations are examined, other demographic issues of special relevance to development, emerge. One of those issues is the population place of residence. In 1950, 1,721,612 million people resided in less developed countries, representing 67.87% of world population. Ten years later, in 1960, the number of people living in less developing countries scaled to 2,118,605 million, representing 69.80% of the

total world population. In 1970, the population living in less developed countries ascended to 2,691,985 million, representing 72.75% of the total world population. (United Nations, 2019, table A.1)

A second significant issue is that most demographic growth happened in less developed countries. More developed regions had lower and decreasing rates of population growth as compared to less developed countries, where the growth rates were much higher and increasing.

Data from United Nations (2019) indicate that in more developed countries the mean population growth rate descended from 1.18% in 1950-1955 to 0.85% in 1965-1970. In less developing countries the mean population growth rate rose from 2.06% in 1950-1955 to 2.52% in 1965-1970 (Table 1.12). The distance between the population growth in more develop countries versus de less develop countries -having more limitations to guarantee proper life conditions- was not only very large but it was increasingly larger.

Table 1.12

Mean annual demographic growth rate (1950-1970)

Region / Period	1950-55	1955-60	1960-65	1965-70
More developed countries	1.18	1.17	1.07	0.85
Less developed countries	2.06	2.09	2.27	2.52

Source: (United Nations, 2019)

Population Theories and Policies

During the period 1920-1970, population and family planning issues were also the subject of special attention and new conceptions became part of the discussions. Social science scholars observed that population growth was a source of poverty and overcrowding;

natural science specialists included population dynamics as a causality factor for environment deterioration; the eugenicists were concerned about the increasing "less fit"; expansionists wanted more population to ensure military strength; Catholics wanted to ensure numerical supremacy. Furthermore, health sector planners, in developing countries, had to cope with the multiple consequences of high fertility.

At the same time, prominent individuals, engaged in population studies and related matters, as well as some governments, especially in Europe, began to explore means to utilize international consultations, in order to reach a common position, using an existing mechanism during the 1920s: the League of Nations, predecessor of the United Nations.

One prominent person during this period was Margaret Sanger (1879-1966), who in her work as a nurse in the slums of New York, shared the suffering of thousands of women, who did not have access to family planning, whose health and well-being and that of their families deteriorated with each new unwanted pregnancy.

Margaret Sanger (1938/2018) warned that family planning could bring better health not only to women and their children and greater well-being to families but would also be a key factor in ensuring the economic development and political stability of societies. By 1922 Margaret Sanger began a crusade in the United States and Europe, speaking with the most prominent scientific and political leaders of her time, to achieve universal acceptance of her message about the urgency of strengthening women's autonomy and empowerment, through access to family planning.

In 1926 Margaret Sanger, with the support of several organizations such as the Milbank Fund and the Rockefeller Foundation, decided to organize a global conference with the

participation of specialists and leaders of outstanding world recognition (Raymond Pearl⁵, John Maynard Keynes⁶, Julian Huxley⁷, among others) in order to achieve greater visibility for the subject and raise to a more prominent level the discussion about the interrelationships between population, family planning, on one hand, and individual, family, and social well-being on the other hand. The Conference took place very successfully in Geneva, between August 31 and September 2, 1927 (Sanger, M. 1938/2018)

The organizers of the event in Geneva sought the participation of the League of Nations. However, its Secretary-General, Sir Erick Drummond, declined its official participation, stating that the Agency could not be represented, since the conference included consideration of issues "which affect the strongest national sentiments and are of a very sensitive nature" (Johnson, S.P. 1987, p. 7). The Secretary-General, however, released agency officials to participate in a personal capacity. In the end, several staff members, especially from the Health Division, participated very actively in the discussions. Similarly, the support given by the Director of the International Labor Organization (ILO) was very encouraging.

The position of the League of Nations on population matters was not easy. The League found impossible to reconcile political positions due to the activism of countries where

⁵ Pear, Raymond, (1879-1940), American Biologist in his work on the biology of population growth proposed basic principles with application to demographic dynamics.

⁶ John Maynard Keynes, (1883-1946), English economist whose ideas contributed to change the theory and practice of macroeconomics and governments' economic policies.

⁷ Julian Huxley (1887-1975), British Biologist , was the first director of UNESCO, recognized as a leading figure of the modern evolutionary synthesis. He was the secretary of the Zoological Society of London and one of the founders of the Worldwide Fund for Nature.

the imperative was population increase, as a factor of military power. This was clearly the case in Italy, France, Germany, and Belgium. Regarding family planning, the position of the League was even more complex, since some delegates, in 1923, stated that the provision of contraceptive information was nothing more than obscenity (Sanger, M. 1938/2018).

Considering countries in particular, France adopted pronatalist policies probably due to political affairs in Germany. First, in 1919 a 'Conseil Supérieur de la Natalité' was created. In 1920, the dissemination of contraceptive knowledge was approved and in 1923 measures against abortion were adopted. Family allowances to promote natality were introduced (Johnson, S.P. 1987)

Belgium, Italy, and Germany had concerns about what they considered low fertility. They confirmed the importance of having a young and larger population size. In 1935 Sweden designated a Royal Commission to advise on population matters. The country opted for strategies to promote bigger families. The Soviet Union maintained the traditional pronatalist Marxist view toward population. On the other hand, the Soviet Union had lost considerable human lives by war and famine (Johnson, S.P. 1987).

In developing countries, since 1921 Indian politicians and intellectuals raised their concerns about population growth, advocating the necessity for family planning services. Several local initiatives were established in 1923, 1928 and 1937 but a national program could not be implemented at the time due to the lack of support from the colonial rule, the League of Nations, or any other developed nation. (Harkavy & Roy, 2007).

The European pro-natalist countries were very successful until the 60s in delaying an effective international response. Nevertheless, since the early 50s, professionals and leaders coming from different disciplines and institutions became aware that the world population was entering into phase of accelerated growth which could affect development plans and trigger off a major environmental crisis. During the 60s, new voices adhered to the due to the seriousness of the problem, its many faces and the broad implications for development and the wellbeing of the humanity.

In the United States until 1950s population policies were not formulated, except for migration. In several states laws and regulations were implemented against family planning, including services and information. Nevertheless, since the early fifties federal policies started to change thanks to the involvement of several prominent personalities.

John D. Rockefeller III (1906-1978) was a great public advocate for the consideration of population growth and development issues. As early as 1952, Mr. Rockefeller convened and leaded a Conference on Population Problems, in Williamsburg, Va. The discussion focused on food supply, industrial development, depletion of natural resources, and political instability resulting from unchecked population growth. The participation of recognized scholars gave serious weight and bolt attention to the emerging and until then unrecognized facts related to demographic change (Dunlop, 2000)

In 1952, Rockefeller established and funded the Population Council. This organization played a crucial role in supporting research, high level training of scholars from many countries, and dissemination of scientific information (Dunlop, 2000)

In a new political and academic context, in 1965 the official position of the United States (U.S.) government experienced a change. In his second State of the Union, President Lyndon Johnson asserted “I will seek new ways to use our knowledge to help deal with the explosion in world population and the growing scarcity in world resources” (Johnson, 1965, January 4). This statement would shape the U.S. policy regarding population matters, thereafter.

Following the US Presidential Address, the U.S. Agency for International Development (USAID) in 1965 created a Population Office for the management of population and family planning programs.

John D. Rockefeller by his part, in 1967 promoted a World Leaders’ Declaration of Population (1967), signed by thirty heads of state, including U.S. President, Lyndon Johnson; Prime Minister of United Kingdom, Harold Wilson, Prime Minister of India, Indira Gandhi; Acting President of Indonesia, General Suharto; Emperor of Iran, Sha Mohamed Reza Pahlavi; President of Egypt, Gamal Abdel Nasser; President of Yugoslavia, Marshal Josip Broz-Tito, among others. The Declaration of Population states that “Too rapid population growth seriously hampers efforts to raise living standards, to further education, to improve health and sanitation, to provide better housing and transportation, to forward cultural and recreational opportunities—and even in some countries to assure sufficient food” (p. 1).

Two years later in 1969, President Nixon established a Commission on Population Growth and the American Future, with Mr. Rockefeller as chairman. In his message to the U.S. Congress, President Nixon stated:

One of the most serious challenges to human destiny in the last third of this century will be the growth of the population. Whether man's response to that challenge will be a cause for pride or for despair in the year 2000 will depend very much on what we do today. If we now begin our work in an appropriate manner, and if we continue to devote a considerable amount of attention and energy to this problem, then mankind will be able to surmount this challenge as it has surmounted so many during the long march of civilization. (Nixon, 1969, July 18, as cited in Rockefeller, 1972)

Other relevant developments were critical to the advance of a population agenda. In 1969 under the leadership of Reimert Ravenholt (1925-2020), the United States Agency for International Development (USAID) initiated a robust global population/family planning assistance program (Ravenholt, R.T., 1969).

During the mid-fifties, several high-ranking universities, mainly in USA, started research and training programs, in several population topics. Those efforts have contributed to expand the demographic knowledge in several fields, to enlarge the number of specialized professionals, to include the population issues into political agendas, and to raise awareness among concerned parties and the public in general. Among those universities are Princeton, University of Chicago, University of California at Berkeley, University of Michigan, Duke, University of Pittsburg, Cornell, University of North Carolina, Johns Hopkins, and Harvard.

Other universities also established research centers in population matters. These include Berkeley California, Santa Barbara California, Pennsylvania State, Texas at Austin, Florida

State, Ohio, Columbia, Brown, Minnesota, El Colegio de Mexico (Mexico), El Valle University (Colombia) among others.

In parallel, national and international research institutes and information centers of private character were also created in different countries. These included The Asian Population Association (Thailand), The Latin American Population Association (Chile), The West-West Center (Hawaii), The Guttmacher Institute (New York), The Rand Corporation (Santa Monica, California) The Population Council (New York), The International Union for the Scientific study of Population - IUSPP (Paris), the French Institute of Demographic Studies – INED (Paris), The Population Reference Bureaus, Washington.

Towards 1970 recognized scholars, in different fields, published relevant articles and even books about population issues. For example, Ehrlich and Ehrlich (1970) exploring the relationship between population and environment stated:

The explosive growth of the human population is the most significant terrestrial event of the past million millennia. Three and one-half billion people now inhabit the earth, and every year this number increases by 70 million. Armed with weapons as diverse as thermonuclear bombs and DDT, this mass of mass of humanity now threatens to destroy most of the life of the planet.

No geological event in a billion years -not the emergence of mighty mountain ranges, nor the submergence of entire subcontinents, nor the occurrence of periodic glacial ages- has posed a threat to terrestrial life comparable to that of human overpopulation (p. 1)

Ansley Coale⁸ in examining the relationship between population growth and economic development in low-income countries, found that slowing population growth could increase economic development. He had a great impact on the formulation of demographic public policies in many countries (Coale & Hoover, 1958)

Kingsley Davis⁹, affirmed that the process of economic development itself provided the motives for the reduction of fertility. He documented how in these countries populations growth slowed down as they become richer. He affirmed that:

Industrial countries also seem destined to apply brakes to their population growth. The steady rising level of living, multiplied by the still growing numbers of people, is endangering a dizzying rate of consumption. It is beginning to produce painful scarcities of space, of clean water, of clean air and quietness (Davis, 1963, p. 163)

It is important to consider that industrial countries never experienced very rapid population growth. The highest growth rate they experienced reached close to 1% per year. While mortality reduced its numbers along two hundred years, they also experienced a parallel reduction in their fertility rates. In the meantime, in developing countries the reduction of mortality rates happened in only a few years.

⁸ Ansley Coale, (1917-2002). American Demographer He was a Director of the Office of Population Research and professor emeritus at Princeton University He was a prolific author, publishing more than 125 books and numerous articles on a wide variety of demographic topics

⁹ Kingsley Davis (1908-1997). American sociologist and demographer, he was considered by the American Philosophical Society as one of the most outstanding social scientists of the twentieth century. He served as president of the Population Association of America, represented the United States on the United Nations Population Commission and a member of the Advisory Committee on Population for the U.S. Bureau of the Census. He coined the term "population explosion".

Chapter 2: Consequences of the population growth

The Nature of the Problem

This chapter examines the prevailing vision on the consequences of the population growth by 1970. In some cases, some statistics are projected beyond that date in order to provide a better perspective about the matters under discussion. The year 1970 was chosen because it marks the moment in which the United Nations strengthened its official commitment on population issues. This chapter, therefore, reflects the process and the rationale under which United Nations engaged itself towards the international community.

Very Rapid Demographic Growth

It is important to start by underlining that the world population experienced an unprecedented growth rate specially during the first part of the past century. The world population took until 1800 to reach the first 1000 million people; 125 years later in 1925, the planet arrived to 2,000 million inhabitants. In 1960, that is to say 35 years later, the world population arrived at 3,000 million people and 4,000 million 15 years later in 1975. The next milestone happened in 1987 when the world population reached 5,000 million dwellers. It occurred in only 12 years. It took another 12 years to growth to 6,000 million and 12 years to reach 7,000 million. Early in 2023 (11 years later) the world population completed 8,000 million inhabitants. (Table 2.1)

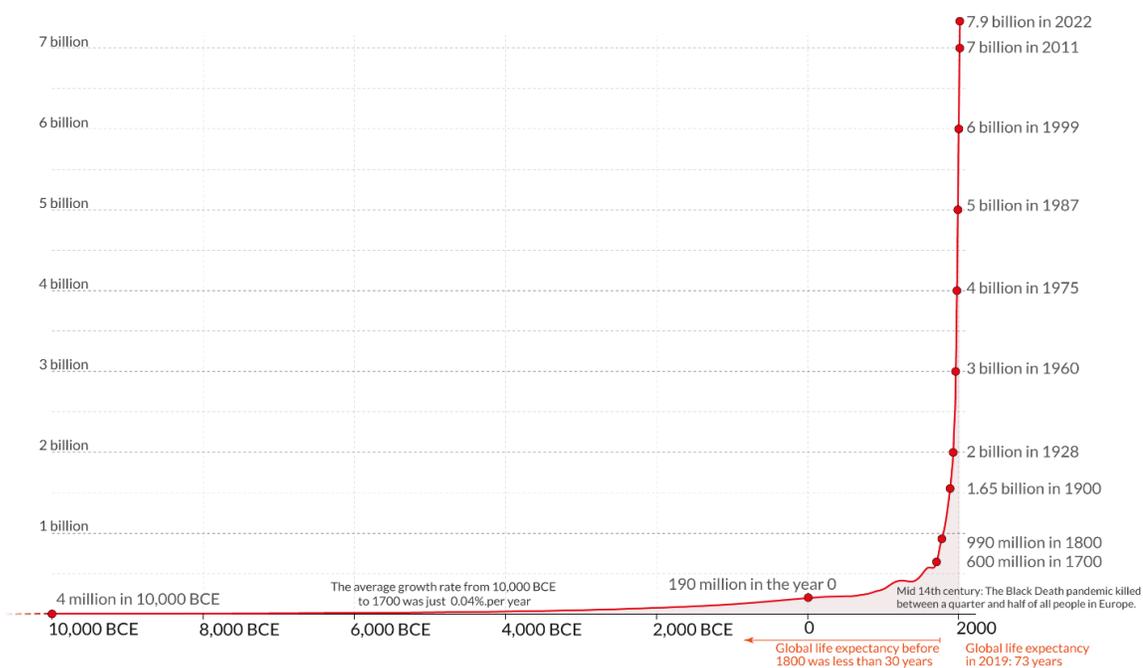
Table 2.1
Historical growth of the world population

Year	Population size million people	Time-lapse years
1800	1,000	
1925	2,000	125
1960	3,000	35
1975	4,000	15
1987	5,000	12
1999	6,000	12
2012	7,000	12
2023	8,000	11

Source: (World Population, 2023)

Demographers and population ecologists, utilizing mathematical models normally classify this type of population expansion as exponential growth, which is characterized by a very rapid number expansion. Graph 2.1 illustrates this type of growth.

Graph 2.1 *Historic world population growth*



Source:(Roser, Max, et al., 2013)

A Complex World

During the 1950s , several global crises became evident to politicians, social and economic planners, and the academic community. The list included poverty, environmental degradation, climate change, the depletion of natural resources, the extinction of animal and plant species, hunger, nuclear proliferation, terrorism, and accelerated population growth. Each phenomena represented a unique challenge and together a great potential risk to humankind.

The global situation had two critical characteristics: first, each crisis was closely interconnected with the rest. Second, each specific remedial action could alter other crisis components. It is paradoxical that several crises have originated, to a large extent, from the efforts that the global society has made to improve the living conditions of humanity. An example of the interconnections among the crisis component, is the green revolution. introduced during the 1950s. Thanks to it, food production increased worldwide, preventing the death of millions of people. The most immediate collateral consequence was the acceleration of the world population growth. In addition, the innovative agricultural practices, characterized by the intensive use of fertilizers and pesticides, led to valuable species elimination, genetic diversity reduction, soil salinization and water pollution.

An additional characteristic of world crisis is the transnational nature of the effects and eventual solutions. For example, pollution of water or the air, can affect not only the country of origin but also, very distant ones. Another example comes from the

accelerated population growth. When it is associated to poverty, it could lead to international migration flows.

Population: a multidimensional variable

This document contains abundant mention to population size and growth as main descriptors used for social scholars for the purposes of population descriptions and the formulation of theories, and policies. Nevertheless, there are three additional variables of special importance when reviewing issues related to consequences of population dynamics on the economy and the environment: they are migration, urbanization, and age structure.

Migration.

Migration refers to the change of residence between rural and urban areas, or the change of residence between countries. There are two migration categories¹⁰: international migration when country barriers are crossed, and internal migration when the movement happens inside the frontiers of the concerned country.

International Migration. Between 1950 and 1970 the relative number of international migrants remained relatively low compared with the total population. During this period the mean annual number of migrants to developed countries was only 0.3 million (Chen et al, 1998,).¹¹ Asia, Latin America, and Africa have positive net migration flows (emigration)

¹⁰ Depending on the goal and reason for relocation, people who migrate can be divided into three categories: migrants, refugees, and asylum seekers.

¹¹ For the period 2000-2010, the level of net migration to developed regions increased to 3.1 million migrants per year, but between 2010 and 2015 this number fell to about 2.2 million persons. Since the 1990s, migration has been the primary source of population growth in the developed regions. ((Chen et al, 1998)

and North America, Europe, and Oceania have negative net migration flows (immigration). The largest migration flow to Europe came from Asia. The largest migration flow to North America came from Asia and from Latin America.¹²

Internal Migration. The great majority of people do not migrate across borders; much larger numbers migrate within national boundaries. Migration occurs from rural to urban areas and from small urban to larger cities. City population grows by natural growth (Births minus deaths) plus net migration.

During the period 1960 to 1970 internal migration was a major contributor to urban growth. In developing countries around 40 to 44 percent of city growth was due to migration Table 2.2 for example, registers the percent annual growth attributable to migration for the years 1960 and 1970.

Table 2.2

Urban Growth Attributable to Migration in less developed countries

Region	Percent annual growth attributable to migration	
	Year 1960	Year 1970
Less Developed countries	40.3	44.1
Africa	41.2	40.6
Latin America	40.1	40.5
Asia	40.4	46.7

Source:(Chen et al., 1998: p 80).

Internal migration affects national development efforts because it impacts demographic change. During 1950-1970, in developing countries the elevated number of migrants

¹² The intensity of this demographic variable expanded dramatically after 1970 due to poverty, political unrest, environmental deterioration and better connectivity. It has become a great political and economic challenge for both recipient and emission countries.

added population to the high natural demographic growth (resulting from elevated fertility and diminishing mortality). The result was very intense growth demographic rates of 4.0 to 7.0 percent per year. Many cities duplicated its population size in 10 year-periods or less. (Chen, 1998, p. 80, Tables 2-6)

Urbanization.

The place of residence is an additional crucial demographic variable that experienced a profound transformation during the twentieth century. According to the United Nations (2018), by 1950 29.6 of the world population lived in urban areas; in 1970 that percentage rose to 36.6 %. (Table 2.2)

In 1970 it was clear to demographers that rapid urbanization would shape the future of the world. In fact, United Nations (2018) data indicated that by mid-2020 urban population would become 62.5 per cent, which was an indication that the world was headed a predominantly urban conglomerate.

Urbanization Patterns. In more developed countries, cities grow basically as the result of migration, while in less developed countries it is the result of both high migration and rapid natural demographic growth. Consequently, the later countries have been increasing their urban population more rapidly.

By 1970, economic and social planners, at national and international levels, were concerned about the vast challenges in less developed countries regarding the fast growth rates of urban conglomerates. As indicated in Table 2.3 by 1950 in more developed countries 54.8 percent of the population lived in cities. In 1970 that percentage raised to 66.8 and it was projected to be 79.1 by 2020. In less developed countries

urbanization started from low levels around 1950 when only 17.7 percent of the population lived in cities. In 1970 that percentage raised to 25.3 and it was projected to be 51.7 by 2020 (United Nations, 2018).

Table 2.3

Percent population living in urban areas (1950 – 2020) in developed and developing regions

Percent population living in urban areas			
Region	Year 1950	Year 1970	Year 2020
World	29.6	36.6	62.5
More developed	54.8	66.8	79.1
Less developed	17.7	25.3	51.7

Source: (United Nations, 2018)

Figures in the previous paragraph indicated that between 1970 and 2020 the urban population in more developed countries would increase by 53% while in less developed countries the increment would be 193%.

In less developed countries the urban growth was a greater challenge since many cities already had large slums mostly without appropriate access to social services, physical infrastructure, jobs, and public services. Meeting the growing demands for schools, hospitals, housing, clean water, electricity, transportation systems, employment, among others was a serious concern for development planners.

Urban Conglomerates. During the period between 1950-1970, an additional issue of concern to social and economic planners was the emergence of very large cities. In 1950 only two cities in developing countries were included in the list of the ten largest cities of the world (Buenos Aires and Calcutta). From there on, less developed countries were

increasing their participation in that list. In 1970 four cities of less developed countries were part of this group (Mexico City, Buenos Aires, Sao Pablo, and Calcutta). In 2000 eight cities in less developed countries ranked in the list of the 10 world largest cities, with Mexico City heading the list with 27.6 million residents (Table 2.4).

Table 2.4

Ten largest cities in the world in 1950, 1970, 2000

Population (Millions)					
City	Year 1950	City	Year 1970	City	Year 2000
1. New York /1	12.4	Tokyo	23.3	1. Mexico City	27.6
2. London	10.4	New York	16.2	2. Shanghai	25.9
3. Rhein/Ruhr	6.9	Osaka	15.3	3. Tokyo	23.8
4. Tokyo /2	6.7	Mexico City	8.8	4. Beijing	22.8
5. Shanghai	5.8	Buenos Aires	8.4	5. Sao Paulo	21.5
6. Paris	5.5	Los Angeles	8.4	6. New York /1	19.5
7. Buenos Aires /3	5.3	Paris	8.2	7. Bombay	16.3
8. Chicago /4	5.0	Sao Paulo	7.6	8. Calcutta	15.9
9. Moscow	4.8	London	7.5	9. Jakarta	14.3
10. Calcutta	4.7	Calcutta	7.3	10. Rio de Janeiro	14.2

Source: (United Nations, 2018)

Urbanization and poverty. It was clear to social planner that high urbanization and high population density were associated to problems in infrastructure, housing, floodings, pollution, slums, crime, congestion, security and poverty. In parallel there were unmet demands of the population in poverty, which in developing countries often represents a high proportion of the total population. Moatsos, M. (2021) published an overview of extreme poverty rates across less developed countries since 1820. Table 2.5 offers data

from 1950 to 1970. The magnitude of the figures indicates the nature of the challenges these regions had to face.

Table 2.5

Extreme poverty across world regions (Percentages) 1950-1970

Region	Percent of people living under poverty		
	Year 1950	Year 1960	Year 1970
Latin America / Caribbean	45	45	42
Sub-Saharan Africa	70	67	62
Middle East / North Africa	33	34	26
East Asia	82	66	64
South / Southeast Asia	67	69	64

Source: (Moatsos, M. 2021)

Urbanization and environment. Another aspect for concern about urban areas is the quality of the environment. Air pollution is high due to combustion from vehicles and industry; organic and solid wastes are produced in elevated quantities and its collection and disposal often becomes a challenge; traffic congestion and noise often constitute a major nuisance. The fact is that natural systems in cities are disturbed and become unable to absorb and recycle wastes through appropriate mechanisms.

To social and science scholars and some political leaders, since the 1960s the challenge consisted in finding holistic solutions to provide the necessary physical infrastructure and social services for city residents and for rural dwellers, including measures to smooth the velocity of demographic growth and land occupation.

Age Composition.

Aside from population size and the rate of growth, age composition is an additional demographic characteristic of significant importance to development. Typically, demographers arrange the population in three groups: persons less than 15 years old, persons 15-64 years old, and persons 65 years old and more. In economic terms the first group is considered youth dependent population. The second group is denominated the working force or working age population, and the third group is denominated elderly population and also elderly dependent population.

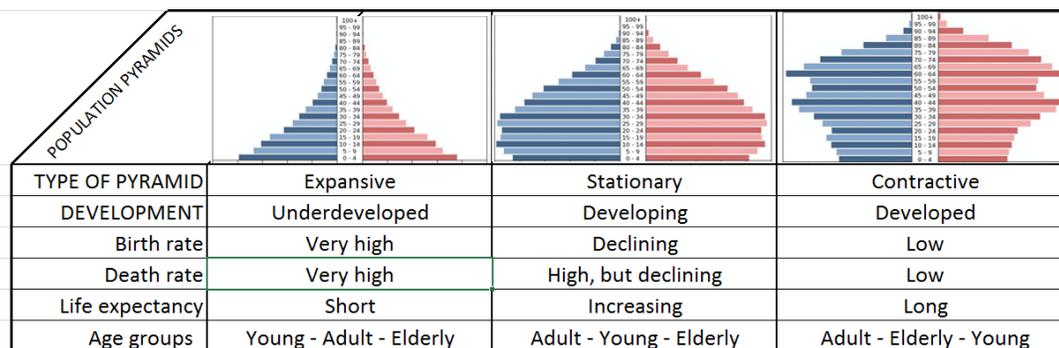
The following country age profiling has crucial effects on development:

1. Countries having low infant mortality, and high fertility have a large proportion of young dependents, low proportion of working population and low proportion of adult dependents. This was the case of most developing countries during 1950 to 1970.
2. Countries having low mortality and low fertility rates rate have a low proportion of young dependents, high proportion of working population and high proportion of adult dependents. This is the case of developed countries.

Usually, age composition is represented by population pyramids. Graph 2.1 is a representation of three country types:

Graph 2.2

Age pyramids in three country types



Source: (Alonso, 2016)

Due to their high proportion of young dependents and its rapid demographic growth, developing countries comparatively must face greater challenges to educate, feed, provide health services, etc. than more developed countries having slower population growth rates, and proportionally, less young population. As could be observed in Table 2.6, in 1960 in less developed countries 41.0 % of the population is in the group 0-14 years while in more developed countries only 28.2 of the population is this group of age. Colombia and France, each representing a region, also illustrate this condition. The same year, in Colombia 46.7 of the population had between 0-14 years, while in France only 26.4 of the population had between 0-14 years of age.

Table 2.6*Age structure in less and more development countries in 1960.*

Region / Country	Percentage per age group		
	0-14 years	15-64 years	65+ years
Less Developed Countries	41.0 %	55.5 %	3.5 %
-Colombia	46.7 %	50.4 %	2.9 %
More Developed Countries	28.2 %	63.3 %	8.5 %
-France	26.4 %	62.0 %	11.7 %

Source: United Nations (2022)

Age Dependency. Total age dependency is a demographic condition that creates additional burden to development efforts in less developed countries. Children dependency is the number of children per one hundred population in ages 15-64 years (also known as working population age). In less developed countries 73.9 children depended on the economic efforts of 100 adults. By contrast in more developed countries only 44.5 children depended on the economic efforts of 100 adults. (Table 2.7)

Table 2.7

Total age dependencies in less and more development countries in 1960

Region / countries	Age dependency ratios	
	Children dependency	Total dependency
Less Developed Countries	73.9	44.5
-Colombia	92.6	49.6
More Developed Countries	44.5	36.7
-France	42.6	38.1

Source: (United Nations, 2022).

At country level, Colombia is contrasted with France. In Colombia 92.6 children (0-14 years old) depended on the efforts of 100 adults in productive ages, contrasted with France where only 42.6 children depend on the efforts of 100 adults, in productive ages. High demographic dependency resulting from the new population dynamics around 1950 was a serious concern for economic and social planners since it represented a heavy economic burden on the working segment and on also on the taxing structure.

Similar conclusions could be obtained from the Total Dependency Ratio. It refers to number of children (0-4 years) plus people older than 65 years by one hundred adults in the ages 15-64 years old. Figures in table 2.6. indicated that in 1960 this ratio was 44.5 in less developed countries while it was 36.7 in more developed countries. In Colombia 49.6 percent of the population were situated in that dependency group while in France only 38.1 percent were in this group.

Population Growth and Development

During the 1950s several scholars and a few government officials declared that rapid population growth represented a serious barrier to economic growth and social advances. To them, countries had the challenge of responding to the needs of the existing poor population but at the same time they had to deliver all necessary inputs to respond to the demands of the growing additional people.

Social Demands- The Case of Education

Countries had to guarantee the public budget needed to create and expand health, education, food, jobs, housing, and transportation services. At the same time, a society

needs to invest in science, technology, and training to keep and improve those investments (Spengler, 1969).

Since 1958 several renowned scholars wrote books and articles explaining the mutual relationships between population and economic development. To mention only a few of them Frank W. Notestein, Director, Irene B. Taeuber, Senior Research Demographer, and Ansley J. Coale Assistant Director, Office of Population Research, Princeton University; Edgar M. Hoover, Visiting Professor of Economics in the University of Harvard; Philip M. Hauser, Director, and Donald J. Bogue, Associate Director, Office of Research and Training, University of Chicago; Paul Demeny, Director of the East-West Center, Population Institute, University of Hawaii; Nathan Keyfitz, Professor of Demography, University of California at Berkeley.

In addressing the effects of rapid population growth on development, academic authorities assert that in less developed countries rapid population growth slows down the growth of per capita income, and constrains the domestic product growth rate. Agricultural production must be significantly expanded to meet the needs of growing population, and this constrains the allocation of resources to other economic and social sectors like education, health, employment, housing, transportation, sanitation, communications, security, among others.

During the 1960s, allocations needed to respond to the demands generated by population growth were very high and expected to be even higher for the following decades. Schooling was a clear example. In only 15 years (1960–1975) in developing countries the

population aged 5-14, would have a projected increment higher than 50 percent, as shown in table 2.8 for 6 of the world's largest countries.

Table 2.8

Children in elementary school ages, 1960 and 1975, in selected countries

Country	Population aged 5-14 (Rounded)		Total increment	% increment
Year	1960	1975	1960-1975	1960-1975
Mexico	9,181,000	14,635,000	5,454,000	59.4
Brazil	16,701,000	25,809,000	9,108,000	54.5
Indonesia	21,363,000	34,666,000	13,303,000	62.3
Pakistan	24,323,000	38,752,000	14,429,000	59.3
Indian	100,100,000	150,300,000	50,200,000	50.1
Mainland China	182,800,000	292,700,000	109,900,000	60.1

Source: (Tauber, I. 1963, p.40)

Around 1960, education authorities in less developed countries became aware about the great challenge created by the rapid expansion of the educational system, to enroll the additional children and youth that each year engrossed each age group. To scholars in the field of development it was clear that the failure to attain the full schooling of children and youth, would probably conduct those countries to poverty self-perpetuation (Tauber I, 1963, p.40)

Food Demands and the Green Revolution

By 1960 the world confronted a three-fold food challenge. First, to keep food production to feed the population estimated at 3,035 million people in 1960, 916 million people living in more developed countries and 2,119 million in less developed countries.

The second challenge was the need to increase food production in order to feed the millions of poor people living under hunger conditions. Salas (1984, p.125), informed that, excluding China, the number of malnourished people in less developed countries was about 400 million in 1969-1971. They constitute about a quarter of the population of these countries. Dumond & Rosier (1969) based on FAO's food surveys in less developed countries found that 1,600 million people suffered food qualitative deficiencies; this was one person out of two.

The third challenge was to increase food production in order to feed the increasing population. Salas (1984, p.125) also reported that that excluding China, the number of malnourish people in developing countries rose from 400 million in 1969-1971 to 450 in 1972-1974. The United Nations (1994) estimated that, at the world level, population increments were likely to remain close 90 million every year, until the year 2015.

After World War II, a new revolution only comparable to the agricultural revolution 10,000 years ago, took place thanks to the combine efforts of the scientific and technological communities. New advances were incorporated to food production including improved seeds, disease control chemicals, new fertilizers, and irrigation systems. The advances were initiated in developed countries and very rapidly they were adopted by less developed countries. Crops were rapidly and largely increased in many

countries thanks to those scientific and technological innovations later known as “The Green Revolution”.

In spite of its collateral effects, the green revolution was a decisive hunger mitigation factor and infant mortality reduction, around the globe. Ironically, as already mentioned above, one of those collateral effects, namely the reduction of mortality rates, helped to increase population growth rates, mainly in poor countries.

In addition to food availability, two other conditions had to be addressed mainly in poor countries. Poverty, and food transport restrictions deprived millions of people of their daily meals. Food security also depended on purchasing capacity and food supply availability near the demand sites.

Nevertheless, to many scholars and policy makers, the integral solution to the hunger challenge had to include an additional component: the reduction of rapid increase of population growth, in order to curve food demand, in the medium and long time-frames. Rapid population growth created additional food demand pressures that were not easily fulfilled by poor countries.

By 1970, ecologists revealed serious limitations of the green revolution. Agriculture in general, and the green revolutions, imply the simplification of forestry and plant diversity by planting single species crops. This only factor disregards one ecological law: the planet’s balance depends largely on the biodiversity of plants, insects, microbes, and predators.

Insects, to take a single case, perform different functions that are crucial to human well-being. Agriculture relies heavily on pollinating insects. However, more than a third of all

insect species that dwell the planet are in danger of extinction, due to increasing urbanization and agricultural practices that use toxic pesticides, fungicides, and herbicides.

According to FAO (2019) pollination is vital to life. Bees and other pollinators such as birds and bats, regulate 35 percent of the world's crop production, increasing outputs of 87 of the leading food crops worldwide.

Environment, Resources and Pollution

By 1965, professionals in the natural sciences warned that pollution of the air, water and land surface was one of the main problems threatening the entire world, with tendencies to endanger the existence of civilization, as it was known.

Although pollution has existed since the beginning of human existence, the pollutants from the industrial revolution became a concern mainly in urban areas, but still it was basically a local phenomenon. It was during the mid-twentieth century when pollution attained very considerable proportions due to the concentration intensity, the extension throughout the planet and the hazardous nature of many pollutants.

Early warnings of scientists indicated that population size and growth, migration and urbanization have increasing impacts on forests, wildlife, water, air, schools of fisheries, etc. But when these population factors act concomitantly with inappropriate developments and consumption styles, the crisis deepens.

Those warnings stressed that pollution of air, water and soils threatened the planet, regardless of where the main sources of pollutant production were located. Circulation

of pollutants throughout the air and waters did not respect political boundaries, transforming the nature of the problem in a universal concern.

Early ecological models stressed that pollution was also the result of inadequate development styles, including the increasing dependence on fossil fuels such as oil and coal, which emit by-products such as carbon dioxide. Those models indicated that carbonic gas creates a greenhouse effect in the atmosphere and consequently increases the average temperature of the planet.

In large cities it was observed that pollution resulted from the production of wastes in areas with high population concentrations. In these cases, natural recycling systems did not complete their operating cycles due to pollutants overloads (e.g., oxygen is depleted, temperature rises, bacterial populations grow exponentially).

The main pollution agents identified by the 1960s were carbon dioxide, carbon monoxide, sulfur dioxide, nitrogen oxides, methane, phosphates, fluorinated gases, mercury, lead, pesticides, and radiation. They are the subproduct of electric power production, the combustion of oil, diesel and gas engines, domestic activities, agricultural processes, and industrial production. These pollutants have negative effects on human health (especially causing respiratory diseases and cancer), alter food chains in rivers, lakes, and the sea, causing warming of the earth's temperature due to the greenhouse effect, and cause the elimination of animals, plants, and microorganisms essential to ensure ecological balance. Motor vehicles were considered, by 1970s, one of the major pollution agents, mainly in cities and metropolitan areas. Between 1948 and 1971 the number of privately owned

cars in the world increased 475%, almost 5-fold, and the corresponding number of industrial uses rose 409%, that is more than four times (Table 2.9)

The combustion of car engines produces toxic gases and other contaminant that affect human health, contribute to climate warming, that without mentioning the consumption of great amounts of fossil fuels.

Table 2.9

World-wide number of cars (privately owned and industrial use)

Use mode	Year					% Increase 1948-1971
	1948	1955	1960	1965	1971	
Private cars	42,970,000	73,440,000	98,820,000	139,730,000	204,400,000	475%
Industrial cars	13,050,000	20,190,000	28,820,000	37,600,000	53,400,000	409%

From: (United Nations. Statistical Yearbook, 1972)

New Frontiers from Systems Analysis

In 1972 the Club of Rome¹³, commissioned the development of computer simulations on the interaction of population, food production, industrialization, pollution, and consumption of nonrenewable natural resources, all growing exponentially. (Meadows, et al., 1972)¹⁴

¹³ The Club of Rome is a nonprofit, informal organization of intellectuals and business leaders whose goal is a critical discussion of pressing global issues. The Club of Rome was founded in 1968 at Accademia dei Lincei in Rome, Italy

¹⁴ The Club of Rome commissioned a team headed by Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens III, representing a team of 17 researchers. The model was based on the work of Jay Wright Forrester (1918-2016), professor at the Massachusetts Institute of Technology. He developed the concept of system dynamics, which through computer coding, simulates interactions between objects in dynamic systems. It has been applied to different systems, including industrial organizations and social systems.

The Club of Rome's purpose was twofold: First to obtain insights about the limits of the world as a system and about the constraints these limits put on our global society. The second purpose was to influence world leaders and population at large, on the necessary changes required in achieving a sustainable planet.

Meadows et al. (1972) came to the following conclusions:

- If the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years. The most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity.
- It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future. The state of global equilibrium could be designed so that the basic material needs of each person on earth are satisfied and each person has an equal opportunity to realize his individual human potential.
- If the world's people decide to strive for this second outcome rather than the first, the sooner they begin working to attain it, the greater will be their chances of success (pp. 23-24).

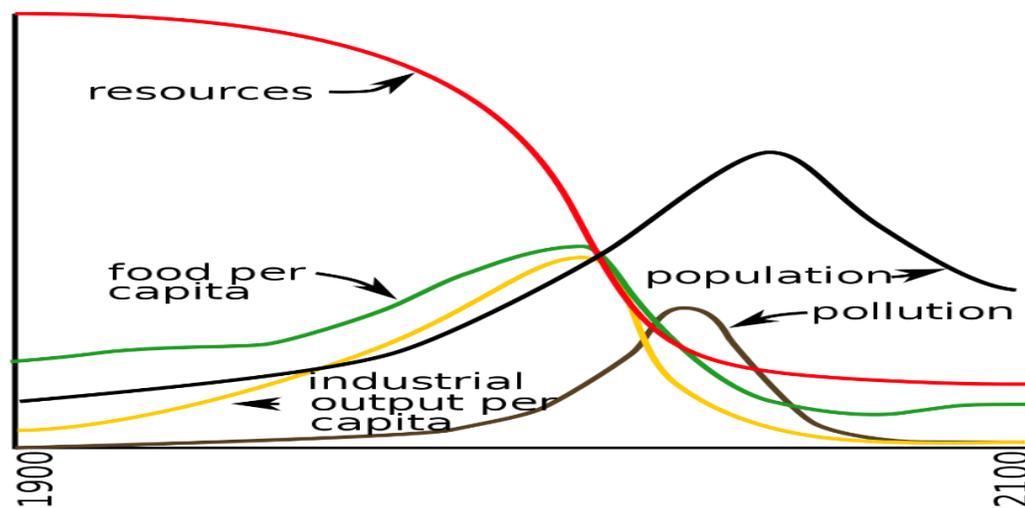
From different computer run outs that were performed by the authors of "Limits to Growth", Graph 2.2 shows one modeling that used standard data, assuming no major changes for the five input variables utilized, in the historical values 1900-1970. Meadows et al. (1972) summarized the model behavior as follows:

Food, industrial output, and population grow exponentially until the rapidly diminishing resource base forces a slowdown in industrial growth. Because of natural delays in the system, both population and pollution continue to increase for some time after the peak of industrialization. Population growth is finally

halted by a rise in the death rate due to decreased food and medical services” (p. 124)

Figure 2.3

World model - standard run



Source: (Meadows et al., 1972, p 124)

The publication of the *Limits to Growth* report achieved its main objectives since renowned scholars and politicians assumed the challenges the publication was intended to. On the other hand, there were heavy criticisms to both methodology and the assumptions of the model, calling its output doomsday prophecies.

In 1974 a Second Report to the Club of Rome was published under the title “Mankind at the Turning Point (Mesarovic et al., 1974) by using a flexible algorithm that compiles a multilevel regionalized model of the world system. The outputs of the model basically ratified the conclusion of the first report.

Subsequent research indicated that the basic premises of those two Club of Rome models are valid. Several additional reports also produced similar results, including *Beyond the Limits* published in 1992; *The Limits to Growth: The 30-Year Update* published in 2004; *A Global Forecast for the Next Forty Years* in 2012, and *Limits and Beyond*, in 2022.

During the 1960s the scientific community both in social and natural sciences were especially concerned about the dramatic demographic inflections during that decade and its projections in a larger perspective. Based on information of Tables 1.9 and 1.11 with data from United Nations (2019) during 1850-1920 the mean annual population growth rate was 0.55%; during 1920-1950 the population increase was two times higher, close to 1% per year. It is estimated that for this period the doubling time for the population was around 68 years. Starting in 1950 the scenery started to change dramatically. In fact, from 1950 to 1960 the population growth rate was almost two times higher (1.79% per year) as compared with the previous decade (0,97% per year). The population net increase was 499 million, in only ten years. The doubling population time was only 39 years, compared with 71 years for the preceding decade.

Chapter 3: The United Nations creates the Population Fund (UNFPA)

The United Nations: its origin

The road to the creation of the United Nations Population Fund (UNFPA) took 22 years since the foundation of the United Nations. In 1945, fifty-one governments had expressed their concern about the great menace posed to humanity by another world war and the possible use of nuclear weapons. In order to strengthen the conditions conducive to lasting peace and free the world of the dangers of armed confrontations, between April 25 and June 26, 1945, the Representatives of those 51 countries met in San Francisco, California.¹⁵ They committed to maintaining international peace and security by fostering friendly relations among nations, promoting social progress, improving living standards and protecting human rights.

The sponsoring countries agreed on the creation of stable headquarters to enable the nations of the world to come together, discuss common problems and find shared solutions. They also developed a conceptual frame that included the reaffirmation of human rights, dignity and value of the human person and the importance of preserving equal rights of men and women. This frame also included the right of nations to create conditions under which justice and respect for obligations arising from treaties and other sources of international law, could be maintained.

The rationale for the UN creation considered that conditions of stability and well-being were necessary for peaceful and friendly relations among nations. The respect for the

¹⁵ The Charter of the United Nations was signed on 26 June 1945 in San Francisco, entering in force on 24 October 1945.

principle of equal rights and self-determination of peoples, was a second pillar for the Organization. Therefore, the promotion of better standards of living was considered a prerequisite for peace achievement.

For the implementation of its objectives, the Organization proposed to seek international cooperation in order contribute to solving economic, social and health problems (United Nations, 1945, Art. 55).

Five organs were foreseen in the United Nations Charter: the General Assembly (GA), the Security Council, the Economic and Social Council (ECOSOC), the Trusteeship Council, the International Court of Justice, and a Secretariat. The ECOSOC is the body entrusted of the preparation of reports with respect to international affairs of an economic, social, cultural, educational and health nature, and make recommendations on such matters to the GA, Member States, and the participant United Nations Specialized Agencies¹⁶ (United Nations, 1945)

The population Commission

The initial issues addressed by the United Nations did not include specific concern on population. However, in 1946, under the auspices of the United States and the United Kingdom, and with strong opposition from the USSR and Yugoslavia, the General Assembly approved the creation of the Population Commission¹⁷ as an advisory body to ECOSOC (United Nations, 1946).

¹⁶ See list of United Nations Specialized Agencies in Appendix 1

¹⁷ In its resolution 49/128 of 19 December 1994, the General Assembly decided that the Commission should be renamed the Commission on Population and Development

The activities of the Population Commission were restricted by the ideological position of some delegations. For example, during its first session, the delegate of the URSS opposed the use of the term optimal population and the delegate of Ukraine objected the inclusion of family planning topics, which in his view, were opposed to the humanitarian spirit of the United Nations (Johnson, 1987, p. 8)

One issue that came to the attention of the United Nations General Assembly was the rapid population growth in Asia and Latin America which began during the 1950s. This phenomenon was viewed with concern by economists, demographers and political leaders from India, Pakistan, Japan, Ceylon (now Sri Lanka), Hong Kong and the English Caribbean countries. In their view, rapid population growth was neutralizing many of the efforts being made to boost economic development and social progress. However, this concern was not shared by countries of Catholic tradition, by communist states and by industrialized countries, where fertility was lower (Johnson, 1987, p. 9)

The Population Division.

In the context of the polarization on population and development issues, ECOSOC understood that in addition to the political functions of the Population Commission, it was necessary to have a technical mechanism, which could carry out a series of tasks aimed at producing demographic information to facilitate the work of the Commission itself, and above all, to strengthen the capacities of countries to produce and use this information. Consequently, also in 1946, ECOSOC approved the creation of the Population Division, staffed with academic officials of the highest world level and with the necessary means to enhance the availability of demographic information at the service of

both the United Nations Secretariat and Member States (United Nations, 1946, Resolution 3)

Since 1948 the Population Division initiated the elaboration of a Demographic Yearbook that has been a critical reference work, about basic information on countries, regions, sub-regions, and the world. The Division also provided technical support to countries and trained numerous officials to conduct population censuses on a decennial basis, so that each country could have the necessary information to assess the evolution of its population, to identify the causes of this demographic dynamic and its various impacts.

Once the Population Division had the information on country censuses and data from civil registries, it started providing aggregated information on global trends at regional and sub-regional levels. The Division delivered information to world leaders on emerging issues, such as the unusual population growth, caused by the very pronounced and rapid fall in mortality in developing countries, which was occurring at the end of the World War II due first, to the massive improvements in the public health, and second to the agricultural improvements resulting from the 'green revolution'.

Regional Economic Commissions

In one step further, ECOSOC also created regional bodies in order to support countries regarding regional perspectives. Five Regional Commission were implemented, two in Asia, and one in Africa, in Latin America, and in Europe¹⁸. These Regional Commission include demographic centers or technical capacities to strengthening national capacities

¹⁸ Economic and Social Commission for Asia and the Pacific (ESCAP); Economic and Social Commission for Western Asia (ESCWA); Economic Commission for Africa (ECA); Economic Commission for Europe (EEC); Economic Commission for Latin America and the Caribbean (ECLAC).

by training national expertise and producing national information to support national policy formulation.

Population at United Nations Specialized Agencies Around 1950s

Within the Specialized Agencies of the United Nations System, several directors also expressed concerns about the sectoral implications of population growth. Sir Julian Huxley, the first UNESCO's Director-General, in his annual report in 1948, indicated that overpopulation could drastically affect the type of civilization possible and its degree of advancement (Johnson, 1987, pp. 9-10).

The World Health Organization (WHO) was the ground where vigorous controversies on family planning took place during the 1950s. In this regards Johnson (1987, pp. 9-12) portrays the challenges faced by its Director-General, Dr. Brock Chisholm (tenure 1948-1953). He held that if a government judged that the growth of its population constituted a health problem and requested WHO's support, then the Agency was obliged to comply with that request. Ceylon, India, and Egypt supported that view. However, under Italy's leadership, other delegates under the influence of the Vatican, including Belgium, Costa Rica and Ireland, argued that from a medical point of view, population problems did not require any action by WHO (Johnson, 1987, pp. 9-10)

Johnson (1987) also registers that in 1952, the Norwegian Delegated to WHO, proposed a) the creation of a group of experts to study the family planning issue and b) a work program, to be considered during the next WHO Assembly, in 1953. In opposition, delegates from Ireland, Italy, Belgium, and Lebanon stated that family planning implied an undesirable physical and physiological outcome. The Irish delegate, in Johnson's

recount, also warned that if WHO ever included a family planning program, some governments could be forced into a position that would lead them to withdraw from this Organism. The Belgium delegate, for its part, indicated that given its universal and neutral nature, WHO could not advocate, much less implement, certain social and economic theories that did not have universal approval.

Because of the passionate way in which some countries opposed WHO's involvement in family planning, the majority preferred to preserve the integrity of the Agency, closing its doors to technical cooperation in family planning.

Notwithstanding his clear position, the WHO Director-General had very little room to act. Even in 1951, at the request of the Prime Minister of India to support his government in implementing its national family planning program, Dr. Chisholm decided to send a technical mission limited to advise on the implementation of a periodic abstinence program, the only method permitted by the Catholic Church (Harkavy & Roy, 2007).

In 1950, other United Nations Agencies also faced similar controversial incidents. In one case, the ILO Director-General David Morse, addressing the Second Annual Asia Conference, stated that the slowing down of population growth, would help Asian workers to derive substantial and lasting benefits from social and economic development. While the Delegate of Ceylon welcomed Morse's expressions, the Delegate of France severely criticized them. (Johnson, 1987, p. 10)

In 1951 John Boyd-Orr, Director-General of FAO, said that a combination of factors, including population growth, had limited the progress of the world's food situation. The

FAO Report of that year indicated that food production was not increasing at the same rate as population growth (Jonhson, 1987, p. 10).

During this early period, the United Nations Secretariat also confronted difficulties regarding the implementations of concrete actions. For example, in 1949 the Population Commission decided not to implement a request of the UNESCO Director-General for the celebration of a World Population Conference. The Population Commission, fearful that it would introduce the theme of family planning, replied that it was preferable to wait for the results of the 1950 censuses round (Johnson, 1987).

However, within international organizations, ideas evolved quickly when new actors came into the scene. In 1951, the Population Commission, under the ruling of new members, highlighted the scientific value of pulling together the contributions of the scientific community by the means of an international conference. In line with this proposal, ECOSOC authorized the holding of a World Population Conference in Rome, of technical nature, under the auspices of the United Nations, the Specialized Agencies, and the International Union for the Scientific Study of Population.

Population Conference in Rome - 1954

The Conference, of non-governmental character, authorized by ECOSOC, was held in Rome in 1954, with the participation of 400 technical experts from 80 countries and specialized agencies, except for the WHO, which had not yet recovered from its internal difficulties (United Nations, 1954).

The main topics covered at the Conference were demographic in nature, including the review of knowledge accumulated in data and techniques, and a balance of the existing

needs in those topics. The Conference examined existing lines of population research and its relationships with other socio-economic and environmental variables. In a third chapter examination was made regarding the efforts made by some countries regarding fertility regulation, highlighting the cases of Japan and India.

Although this Conference did not have official participation of official country representatives, participants from Russia and the Vatican expressed opposition to the need for family planning. Russian participants argued in favor of an increase in family size. Like the Vatican participants, the Russians noted that rather than reducing family size, resources and productivity should be expanded to sustain natural population growth (United Nations, 1954)

One of the recommendations of the Rome Conference was the creation of regional centers of excellence for the training of experts in different areas of demography. The first Conference accepted that on issues related to fertility regulation, the path to consensus would be difficult, due to the complexity of the issue and the polarization of points of view. The challenge for the United Nations was to reconcile political, religious, and moral interests with its mission to promote social progress, improve living standards and protect human rights (United Nations, 1954).

New Impetus During the 1960s

Despite its basic demographic function, in 1959 the Population Commission declared that population growth could jeopardize efforts to achieve economic progress. In this regard, the Commission recommended governments to pay attention to the interrelationships between population growth and economic and social progress and take these

interrelationships into account in the formulation and implementation of their national policies (Mirkin, 2005).

In 1962, the Population Commission, after conducting a review of the United Nations' work in the field of population, indicated that it considered appropriate for the Organization to provide technical assistance at the request of countries, for research purposes and to implement programs of action related to their population problems. (Salas, 1979, p. xvi)

Between 1960 and 1966, thirty-nine new members from developing countries joined the United Nations. A wider membership opened the consideration of new perspectives and points of view to the Organization, not always coinciding with western countries. In the field of population this new impetus led to a turning point because it added votes to the positive voices felt since 1962. In fact, Salas (1979) reports that:

In 1962 the General Assembly holds its first full-scale debate on the question of whether the United Nations should be involved in helping Member States to solve their population problems. In a final resolution (1838, XVII, dated 18 December 1962), the General Assembly recognizes for the first time the close relationship which exists between economic development and population growth (p. xvi).

Since 1963 at the regional level, the Asian and Latin American Economic Commissions were in favor of expanding the range of population activities, including strategies to support countries in regulating population growth. They published the results of the government survey showing that a significant number of countries were concerned about the high rates of population growth. And for the first time, and without the formal support of the General Assembly, in early 1965 the United Nations Secretariat sent a mission to

India to review the family planning program and make recommendations for its expansion (Salas, 1979, p. xvi).

Population Conference in Belgrade

In 1965 the Second non-Governmental World Conference on Population was held in Belgrade, with the participation of 900 specialists from 90 countries. Different population variables were analyzed, including size, growth, fertility, mortality, and migration, from a technical point of view.

The Belgrade Conference allowed for discussions on the need to guarantee couples the means to have the children they desired, and for married women to be able to work outside the home, if they so wished. Given the polarization of the world, at that historical moment, the Conference represented a great advance, that was achieved perhaps by virtue of the scientific-technical quality of the participants.¹⁹ (United Nations, 1965)

Under a new political background, in 1966 the UN General Assembly unanimously adopted a resolution that included an operational paragraph requesting the Secretary-General, ECOSOC, the Population Commission, the Economic Commissions and the specialized agencies, to continue and strengthen the implementation of a programs of action supporting countries and regional authorities, for the training, research, information and advisory services on population matters (United Nations, 1966/1967).

¹⁹ The list of participants to the Belgrade Population Conference includes outstanding social scientists like Choudry, N.K; Macura, Milos; Urquidi, Victor; Clark, Colin; Mayobre, Jose Antonio; Rao, V.K.R.V; Spengler, Joseph J; Tabah, Leon; Stycos, J. Mayone; Tauber, Irene; Elizaga, Juan C; Hauser, Philip; Doctor, Kailas C; Souvy, Alfred

The content of a paragraph in the preamble to the 1966 General Assembly Resolution probably neutralized possible oppositional tendencies. Indeed, it explicitly recognizes the sovereignty of nations to formulate and promote their own population policies, with due respect for the principle that family size should be decided freely by each individual family (United Nations, 1966/1967)

A relevant change also occurred Specialized Agencies. At WHO, support statements from member countries in 1963, 1964 and 1965 finally enabled the Director-General to accept in 1966 that this Agency could provide advice, when requested, on family planning, as part of established health services (Salas, 1979, p. xix).

Human rights, New Perspectives

On 10 December 1966, on the Human Rights Day, 12 Heads of State²⁰ joined one year later by 18 additional Dignitaries²¹, presented to the Secretary General, U Thant, a declaration recognizing family planning as a matter of vital concern both for the family and for the nation The Declaration on Population (1967), among other points, stated:

As heads of governments actively concerned with the population problem, we share these convictions:

²⁰ Those Heads of State included Carlos Lleras Restrepo, Colombia; D. Urho Kekkonen, Finland; Indira Gandhi, India; Chung Hee Park, Republic of Korea; Tunku Abdul Rahman, Malaysia; Hassan II, Morocco; Mahendra, Nepal; Lee Kwan Yew, Singapore; Tage Erlender, Sweden; Habib Bourguiba, Tunisia; Gamal Abder Nasser, United Arab Republic; and Joseph Broz-Tito, Yugoslavia.

²¹ Harold Holt, Australia; Errol W. Barrow, Barbados; Jens Otto Krag, Denmark; Joaquin Balaguer, Dominican Republic; J.A. Ankrag, Ghana; General Suharto, Indonesia; Shah Mohamed Reza Pahlavi, Iran; Eisako Sato, Japan; King Hussein, Jordan; J. Zijlstra, The Netherlands; Keith Holyoake, New Zealand; Per Borten, Norway; Mohamed Ayub Khan, Pakistan; Ferdinand Marcos, Philippines; Thanon Kittikachorn, Thailand; Erick Williams, Trinidad and Tobago; Harold Wilson, United Kingdom, and Lyndon B. Johnson, the United States.

We believe that population problem must be recognized as a principal element in long-range national planning if governments are to achieve their economic goals and fulfill the aspirations their people.

We believe that the majority of parents desire to have the knowledge and the means to plan their families; that the opportunity to decide the number and spacing of children is a basic human right.

We believe that lasting and meaningful peace will depend to a considerable measure upon how the challenge of population growth is met.

We believe the objectives of family planning is the enrichment of human life, not its restriction; that family planning, by assuring greater opportunity to each person, frees man to attain his individual dignity and reach his full potential.

Recognizing that family planning is in the vital interest of both the nation and family, we, the undersigned, earnestly hope that leaders around the world will share our views and join with us in this great challenge for the well-being and happiness of people everywhere. (Declaration on Population, 1967)

The Secretary-General, in response to the Declaration on Population, affirmed that the right of parents to determine the number of their children should be recognized. Mr. U Thant stressed the importance of this human right at that moment, in human history. The Secretary-General added that population growth -higher in less developed countries- was one factor behind poverty. He stressed that food scarcity would not be solved if a parallel effort was not made to moderate population growth rates (Salas, 1979, p. xix)

The year 1967 was especially crucial regarding the involvement of the United Nations in population assistance. In July, Secretary-General U Thant in his address to ECOSOC declares that "On the strength of a historic General Assembly resolution, the United Nations can

now embark on a bolder and more effective program of action in this field” Salas (1979, pp. xxi)

In connection with his statement to ECOSOC Mr. U Thant announced that his decision to establish a trust fund for population activities, adding in his own words “to which I hope governments and institutions will pledge voluntary contributions. This would help us to lay the ground for training centres as well as for pilot experiments which will assist the countries in establishing or expanding their own administration and programmes” Salas (1979, pp. xxi).

The Heads of State Declaration, its endorsement by the Secretary General’s served as a prelude to a renewed involvement of other United Nations instances. In fact, the following year, on 13 May 1968, the International Conference on Human Rights held in Teheran, under the auspices of the United Nations, took a fundamental step in the advancement of family planning by explicitly recognizing it as a human right. In the text known as the Teheran Proclamation, adopted unanimously with the vote of 49 States, including the Holy See. The Proclamation solemnly proclaims that “The protection of the family and the child is a responsibility of the international community. Parents have the basic human right to determine freely and responsibly the number and spacing of their children (United Nations, 1968, Resolution XVIII).

Contrasting Positions

At this point, population issues and family planning had become an important issue at the international front. At the end of the 1960s it was positioned in the public agenda of

political leaders and recognized academic scholars. Nevertheless, opponents also took new vigor.

When those responsible for population and family planning programs, especially in countries with strong Catholic influence, thought that the vote in Teheran was the prelude to Vatican policy change, on July 29, 1968, Pope Paul VI launched his Encyclical *Humanae Vitae*²². While it is true that the Encyclical recognizes the right of parents to family planning, it also drastically limits their freedom to select the contraceptive method they wish to use (Paul VI, 1968).

Papal Encyclicals, which constitutes the official position of the Catholic Church for its adherents, caused concern because the Vatican tried to impose those precepts on public policy, even in countries that have secular constitutions, where separation between Church and State is the ruling of law.

In contrast, Other United Nations bodies also expressed bold statements in population matters. In 1969 Robert S. McNamara, President of the World Bank, in an address to the University of Notre Dame in United States, asserted that the population growth is the greatest obstacle to the economic and social advance of the majority of the peoples in the underdeveloped world. He started by saying that:

It is, by half a dozen criteria, the most delicate and difficult issue of our era - perhaps of any era in history. It is overlaid with emotion. It is controversial. It is subtle. Above all, it is immeasurably complex....it is not merely a problem, it is a

²² In 1981 Pope John Paul II endorsed *Humanae Vitae* by signing an Apostolic Exhortation on the Role of the Christian Family (John Paul II, 1981).

paradox. It is at one and an issue that is intimately private -and yet inescapably public (McNamara, 1969)

The United Nations, a Renewed Commitment.

As already annotated in previous paragraphs, in 1967, the Secretary General U Thant decided to create a Trust Fund with voluntary contributions, in order to strengthen the potential of United Nations bodies and agencies, to support countries requesting population assistance. This was the beginning of the Program that would later be known as the United Nations Population Fund, whose role has been fundamental, not only for the support of other agencies of the United Nations System, but also for the promotion of a wide consensus on population, including family planning, in a very complex political and ideological context.

Undoubtedly, without this mechanism, neither the Secretariat nor the Specialized Agencies would have been able to achieve the advances that the whole world has witnessed during the last 45 years.

In 1969, Secretary General U Thant speaking in a closed-door meeting of representatives from 35 nations, about the urgency for a wider involvement of the UN in population matters made the following statement:

I do not wish to seem over-dramatic, but I can only conclude from the information that is available to me as Secretary General that the members of the United Nations have perhaps 10 years left in which to subordinate their ancient quarrels and launch a global partnership to curb the arms race, to improve the human environment, to diffuse the population explosion, and to supply the required momentum to development efforts. If such a global partnership is not forged within the next decade, then a very much fear that the problems I have mentioned

will have reached such staggering proportion that they will be beyond our capacity to control". (Thant, 1969, as cited in Meadows et al, 1972, p. 17).

Subsequently, Secretary General U Thant decided to transform the trust fund created in 1967 into an operational entity named United Nations Fund for Population Activities (UNFPA), changed to United Nations Population Fund (UNFPA), after 1987.

The United nation Population Fund (UNFPA): New Momentum.

From the moment it became operational in 1979, UNFPA showed great vitality in the obtaining financial resources to support the strengthening of national capacities to address population and reproductive health issues. Also, UNFPA has been a critical factor in achieving international agreements regarding the impact of population variables on development of those efforts to reduce poverty levels.

Mandate - Main Areas

The role of UNFPA basically encompasses five interrelated working areas including resource mobilization and technical and financial support to countries, other UN agencies and national and international organizations. Basically, these five areas are the following:

- i. Mobilizing voluntary resources from donor and recipient countries and other sources, destined to fund its activities.
- ii. Providing technical and economic support to countries for the formulation of population national programs.
- iii. Supporting Regional Economic Commissions for the training of national technical experts and the production of knowledge to support national policy formulation.
- iv. Supporting specialized UN Agencies to broaden its mandates in population matters.

- v. Subsidizing international non-governmental bodies and research centers to expand their institutional capacities to provide support to national institutions.

Resource mobilization. UNFPA, as other UN programs like UNICEF and UNDP, is funded from voluntary contributions coming from two different sources:

- i. Core contributions (also known as regular). These resources are utilized according to a work plan approved annually by the Executive Board.
- ii. Non-core contributions (also referred to as other). These resources are earmarked by the donors regarding the intended beneficiary country or countries and thematic areas.

In raising funds from donor and recipient countries, multilateral entities, and non-governmental organizations, UNFPA has been very successful, although it still represents only a small proportion of the total Official Development Assistance (ODA)²³.

UNFPA's resources started from an initial trust fund of US\$ 0,1 million in 1967, increasing to US\$ 3.9 million in 1969 when it became an operational body (Salas, 1979). According to the UNFPA Annual Reports (1978, 1990, 1995, 2010) the mobilization of core resources in 1978 surpassed the US\$ 100 million benchmark, in 1990 surpassed the 200 million; in 1995 the US\$ 300 million and in 2010 it surpassed the US\$ 400 benchmark. In 2020 total core resources amounted US\$ 505.7 million.

Regarding non-core funding, for the period 1976 through 2019 UNFPA did not record all the resources because in many cases they were delivered directly to the beneficiary

²³ In 2020, UNFPA raised US \$505.7 million. According to OECD in 2020 the ODA totaled US \$161.2 billion

entities. Since 2010 it started recording them, initiating with US\$ 357 million that year, rising to US\$ 811.2M in 2020. (UNFPA Annual Reports 2010, 2020)

Support to country programmes. It was planned that UNFPA should prioritize technical and economic support to countries in order to strengthen their national capacities to identify needs, formulate policies, implement and evaluate action programs, collect and analyze data. The main content subjects were the following:

- i.basic data collection,
- ii.population dynamics,
- iii.formulation and evaluation of population policies,
- iv.family planning,
- v.information, education, and communication,
- vi.gender issues,
- vii.multisectoral activities.

The areas of support to countries were implemented by means of national programs, submitted to UNFPA through the planning bodies, in order to guarantee local ownership. To protect the pertinence, the formulation of country programs was preceded by Need Assessment Missions conformed by a team of international experts working in close contact with national experts and authorities.

The controversial environment under which the United Nations involvement in population issues took place, required a high dose of neutrality. Therefore, UNFPA was very cautious in avoiding that its technical and economic assistance had a prescriptive approach. At the same time, flexibility was required in order to improve project impact. In this direction UNFPA did not imposed selection of strategic sectors to be supported; it

did not prioritize by itself thematic areas and it was open to include NGOs as assistance beneficiaries.

Additionally, in supporting country level activities, UNFPA adopted three main principles: first, respect to sovereign right of countries to determine its own population policies; second, promotion of national self-reliance and third, priority attention to the needs of disadvantaged groups (Salas,1979. p. 252).

During its beginning years, in 1970 UNFPA approved population country programs to Pakistan, Mauritius and Egypt; in 1971, programs were approved to India, Iran, Thailand, and Chile. In 1972, country programs were approved to Indonesia and Philippines. Besides, individual population projects were also approved to other countries, prior to the prerequisite of having an approved official country program (Johnson, 1994).

In 2020, 120 countries were implementing UNFPA supported population programs (UNFPA, 2021a, p. 9). Moreover, through multi-country projects, 14 countries and territories were supported in Asia Pacific²⁴ and 23 countries territories in the Caribbean²⁵, in the framework of regional interventions (Table 3.1).

²⁴ The list includes Cook Islands; Fiji; Kiribati; Marshall Islands; Federated States of Micronesia; Nauru; Niue; Palau; Samoa; Solomon Islands; Tokelau; Tonga; Tuvalu; and Vanuatu.

²⁵ The list includes Anguilla, Antigua and Barbuda, Aruba; Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Curacao, Dominica, Grenada, Guyana, Jamaica, Montserrat, Netherlands Antilles, St. Lucia, St. Kitts and Nevis, Saint Maarten (Dutch part), Saint Vincent and the Grenadines, Suriname, Turks and Caicos, and Trinidad and Tobago

Table 3.1*Number of assisted countries and expenses by region in millions of US\$*

Geographical region	Number of countries	Core resources	Non-core resources	Institutional budget	TOTAL
East and Southern Africa	22	55.1	165.2	21.2	241.5
West and Central Africa	23	49	137.5	19.8	206.3
Arab States	15	27.9	176.6	13.1	217.6
Asia and the Pacific	23	56.4	121.6	19.9	197.9
Latin America and the Caribbean	20	26.3	36.9	13.7	76.9
Eastern Europe and Central Asia	17	16.1	43.6	7.4	67.1
Global and regional interventions		18.4	-	-	18.4
Global activities		-	155.8	91.6	247.4
TOTAL		249.2	837.2	186.7	1,273.1

Source: (UNFPA, 2021a, p. 9)

Contraceptive commodities. Contraceptive commodities supply has become a critical factor to ensure the successful implementation of comprehensive reproductive health programs. Since 2007 UNFPA is managing a multi-lateral and multi-donor Supplies Partnership through which it is supporting 48 countries to strengthen their health systems. (UNFPA, 2021b, p.5). Recipient countries are selected from those having high rates of maternal mortality and unmet need for family planning.

During 2021 the Contraceptive supplies Partnership delivered an ample supply of commodities as it can be observed from Table 3.2

Table 3.2

Contraception provided by UNFPA worldwide (Year 2021)

Contraceptive	Quantities
Male condoms (Units)	725,643,280
Female condoms (Units)	5,556,162
Oral contraceptives (Monthly cycles)	80,089,103
Doses of injectable contraceptives	54,702,365
Contraceptive implants (Units)	11,084,230
Intrauterine devices (IUD) Units	2,606,795
Emergency contraceptives (Cycles)	2,304,592

Source: (UNFPA, 2021b, p.5).

Support to Economic Regional Commissions.

Economic Commissions for Latin America and the Caribbean and the Commission for Asia implemented population activities since 1955 and 1967 respectively. Later in 1975 the Africa and the European Commission implemented population activities with a more limited scope (Johnson, 1987 pp. 44-45). Since its beginning in 1969, UNFPA has cooperated with these Commissions in order to strengthen their staffing capacities and the expansion of training and research. Further, information diffusion to member states has been a core support area. As a result, countries had more and better higher-level specialists to support the planning and implementation of national activities in census matters, vital statistics, socio-demographic studies.

Regional Commissions were very active in reinforcing the capacity of national universities for the training of professional demographers. With UNFPA support, Regional

Commissions also played a leading role in the evaluation and follow up of mandates from the United Nations General Assembly, ECOSOC, and the World Conferences.

Support to Specialized Agencies.

One of UNFPA's purposes was to support relevant United Nations Agencies in extending their capabilities, within the framework of their respective mandates, in order to provide efficient and effective assistance to member states in planning, programming, and implementing population projects (Salas,1979, p. 9).

It is important to point out that at the country level several agencies were entrusted with the technical assistance for those UNFPA funded projects.

The International Labor Organization (ILO) provided technical support to UNFPA supported projects aimed to strengthening institutional capacities for population policy making. These policies, to be formulated within the framework of national development programs, had the objective of i) assessing the situation of each of the population variables; ii) formulating socio-economic and institutional measures to modify the course of population variables that were considered inadequate; iii) strengthening those variables that were considered positive as per national development.

World Health Organization (WHO) provided technical support to UNFPA supported projects aimed to strengthening national health systems in order to offer quality family planning services, including modern contraceptive methods. UNFPA, and WHO and WHO regional offices also supported the training of medical and paramedical personnel, and the development of counselling programs to ensure free consent and free choice.

UNESCO provided technical support to UNFPA supported projects aimed to strengthening both national education systems and non-formal education programs, to introduce, within the school curricula, population education, sex education and family life education. The purpose of these innovations was to promote voluntary, free, and informed adoption of family planning, in adult life.

UNFPA supported FAO, ILO and WHO for the reinforcement of their institutional capacities to provide technical support to countries to expand non formal education programs to generate socially responsible behaviors regarding family size. The added value of millions of free decisions by individuals and couples would be in harmony with the eventual national interest to reduce fertility and population growth and contributing to ecological balance.

From its inception UNFPA's mandate foresees the consideration of the status of women as a core programmatic issue. Consequently, UNFPA contributed with UNESCO, ILO and FAO in strengthening their capacities to promote gender equity, both in school-based education and in adult out of school programs.

Equity and gender equality are human rights, but at the same time gender inequality affects millions of women since it entangles their access to educational programs and family planning services.

Governmental Population Conferences.

As already mentioned during the two first decades of the cold war, political polarization also embraced the population field. As a result, UNFPA encountered little interest, and in

some cases outright opposition, to the formulation of population programs, including policy design, and the development of educational and family planning activities.

At the national level, countries with a 'leftist' orientation insisted that poverty and underdevelopment were not exacerbated by the rapid population growth. For them, population growth was a consequence of poverty and not one of its causes, which was Marx's position.

In developing countries, intellectual and political parties warned of the danger that too much emphasis on population issues could detract governments from implementing other development measures such as social services and infrastructure strengthening.

The Vatican also came into the picture, when in 1968 the Encyclical *Humanae Vitae* drastically limited the freedom of couples to select their preferred contraceptive method. In countries under Catholic influence, the encyclical precepts meant to influence not only couple's conduct, but also public policy. In many countries, policy makers preferred to avoid positions that could have a negative impact on governance.

In the second part of the 1960s and at the beginning of the 1970s, thanks to relevant ideological progress in the international front, within the UN it became clear that it was essential to introduce actions of greater impact that would allow countries to advance on a political and programmatic consensus. To this end in 1974, 1984 and 1994 the UN convened government international conferences on population and development with the finality of advancing in achieving worldwide agreements in those controversial topics

and the engagement of countries regard the formulation and implementation of national plans of action.

The First Governmental International Conference. In 1970, ECOSOC (1970a) requested the UN General Assembly to convene the celebration of the first governmental International Conference on Population and Development, to be celebrated in 1974. The International Conference on Population foresaw a series of preparatory regional meetings and the elaboration of clarifying technical papers. The Conference took place in Bucharest, in August 1974

At the same time ECOSOC (1970b) recommended that the UN General Assembly designate 1974 as “World Population Year” with the following objectives:

- i. Improve knowledge about the demographic situation and population trends.
- ii. Improve awareness of population problems and their implications.
- iii. Underline the importance of policies in the field of population and development.
- iv. Expand international cooperation in the population field.
- v. Supply increased technical assistance to countries needing and desiring it.

Bucharest, a Political Achievement. The Bucharest Conference (10-30 August 1974) had the official participation of 136 States. The debates were intense, and as expected, they started from contrasting political and ideological views.

Several countries, mainly from the URSS and Latin America, highlighted the dangers of an emphasis on demographic aspects and instead stressed the importance of accelerating the achievement of a new international economic order, under the argument that the best contraceptive is economic and social development.

For the countries of the USSR fertility and therefore population growth would be automatically reduced because of improvements in the standard of living, which were guaranteed in a communist state. More Developed Countries argued that it was very difficult to guarantee significant improvements in the quality of life, in the presence of high fertility and accelerated population growth rates (Johnson, 1994, p. 118).

The Vatican made clear its opposition to modern contraceptive methods; the Vatican Delegate indicated that the contents of the draft Bucharest Declaration referring to family planning were not acceptable, because they opened the door to abortion (Johnson, 1994, p. 116).

After intense debates, and long and complex negotiations, Bucharest achieved a relevant consensus in the field of population and development. The Plan of Action emanating from the Bucharest Conference, in its background, stated:

Where trends of population growth, distribution and structure are out of balance with social economic and environmental factors, they can at certain stages of development, create additional difficulties for the achievement of sustained development. Policies whose aim is to affect population trends must not be considered substitutes for socio-economic development policies but as being integrated with those policies in order to facilitate the solution of certain problems facing both developing and developed countries and to promote a more balanced and rational development". (United Nations, 1974, para 2, p.3)

The text of the former paragraph closed an ancient ideological debate that for years had created barriers to universal understanding, in an aspect of singular importance for the entire planet. The main Bucharest achievement is the universal political consensus on the existence and seriousness of population problems. Furthermore, the Bucharest

Population Plan of Action (PoA) declares that concerted international action to resolve the problem was legitimate, within the framework of respect for the sovereignty of states and the strictest compliance with human rights (United Nations, 1974).

In addition, the adoption by consensus of the Conference's PoA is another characteristic that strengthened its validity. The PoA had the support of all the delegations attending, except the Holy See, which expressed reservations about the demographic emphasis, and the approaches related to the family and the prevention of births (UN, 1974).

More specifically in the field of family planning, the Plan of Action, in its declaratory chapter states that

All couples and individuals have the right to decide freely and responsibly on the number and spacing of their children and the information, education and means to achieve this; the responsibility of couples and individuals in the exercise of this right takes into account the needs of their children already born and those who will be born in the future, and their responsibilities towards the community (United Nations, 1974 para 7.3).

The former paragraph is of singular importance since beyond couples it also considers individuals as subjects of the right to family planning. Also, it considers that this right will be effective only when it is accompanied by information, education, and services. This issue, implicitly, opens a responsibility for the State. Moreover, the paragraph extends the concept of responsible procreation to the interests of not only the family group, but also to the interests of the community. This principle contains an important aspect of social solidarity, usually absent in most family decisions.

After Bucharest, there was a significant increase in the number of countries that formulated policies and implemented programs that included data collection, policy formulation, population education and family planning.²⁶ It is worth mentioning that during the Conference China and Cuba signed agreements with UNFPA to implement their own population programs.

As reported in previous paragraphs, international funding in support of national programs increased, as well as national budgets devoted to this field. Information on the demographic situation and its trends improved; population size, fertility, and maternal mortality reduced their growth rates. It was not the same with adolescent fertility rates that remained high in many countries.

In countries with catholic tradition in Latin America, programs and projects were adopted without major constraints, except the beginning of the 1990s when opposition to sex education and to modern contraception re-emerged in some countries.

Conference in Mexico City. In order to appraise the Implementation of the World Population Plan of Action, adopted by consensus at Bucharest, United Nations (1981) decided to hold the Second International Conference of governmental nature. Indeed, in 1984 a new conference was held in Mexico City.

²⁶ By 1965, only 12 countries had adopted population policies based on demographic grounds and only 1 had adopted family planning programs for health reasons. By 1975 Twenty-two countries had adopted population policies and Twenty-five countries had adopted family planning programs.

The second governmental conference reaffirmed the full validity of the principles and objectives of the Bucharest World Population Plan of Action and adopted a set of recommendations for the further Implementation of the Plan in the years ahead. It also confirmed the progress achieved in several countries of great strategic importance.

Mexico City: Ups and Downs. During the Conference most countries expressed a clear and bold support to the implementation of population policies, including family planning. China, for example, evidenced a 180-degree ideological change and announced the measures it was taking to reduce fertility; Brazil and Mexico exposed their achievements in terms of public policies, as did Bangladesh, India, Indonesia, and Pakistan. Many African countries reversed the rather passive positions they had in Bucharest, and several countries in Europe expressed their plans to increase their financial contributions. In this regard, the report of the Conference states the following:

The experience with population policies in recent years is encouraging. Mortality and morbidity rates have been lowered, although not to the desired extent. Family planning programmes have been successful in reducing fertility at relatively low cost. Countries which consider that their population growth rate hinders their national development plans should adopt appropriate population policies and programmes. Timely action could avoid the accentuation of problems such as over population, unemployment, food shortages, and environmental degradation (United Nations, 1984)

In Mexico, after recognizing the important advances reached by many countries, the Conference also recognized the challenges to be addressed. United Nations (1984) of the report indicates that:

Although considerable progress has been made since Bucharest, millions of people still lack access to safe and effective family planning methods. By the year 2000 some 1.6 billion women will be of childbearing age, 1.3 billion of them in developing countries. Major efforts must be made now to ensure that all couples and individuals can exercise their basic human right to decide freely, responsibly and without coercion, the number and spacing of their children and to have the information, education and means to do so (para. 13)

At Bucharest, the international community agreed on the gravity and magnitude of the population problems and their close interrelationship with economic and social development. The message of Mexico City is to forge ahead with effective implementation of the World Population Plan of Action aimed at improving standards of living and quality of life for all peoples of this planet in promotion of their common destiny in peace and security.

However, the surprise came from the United States delegation²⁷. Contrary to the US traditional support position, this delegation indicated that population growth was a neutral factor, which could go from good to bad, depending on other factors associated with social conditions and the availability of employment (Johnson, 1994, p. 166).

The US delegation also announced that the government would not assist programs that supported or promoted abortion. The Head of the delegation announced that his government's policy would not grant contributions to finance or promote abortion. Furthermore, his government would no longer contribute to non-governmental organizations which perform or promote abortion as a method of family planning in other

²⁷ This was the official policy of the US government during President Ronald Reagan (1981-1989).

nations. He added that no part of his government's contributions to multilateral funding organizations could be used for abortion or coercive family planning programs (UN, 1985, pp.537-541)

The official position of the US delegation transformed the official financing of this country to population matters during successive republican administrations. For example, the contributions to UNFPA have been suspended during all Republican administrations since Donald Reagan's, under the false argument that UNFPA provides support to abortion-related activities.

Although the United Nations organisms have never supported or promoted abortion as a method of family planning, the Mexico City Declaration, framed the United Nations role in this field. Concretely, the Conference Declaration urged Governments:

To appropriate steps to help women avoid abortion, which in no case should be promoted as a method of family planning, and whenever possible, provide for the humane treatment and counselling of women who have had recourse to abortion" (United Nations, 1984, recommendation 18 (e) p. 21).

Concerning the formulation of family planning legislation and policies the Conference recommended that incentives and disincentives shouldn't be neither coercive nor discriminatory, observant of human rights and changing individual and cultural values (United Nations, 1984, recommendation 31, p. 24).

Despite recommendations for action numbers 3 and 31 respond to the Holly See lines, this was the only delegation that did not adhere to the consensus of Mexico, arguing that

the Plan of Action recommended support for family planning services for adolescents and the attention to family issues was insufficient.

UNFPAs labor was recognized as a central actor for the further implementation of national programs. In fact, the Conference urged the Secretary General that:

In view of the leading role of the United Nations Population Fund, the Conference urges that the Fund should be strengthened further, to ensure the more effective delivery of population assistance, taking into account the growing needs in this field (United Nations, 1984, Recommendation 83 p. 39).

The Action Plan was approved by Consensus, largely thanks to the support of the Group of 77²⁸ which distanced themselves from the position of the United States and the Holy See.

Conference in Cairo. United Nations (1989) decided to convene a third International Conference on Population and Development (ICPD) to be held in 1994, in Cairo City, to mark another milestone in the advancement of population programs. At that point, national programs had undergone enormous development in countries of all continents, academia had made very significant progress in sociodemographic studies and considerable synergies had been achieved with other UN International Conferences on women, environment, social development, and HIV/AIDS issues.

The ICPD/Cairo was an opportunity for the development of a new conceptual framework based on the experiences gained by countries after 20 years of implementation of the

²⁸ The Group of 77 (G77) was a coalition of 134 developing countries, founded on 15 June 1964 by 77 non-aligned nations. The objective of the Group was to enhance their joint negotiating capacity in the United Nations.

two previous population conferences. The framework had three components: First, the reaffirmation of the human being as the center of development and therefore as the center of population programs. Second, the inclusion of reproductive health as a basic human right. Third, the incorporation of family planning into a broader reproductive health setting.

The preparatory work of the ICPD/Cairo was intense and extensive including governments, other UN entities, experts, NGOs, and specialized institutions. It included three sessions of the Preparatory Committee in New York (March 1991, May 1993, April 1994); five regional intergovernmental conferences organized by the five Regional Economic Commissions in Denpasar (August 1992); Dakar (December 1992); Geneva (March 1993); Amman (April 1993); Mexico City (29 May 1993); (Singh, J, 1998 pp. 22-28).

Six expert group meetings were organized on topics requiring special attention. Population, environment and development issues were examined in New York (20-24 January 1992); population policies and programs in Cairo (12-16 April 1992); population and women in Gaborone (22-26 June 1992); family planning health and family well-being, in Bangalore (26-29 October 1992); population growth and demographic structure in Paris (November 1992); and population, distribution and migration (Santa Cruz, January 1993) (Singh, J, 1998 pp. 22-28).

Seven round tables were organized, bringing together experts and program managers, in women's perspectives on family planning and reproductive rights in Ottawa (August 1993); population programs and HIV/AIDS in Berlin (September 1993); population and development in Bangkok (November 1993); Population and environment in Geneva

(November 1993); population and communication in Vienna (December 1993); Population and food in Washington DC February 1994); and ethics and population in New York (March 1994) (Singh, J, 1998 pp. 22-28).

Cairo, Difficult Transit to New Paradigms. Contrary to the positive expectations created by the exhaustive regional and country preparatory work, when those national and regional preparatory activities for the ICPD/Cairo took a decisive momentum, the Catholic Church, allied with like-minded groups, decided to intervene very actively in preparatory national activities and also in regional events that took place during 1993 and 1994.

The purpose of the anti-Cairo alliance was 1) to prevent the fictional attempt of rich countries, international agencies, and women's groups to impose abortion as a family planning method and 2) to deactivate what they claimed was an international strategy to introduce a gender agenda aimed at promoting homosexuality, same-sex marriage, and thus achieving the weakening of the traditional family. (Singh, J, 1998 pp. 54-58)

To achieve its goals, the opposition used a very effective direct advocacy strategy. Papal Nuncios, members of the Episcopal Conference and directors of related NGOs visited presidents, ministers, parliamentarians, political leaders, and media executives, to impudently present their arguments. Several government authorities, due to unfamiliarity about the background and original documentation, shared many of those allegations. In several countries, the imminence of presidential re-elections and the delicate balances of

governance, opened political spaces to the alliance for controlling official position of several country delegations to ICPD.²⁹

Furthermore, members of the alliance took over the media. In countries of Central America, for example, newspapers with a large national circulation published interviews of their most notorious leaders but closed their spaces to ICPD advocates.

The most successful chapter of the alliance anti ICPD/Cairo was the direct involvement of its members as participants of governmental delegations in regional and global preparatory meetings and in the Conference itself. Once they became members of the official delegations, they had the right to voice and vote and to forge official alliances with other governments. One case in point was the alliance with several countries of strong Islamic tradition, probably based on a common cultural issue: reproductive health and in particular family planning and gender equity, represent formidable challenges to patriarchal supremacies.

Under a high level of expectations, the ICPD took place in Cairo, from 5 to 13 September 1994. This was the largest United Nations Conference ever, attended by official representatives of 183 countries, 249 speakers, representatives of most United Nations Organisms and 1,500 representatives of non governmental organizations (NGOs). More than 4,000 journalists traveled to Cairo to cover the Conference, a record number for any United Nations Conference. The opening ceremony was addressed by the Secretary

²⁹ In Latin America this was the case of Argentina, Perú, Ecuador, Venezuela, Costa Rica, Nicaragua, Honduras, El Salvador, Guatemala and Dominican Republic.

General, the President of Egypt, the Prime Ministers of Norway, Pakistan and Swaziland and the Vice President of the United States.

After intense deliberations, reflecting concerns already expressed by several countries during the preparatory period, a Program of Action (PoA) was approved by acclaim, for the next 20 years, (United Nations, 1994) representing a new consensus far beyond the agreements obtained in Bucharest (1974) and Mexico (United Nations, 1994).³⁰

The Report of the Conference (United Nations, 1995, Annex III) contains the closing statement by Dr. Nafis Sadik, Secretary-General of the International Conference and UNFPA Executive Director at the time. She pointed out several issues that made this Conference a political breakthrough:

This has been an outstandingly successful Conference. President Mubarak told us that it should be a bridge between North and South, East and West; and you have made it so. It was attended by 183 countries and addressed by 249 speakers. Altogether, 10,757 people took part. Ten days ago, Vice-President Gore called this one of the most important conferences ever held, Prime Minister Brundtland advised the Conference: "We are gathered here to answer a moral call to action. Prime Minister Benazir Bhutto told us that true leaders do not permit a narrow-minded minority to dictate an agenda of backwardness; at this Conference you have shown true leadership. You have discussed the issues to the point of exhaustion; but you have kept your purpose in sight.

³⁰ During the deliberations the Vatican and a few countries expressed reservation on several chapters on issues related to reproductive health and abortion in particular, the family concept, gender, and quantitative demographic targets. (UN, 1994 pp. 89-93) Nevertheless, those reservation did not shadow the approved Population Plan of Action.

You have learned how important and deeply felt are the differences among our cultures, backgrounds and beliefs. You have learned to respect those differences, and yet to find among them the values we hold in common (p. 185).

Mr. Amre Moussa, Minister of Foreign Affairs of Egypt in his closing statement also traced some salient achievements of the Conference (United Nations, 1995):

This Conference was convened in an atmosphere occasionally marked by tension and sharp controversy and in most cases by widely diverging views, as well as a plurality of perspectives with regard to the document at hand and how to introduce, address and resolve the issues it raises. It is our conviction that the intensive discussions on population and development, notwithstanding the controversies, were really about intellectual and cultural issues stemming from divergent cultures and a multiplicity of lifestyles whose genesis and evolution have taken varying forms.

I am certain that we all agree that since the end of the cold war, the international community has been seized by profound soul-searching on all issues related to man's existence: how to build a better future and attain a higher degree of progress, and how to formulate a broader basis for structuring our lives in the years and decades to come.

The international community is taking one step after another to formulate a new and comprehensive methodology aimed at achieving human development, particularly in its social aspect, within a cohesive framework of international action in which all peoples and societies take part in shaping their destiny. It is worth noting that this Conference provided an opportune occasion to launch a dialogue between cultures and strengthen the encounter of civilizations. This is the first time since the end of the cold war, indeed, since the end of the Second World War, that issues closely intertwined with matters deeply rooted in our

values, religious principles, beliefs and worldly practices were tackled concurrently (pp. 188-189)

On 19 December, the General Assembly (1994) endorsed the Report of the ICPD/Cairo, calling the governments at the highest political level, to commit themselves with its goals and objectives, and to make available the resources needed. .

Although the ICPD/Cairo PoA was approved for the period 1994 to 2014 it has continued to serve as a framework for national and international action until today. In 2004 a global assessment of its implementation reconfirmed its validity and allowed the identification of areas in which new efforts should be executed. The most relevant area for new action was the need to integrate the PoA in the framework of the UN Millennium Development Goals which has been reinforced since then.

UNFPA - Overall Impact

Over five decades, in a context of political, cultural, and ideological complexities, UNFPA has been able to overcome those complexities, becoming the leading international agency in population matters. It has been able to reach conceptual agreements, mobilize financial resources, support other United Nations and NGO bodies, and to enable the strengthening of national capacities to formulate and implement population policies and programs.

Since its inception in 1997/1969 UNFPA has been able to support the advancement of sexual and reproductive health, the protection of reproductive rights and the slowdown of population growth. Contraceptive commodities have been distributed to poor

populations, countries have been supported in order to improve their reproductive health commodity security systems, experts have been trained for the formulation of population policies, to conduct demographic censuses and to improve their basic vital statistics among other subjects.

UNFPA has been crucial in achieving international agreements and the formulation and implementation of population policies that have helped the world population to halve its rapid growth. But very importantly, it has also been able to strengthen the efforts of the international community to achieve the universal aspiration for cutting rates of infant, child and maternal mortality and above all, to improve educational opportunities for women and children.

These advances are evidenced in the text of the UNFPA Annual Report (2021 c, p. 4), as shown in Table 3.3 which includes achievements in core mandate areas but also in other strategic issues. On the other hand, the table might illustrate that the lack of a logical framework matrix that could support program planning, do not allow the discrimination of core objectives and working strategies.

Table 3.3*Delivering on the transformative results*

12.7 million unintended pregnancies were prevented	39,000 maternal deaths were averted	1.9 million survivors of female genital mutilation received essential services
5 million unsafe abortions were prevented	4.9 million marginalized girls were reached by life-skills programmes	2.3 million survivors of gender based violence received essential services 82,000 new HIV infections were averted
31,000 gender-based violence survivors with disabilities received essential services	1.5 million safe deliveries assisted in 29 humanitarian crisis- affected countries	3 million girls received UNFPA- supported prevention or protection services and care related to child, early and forced marriage

Source: (UNFPA Annual Report, 2021 p. 4).

Similarly, thanks to UNFPA support, other UN bodies and national and international entities, including NGOs, have strengthened their programs in population related issues like gender, AIDS prevention, demographic research and data production which opens the opportunity to UNFPA to focus its thematic mandate and the attention to those countries that still are distant from the achievement of the ICPD PoA objectives.

Chapter 4 – Discussion

During the 50-year period between 1970 and 2020 progress has been achieved, at different paces, in most world countries, in slowing down the rate of population growth thanks to fertility reduction. Although the world population is still growing, the pace of growth is slowing down.

While it is not possible to assess the exact contribution that could be attributed to UNFPA regarding the slowing down of the population growth rate, a revision of its strategies and implementation of major activities, clearly indicates that this Organization has had an important role in:

- a) Channeling financial resources to and within individual countries.
- b) Strengthening national institutional capacities in population related matters.
- c) Reconciling on major ideological and political controversies.

Through these strategies UNFPA has been the catalytic factor in shaping new demographic trends for individual countries, geographical regions, and the whole world.

Mobilization of Financial Resources.

From an initial trust fund of U.S. \$ 0,1 million in 1967, UNFPA has been able to mobilize U.S. \$ 1,316.9 million in 2020, in a combination of voluntary regular and non-core resources (UNFPA Annual Report 2021, Resources and Expenses, p.6). Thanks to this achievement UNFPA has been able to develop an ample program in the frame of its mandate.

Among its donor UNFPA has obtained contributions from donor countries, from recipient countries, from multilateral entities, and non-governmental organizations. In 2021 the number of contributing countries to core resources was 105. Table 4.1 contains the top 20 donors to core resources.

Table 4.1

Top 20 donors to UNFPA, Core resources in 2021.

Donor	US\$	Donor	US\$
1. Sweden	64,105,586	11. Great Britain and Northern Ireland	10,936,994
2. Norway	54,271,357	12. Belgium	10,701,546
3. Germany	47,769,765	13. Australia	6,564,651
4. Netherlands	40,490,798	14. New Zealand	4,297,994
5. Finland	39,379,475	15. Ireland	4,103,165
6. Denmark	37,134,841	16. Luxembourg	3,631,961
7. United States of America	30,800,000	17. Italy	3,026,634
8. Switzerland	17,410,229	18. Pakistan	1,677,108
9. Japan	16,000,000	19. China	1,480,000
10. Canada	12,206,573	20. France	1,232,311

Source: UNFPA Annual Report 2021, P. 6.

The top 20 donors to non-core resources include international organizations, private sources, and countries that besides their contribution to regular resources, donate earmarked funds for specific projects. (Table 4.2)

Table 4.2*Top 20 donors to UNFPA, Non-Core resources in 2021.*

Donor	US\$	Donor	US\$
1. UN & other transfers	247,443,828	11. Australia	34,287,105
2. Canada	73,239,960	12. Bill & Melinda Gates	26,057,558
3. United States of America	62,533,445	13. France	24,764,604
4. Sweden	61,559,737	14. Anonymous	20,000,000
5. European Commission	58,936,882	15. Japan	19,507,127
6. Norway	54,398,825	16. Great Britain	17,828,945
7. Netherlands	51,846,851	17. D. R of the Congo	17,589,919
8. Denmark	50,244,072	18. Switzerland	16,270,711
9. Bangladesh	38,800,000	19. W. African Health Org.	15,980,000
10. Korea, Republic of	36,695,868	20. Finland	14,614,447

Source: (UNFPA Annual Report 2021 Resources and expenses, Pag. 6).

Major Controversies Settlement

The Bucharest International Conference in Population and Development (United Nations, 1974) reached a consensus regarding the consideration of population policies as a central element of socio-economic policies. The contention that population policies were an attempt to deviate from the discussion about the real causes of poverty, vanished from public debates. The political leftist groups did not insist, from there on, in opposing to population policies, even more, when during the Conference, China and Cuba signed with UNFPA technical assistance agreements to implement family planning programs.

Regarding reproductive health issues, abortion has been legalized in several countries, but still, it continues to be a major controversial issue. Some countries have approved

laws legalizing abortion, some others have approved it under certain restrictions, but others have banned the voluntary interruption of pregnancy. In a few countries induced abortion has been placed under the category.

Regarding the United Nations position on abortion, the official policy formulated in Bucharest and reaffirmed in Mexico and El Cairo (United Nations, 1994 par 8.25, p. 44) recognizes that:

- i) The legal condition of abortion is a national issue in which the UN remains neutral.
- ii) Abortion should not be considered a family planning method.
- iii) Nonetheless the UN should support countries to guarantee that every woman, every couple, has full access to modern family planning methods so to avoid the need for an abortion.
- iv) The UN should also support countries to guarantee that reproductive health services be provided to every woman that had an abortion under unsafe conditions, in order to prevent health risks and eventual deaths.

On family planning matters, the official position of the Catholic Church, prohibiting the utilization of modern contraceptive methods (Paul VI., 1968) and (John Paul II, 1981, para 34) have not been endorsed by the international community that reaffirmed family planning as a human right (United Nations, 1994, objective 7.14). Neither the Catholic Church official position has been accepted as a ruling precept by its parishioners.

It is the case when the substantial reduction in total fertility rates in those countries with a high proportion of Catholics is examined, the disapproval to contraception by the Catholic hierarchy and other socially conservative organizations is not currently echoed by Catholic women.

Table 4.3 lists the 10 countries (population higher than 1 million people) registering the highest percentage of Roman Catholic population (“list of Catholic Church by Country”, 2022). The negative correlation between proportion of Catholics and the total fertility rate, in those countries, except two, indicates that utilization of modern methods of family planning is high in countries with very high proportion of Catholics.

Table 4.3

Total fertility rate in Roman Catholic countries

Country	% Catholics 2018	Total fertility rate 2020
<u>Timor Leste</u>	96.90%	3.25
<u>Paraguay</u>	89.00%	2.50
<u>Croatia</u>	86.30%	1.46
<u>Poland</u>	85.80%	1.45
<u>Portugal</u>	84.50%	1.39
<u>Italy</u>	83.00%	1.26
<u>Philippines</u>	81.40%	2.78
<u>Equatorial Guinea</u>	80.70%	4.35
<u>Mexico</u>	80.00%	1.91
<u>Ireland</u>	78.30%	1.77

Sources: Total Fertility Rates from (United Nations, 2022); Percentage of Catholics taken from (“List Catholic Church by Countries,” 2022)

Regarding the utilization of modern contraception, Jones & Dreweke (2011, p. 4-5) reveal that most American women (including Catholics) have had sex by their early 20s, and virtually all of them have used contraceptives other than natural family planning.

Strengthening National Institutional Capacities

UNFPA in 2021 informs that 118 countries and 38 small islands and territories had comprehensive population programs (UNFPA Annual Report 2021, p.10-15), including

data gathering and processing, formulation of laws and policies formulated, development of protocols, services expansion, among others. At the same time those countries avail themselves of high-level trained government staff; NGOs were empowered to implement advocacy, impulse education and communication plans and deliver health services. Besides those countries have an enabling political environment, and national capacities for the identification of population needs, formulate population policies, and provide comprehensive reproductive health services, including family planning.

Towards Population Growth Stabilization

According to calculations by the United Nations (2022), in 1950 the world population size was 2,499 million people. In 1970 that figure rose to 3,695 million. By mid-2020 the world population reached 7,840 million. Therefore, in fifty years (1970-2020) the world population size increased by 4,145 million. This large increment, during a period in which considerable efforts by United Nations and by international NGOs were implemented, might disappoint some observers. Nevertheless, two reasons might indicate that on the contrary, this was the initial phase of a successful effort.

The first explicatory fact relates to demographic inertia in the population dynamics. Normally, the impact of fertility reduction on populations size is very low for the first 20 years, due to the high proportion of youth encountered during periods of high fertility. In fact, during that fifty-year period (1970-2020), fertility had a considerable reduction, but also more youth entered into reproductive ages.

A second factor that helps to visualize the impact of fertility reduction on population size is the contrast between the registered size of the population versus demographic

projection under different growth scenarios. For this exercise, using the annual population duplication time as a constant for the period 1970-2020, the resulting population size would have been 10,340 million in 2020, this is 2,500 million additional people as compared with the estimated figure for that year³¹.

Another variant that we might use for exploratory purposes is the high fertility variance, normally used for projections by UN. This variant supposes a spontaneous reduction of fertility during fifty years-period (1970 – 2020), resulting from urbanization and the modernization of some society sectors, without special interventions of institutional actors. For this scenario the population by mid-2020 would have been 8,840 million (United Nations, 2022), that is to say 1,000 million additional people compared with the official estimated population of 7,840 million in 2020.

Therefore, it might be concluded that what seems a meager demographic achievement, is a significant advance. Furthermore, we will also see that during this period (1970 – 2020) the conditions for the stability of the world population were created.

In fact, the accumulated changes in fertility during the 50 years after 1970 and the projected future trends, the projected population by the year 2050 will reach 9,700 million people. Around 2080 the world's population is projected to reach a peak of around 10.4 billion people and would remain at that level until the year 2100. (United Nations, 2022)

³¹ Calculations by the author based on the annual population duplication time published by the United Nations (2022).

Population projections provide a probable vision of the demographic future. They illustrate what the course of the population would be under different hypothetical fertility hypothesis and mortality scenarios. The projections for the years 2050 and 2100 in the former paragraph assume a continuous success following the year 2020 of those efforts to achieve universal access to reproductive health programs, including family planning and modern contraception.

Different assumptions would provide different projections. Assuming that since 2020 there is no change in fertility and mortality, the world population would reach 12,506 million people in 2050 and 19,156 million by 2100. Projections like those were a great concern to some policy makers and demographers during the fifties and the sixties, the last century (Table 4.4)

Table 4.4

Population projections under two different scenarios

Scenarios	Advances in Reproductive Health	Population projected (Millions)	
		Year 2050	Year 2100
Scenario 1	Relevant Advances in Reproductive Health (*)	9,700	10,400
Scenario 2	No advances in reproductive health beyond 2020	12,506	19,156
	Additional population under conditions of no further advances in Reproductive Health beyond 2020	3,806	8,756

Source: (United Nations, 2022)

(*) including family planning and modern contraception beyond the year 2020.

Improvement of other Demographic Variables

The immediate explanation for the smoothing of the world population numbers is the dramatic reduction of the rate of population growth. During the 50 year-period starting in 1970 the world population growth rate experienced a significant reduction of 45% - from 2.05 in 1970 to 0.92 percent in 2020. (Table 4.5, column 3)

Table 4.5

Evolution of selected World demographic indicators 1950 – 2020

Year (1)	Total Population, as of 1 July (thousands) (2)	Population Growth Rate (percentage) (3)	Population Annual Doubling Time (years) (4)	Crude Rate (births per 1,000 population) (5)	Birth Rate (6)	Total Fertility Rate (live births per woman) (6)
1950	2.499.322	1.73	40.0	36.8		4.86
1960	3.019.233	1.57	44.3	33.9		4.70
1970	3 695 390	2.05	33.9	33.6		4.83
1980	4 444 008	1.79	38.8	28.5		3.75
1990	5 316 176	1.75	39.7	26.8		3.31
2000	6 148 899	1.33	52.0	21.8		2.73
2010	6 985 603	1.25	55.5	20.3		2.59
2020	7 840 953	0.92	75.5	17.2		2.35

Source: United Nations, 2022).

The reduction of the population growth rate extended the population doubling-time periods. In 1970 the population would double its size in 33.9 years. The population

doubling- time in 2020 was 75.5 years. Those figures represent a relevant advance (Table 4.5, column 4).

Other statistics that indicate the positive demographic changes that occurred after 1970 is the Crude Birth Rate (the number of births each year per thousand population). In 1970 the number of children born per 1000 people was 33.6. Fifty years later, in 1920, the number of children born per 1000 people descended to 17.2 (Table 4.5, column 5). This is a significant change, since fertility reduction is very difficult to achieve because it depends on several cultural, social, economic, and technical variables.

An additional statistic that also illustrate the demographic advances after 1970 is the total fertility rate, which indicates the number of live births during the life of a woman. In 1970 women had 4.83 children but in 2020 that figure descended to 2.35 (Table 4.5, column 6)

The total fertility rate illustrates how far a population is from the condition of stability³² - when demographic growth is zero- which is reached after several years in which total fertility rate is 2.1. After 2020 the world population is approaching its demographic stability which according to the United Nations projections will be reached by 2050, under the continuity condition of current tendencies but also if existing geographical and country disparities are alleviated.

It is important to remark that the world population has reduced its growth speed despite relevant advances in life expectancy. A person borne in 1970 was expected to live 56.1 years while a person borne in 2020 is expected to live 72 years (Table 4.6). Similarly, at world level, the infant mortality rate has attained a robust improvement: in 1970 in average

³² Demographers estimate that total fertility rate at 2.1 is level of population replacement. Two children replace the parents and the 0.1 left, accounts for eventual infant mortality rate and couples without children.

there were 78.5 infant deaths per 1,000 live births while in 2020 only 28.3 children died per 1,000 live births (Table 4.6).

Table 4.6

Evolution of selected World demographic indicators 1950 - 2020

Year	Life Expectancy at Birth (*)	Infant Mortality Rate (**)
1950	46.5	143.4
1960	47.7	135.1
1970	56.1	98.5
1980	60.6	80.4
1990	64.0	64.6
2000	66.5	53.3
2010	70.1	37.1
2020	72.0	28.3

Source: United Nations, World Population Prospects 2022

Notes: (*) Years, both sexes; (**) Infant deaths per 1,000 live births

Regional demographic evolution

The remarkable world growth rate reduction after 1970 is not a universal phenomenon. In fact, the evolution of population size has not been steady in different regions of the world (Table 4.7). In Europe and North America, the demographic increment has been low. By mid-1970 the number of people living in this conglomerate was 878 million people; fifty years later, by mid-2020, its population was 1,120 million, an increment of 242 million in fifty years.

In Europe and the United States, the rate of population growth in 1970 was low (0.77 percent) descending to only 0.06 percent in 2020. The total fertility rate descended from

2.33 children per woman in 1970, to 1.53 children per woman in 2020, which is below the replacement level.

Australia and New Zealand have very low population size but medium high population growth rate; in 1970 the region had 15.4 million people; in 2020 his number reached 30.7 million people. The rate of population growth has descended from 2.88 in 1970 to 1.01 in 2020. This change is basically due to the fertility fast drop. In 1970 the total fertility rate marked 2.6 live births, descending to only 1.05 per cent in 2020. The total fertility rate also illustrates the changes in the region's demographic dynamics. In 1970 this indicator registered 2.91 live children per woman descending to only 1.63, which is well below the replacement level.

Table 4.7
Regional demographic evolution

Region, subregion, country, or area	Year	Total Population (Thousands)	Population Growth Rate (%)	Crude Birth Rate (*)	Total Fertility Rate (**)
Europe and Northern America	1970	878 387	0.77	16.6	2.33
Europe and Northern America	2020	1.120 182	0.06	9.8	1.53
Australia/New Zealand	1970	15.419	2.88	20.8	2.91
Australia/New Zealand	2020	30.731	1.05	11.7	1.63
Latin America/ the Caribbean	1970	286.526	2.45	36.6	5.19
Latin America/ the Caribbean	2020	651.836	0.71	15.1	1.90
Eastern and South-Eastern Asia	1970	1.276.112	2.45	36.3	5.43
Eastern and South-Eastern Asia	2020	2.333.344	0.32	10.8	1.57
Central and Southern Asia	1970	781.336	2.30	40.5	5.84
Central and Southern Asia	2020	2.044.342	1.12	18.5	2.28
Northern Africa and Western Asia	1970	170.290	2.62	42.1	6.28
Northern Africa and Western Asia	2020	538.055	1.29	21.6	2.85
Sub-Saharan Africa	1970	283.260	2.66	47.5	6.74
Sub-Saharan Africa	2020	1.109.259	2.60	35.0	4.66

Source: United Nations, World Population Prospects 2022

Notes: (*) Births per 1,000 population; (**) Live births per woman

Latin America and the Caribbean totaled 286 million people by mid-1970. Fifty years later, in 2020, that number ascended to 651.8 million. The region multiplied its population 2.3 times. The population growth rate in 1970 was high at 2.45 percent. However, this rate descended very rapidly, registering only 0.71 percent in 2020. The total fertility rate also illustrates very well this achievement: in 1970 women had 5.19 live births, descending to 1.90 in 2020. Currently the total fertility rate is below the replacement level. Eastern and

South-Eastern Asia region³³ groups the first largest population among the UN subregional arrangement. By mid-1972 this subregion had 1,276 million people. Fifty years later, in 2020, the population increased more than 1.8 times, reaching 2,333 million.

In the Eastern and South-Eastern Asia region, during the 50-year period 1970-2020, the population growth rate achieved a strong fall when it evolved from 2.45 to 0.75 per cent. The weight of China explains, in part, the behavior of fertility in the geographical group since this country approved a population policy since the Bucharest International Population Conference in 1974, and furthermore, in 1980, the country implemented the “one single children policy” per family.

Moreover, the total fertility rate in the Eastern and South-Eastern Asia region descended from a high level in 1970 (5.43 per cent) to 1.57 per cent in 2020, which is below the population replacement level.

Central and Southern Asia³⁴ is the second highest populated subregion in the world. By mid-1970 this subregion had 781 million people. Fifty years later, in 2020, the population increased more than 2.6 times, reaching 2,044 million. The population growth rate achieved a significant fall during this 50-year period when it dropped from 2.30 to 1.12 per cent. The total fertility rate in this region was high in 1970 (5.84 live children per woman) descending to 2.28 per cent in 2020 which is still above the population replacement level.

³³ Includes, among other countries China, Japan, North Korea, South Korea, Thailand, Laos, Cambodia, Vietnam, Philippines, Indonesia.

³⁴ Includes, among other countries Turkmenistan, Uzbekistan, Afghanistan, Bangladesh, Pakistan, and India

The countries in Southern Asia adopted population policies early during the period after 1970. Fertility reduction from 1970 to the year 2000 was intense (from 5.84 to 3.45 live children per woman). From the year 2000 to 2020 fertility reduction has occurred but poverty and constraints to reproductive health services expansion have limited, to an extent, further advances.

In 1970, Northern Africa and Western Asia³⁵ registered 170.3 million people; by 2020 the population increased 3.2 times, totaling 538 million. In 1970 this subregion had a high population growth rate (2.62 percent); in 2020 this rate registered 50 percent reduction (1.29 percent). Nevertheless, it is important to observe that this reduction took its momentum only after the year 2000 when the population growth rate registered 1.95 percent.

In Northern Africa and Western Asia, the total fertility rate was very high in 1970 (6.28 live children per woman); in 2020 this indicator registered 2.85 live children per women which is still high and indicates that still there is a potential for population growth beyond 2050.

Sub-Saharan Africa³⁶ is the subregion that reveals less advances regarding the efforts towards population stabilization. In 1970 the subregion was inhabited by 283.3 million people; in 2020 this figure almost quadrupled its size to 1,109.2 million people. The

³⁵ Includes, among other countries Egypt, Algeria, Libya, Iraq, Iran and Turkey

³⁶ Includes, among other countries Angola, Cameroon, Ethiopia, Democratic Republic of Congo, Kenya, Nigeria, Tanzania, South Africa

population growth rate was high in 1970 (2.66 per cent) and it was still high in 2020 (2.60 percent).

In 1970, in the Sub-Saharan Africa, the total fertility rate was the world's highest at 6.7 live children per woman; in 2020 it was still the highest of all UN subregions at 4.66 live children per woman. This region is still far from the possibility of stabilizing its population.

In Sub-Saharan Africa poverty and social services insufficiencies, including education and health, are elements that restrict the possibility of providing access to comprehensive reproductive services. At the same time, their demographic characteristics are a challenging factor to development efforts. This Subregion requires special attention from the international community, including UNFPA, geared to provide the required support to national governments and the non-governmental organizations, to achieve the universal coverage of reproductive health, family planning included, in the context of gender equity, education for all and extreme poverty elimination.

Persistence of High Fertility Rates

With a fertility rate of 6.91 children per woman, Niger is the country with the highest fertility rate in the world, followed by Angola, Democratic Republic of Congo, Mali, Chad, Benin Uganda, South Sudan, Somalia, and Burundi having total fertility rates higher than 5.0 live children per women. (Table 4.8) All these countries are located in Sub-Saharan Africa.

The next ten high fertility countries, except Afghanistan, are also located in Sub-Saharan Africa with total fertility rates between 4.58 to 4.89 live birth children per woman.

Source: (United Nations, 2022)

Table 4.8*Twenty countries with the highest total fertility rates in 2020*

Rank	Country	2020 Population As of 1 July (Thousands)	Population Growth Rate (%)	Total Rate (Live births per woman)	Fertility Rate (Live births per woman)
1	Niger	12,342	3.72	6.91	
2	Somalia	16,537	3.20	6.42	
3	Chad	16,645	3.19	6.35	
4	D.R. of Congo	92,853	2.66	6.21	
5	Mali	21,224	3.18	6.04	
6	Burkina Faso	16,117	2.94	5.94	
7	Angola	33,428	3.28	5.37	
8	Nigeria	208,327	2.45	5.31	
9	Burundi	12,220	2.72	5.18	
10	Benin	12,643	2.79	5.05	
11	U.R of Tanzania	61,705	3.02	4.80	
Rank	Country	2020 Population As of 1 July (Thousands)	Population Growth Rate (%)	Total Rate (Live births per woman)	Fertility Rate (Live births per woman)
12	Afghanistan	38,972	3.32	4.75	
13	Mozambique	31,178	2.94	4.71	
14	Uganda	44,405	3.24	4.69	
15	Sudan	13,205	2.48	4.54	
16	Cameron	26,491	2.67	4.54	
17	Cote d'Ivoire	26,812	2.49	4.47	
18	Senegal	16,436	2.69	4.45	
19	Zambia	18,928	2.49	4.38	
20	Ethiopia	117,191	2.65	4.24	

The United Nation projections indicate that these countries will double their population size between the years 2020 and 2050, have an elevated proportion of children dependents, and high rate of adolescent fertility, which creates additional challenges to the achievement of their Sustainable Development Goals as agreed within the UN System.

UNFPA has a central role in supporting those countries to strengthen their national capacities to close all the gaps in comprehensive reproductive health. The areas for which support is required are institutional development, production of information to support the formulation of policies and programs, training of teachers and health personnel, provision of equipment and family planning equipment and supplies, information and education programs to enhance needed cultural change.

UNFPA Resources Focusing

The bold support required by less developed countries requires that UNFPA's available resources be re-focused in order to be able to provide effective responses as per country needs. In its annual report 2002 UNFPA informs that during 2001 it has contributed with national governments to prevent unintended pregnancies, maternal deaths, and unsafe abortions, among other achievements. The challenge for UNFPA is to focus its resources and its expertise on the countries more in need and to be able to include this strategy as a special chapter from its 2004 report on. Nevertheless, this time it is expected that a more focused strategy on the core UNFPA mandate, is implemented.

Chapter V – Conclusions and Recommendations

UNFPA has accomplished outstanding achievements during its 55 years of existence, as recorded in chapter IV of this dissertation. Nevertheless, it is clear that several shortcomings have impeded an even higher performance. Essentially, those shortcomings come from the conceptual complexity of its mandate, and from historic ideological controversies in the population field. In addition, the absence of a bold training strategy to align its staff with the various conceptual and political complexities has also been a limiting factor for the accomplishment of its mandate.

Mandate Conceptual Complexity

The UNFPA's mandate has its complexities beginning with the multi-dimensionality of the word "population". Conceptually, it is complex term. According to the webster's New World Dictionary population is "all the people in a country region, etc." Therefore, the study of population is associated with ethnic, economic, sociological, religious, educational, cultural, and demographic dimensions. Each aspect is specific, but they are also interdependent. However, UNFPA's mandated is basically restricted to the demographic side, which comprehends a number of variables such as size, growth rate, fertility, migration, urbanization, age structure, all of them interdependent among them but also with the social, economic, and educational dimensions.

The multiplicity of variables that characterize a population has created confusion in the implementation of several UNFPA endeavors. For example, when the population policy

was discussed, to some national and international staff, it should include strategies on employment, education, health, disregarding population size, growth rate and the like.³⁷

From the amplitude of the population definition some UNFPA's staff paid attention to topics such as climate change, international migration, and migrant remittances, that are related to population, but they are not the core of UNFPA's mandate. On the same direction several new issues have emerged since 1970, such as obstetric fistula, female genital cutting, human trafficking, climate change, changing age structures, HIV/AIDS. All of them, although peripheral to the mandate, have been significantly addressed, in the UNFPA's programming at regional and at the national levels.

On the other hand, within UNFPA the exploration of the linkages of population and development, poverty, reproductive health, and fertility has not been steady, constant, and coherent, mainly during the first two decades its existence.³⁸

As a result, UNFPA has often fragmented its programming in many directions, losing focus and the most immediate consequence is the weakening of its impact on reproductive health including family planning and contraception.

Closing Passionate Debates.

Since its very beginning, UNFPA encountered itself at the center of passionate debates, coming from political and from religious sources. As a matter of fact, the United Nations and its predecessor, the League of Nations, found strong opposition when they intended

³⁷ Personal experience of the author after his participation in the population policy formulation in Guatemala, El Salvador, Costa Rica, and Dominican Republic, among other Latin American countries during the decade of 1980's

³⁸ Personal experience of the author in his capacity as UNFPA senior staff member between 1992 and 2007 which can be confirmed by analyzing the main policy documents and the annual report.

to support country initiatives on different population areas. In fact, this was the reason for the creation of UNFPA as a mechanism to facilitate the opening of a route to respond to the great challenge of the mid 1950s regarding the fast and increasing rate of population growth and the absence of mechanisms to reduce fertility rates.

Utilization of Planning Tools

At the local level UNFPA has had to adapt its discourse to the culture and political circumstances of sovereign countries. This complex environment inhibited UNFPA, for most of its existence, to formulate a logical framework and an unambiguous mission statement to articulate, in a clear and more effective manner, its areas of work.

During its first 20 years UNFPA defined its program as a list of subjects that included population and development, population policies, sociodemographic issues, data collection, family planning, population education and gender issues. These subjects were supported often as segregated areas in different government sectors, without the benefit coming from the articulation, in a logical framework, of different population issues.

Logical framework

there is a general social purpose (sustainable development or poverty alleviation) could have helped to articulate population issues and development policies. Subsequently a list of proposed objectives (population growth reduction, internal migration mitigation) could have opened a rationale for population issues as part of development efforts. Finally, products to be achieved (universal family planning coverage, women empowerment, population policy formulated) and activities to be implemented (reproductive health

services, contraceptives logistics, census and population data collection) would be logical programmatic instruments to be incorporated to a national development policy.

Conversely, the lack of a logical framework had several adverse consequences³⁹:

1. The staff of the organization, coming from different professions and expertise, did not have a common strategy to impulse their work, had limitations to conduct more productively policy dialogue and negotiations.
2. Although the implementation of each area by itself had positive effects it is clear that their impact could had been more effective and faster if they had been part of an articulated whole.
3. Some components that could have been considered of minor importance, in a logical framework context, could have been embraced with more relevance. On the other hand, some aspects that are not part of the mandate could have been avoided.
4. Not having clarity regarding the difference between goals and strategies, might have caused undue emphasis on some important subjects that do not belong to the core UNFPA's mandate such as gender and VIH/AIDS that are core subjects to other United Nations organizations.

Mission Statement

Also, UNFPA has undertaken efforts to formulate a proper mission statement. At the request of the UNDP/UNFPA Executive Board, its first mission statement was formulated in 1996 which indicated a list of fields, some central to its mandate and other more in the realm of other entities. At the same time this mission statement equates purposes, objectives, strategies, and action programs. The following is the approved 1966 mission statement:

³⁹ This is the author's personal view while working as UNFPA staff member in several capacities as technical staff, Country Representative and Manager in Headquarters.

UNFPA is an international development agency that promotes the right of every woman, man and child to enjoy a life of health and equal opportunity. We support countries in using population data for policies and programmers to reduce poverty and to ensure that every pregnancy is wanted, every birth is safe, every young person is free from HIV/AIDS, and every girl and woman is treated with dignity and respect.” (United Nations, 1966, p.295)

The UNFPA’s essence cannot be clearly established from the wording of this mission statement, due probably to the strategy designed to lessen political opposition over some core areas of its mandate. Along this line, Nugent et al., (2011)⁴⁰ affirmed that “Specific language has disappeared from the mission statement and has been replaced by generalities. And for similar reasons, UNFPA is hesitant to seize the bully pulpit to promote women’s sexual and reproductive needs and population-related issues” (p. 3). Probably to position its public image in a more neutral ground, UNFPA has embraced specific target groups like women and adolescents; UNFPA has also associated its mandate to wider universal aspirations like health and gender equity. It has addressed critical treats to human wellbeing like HIV/AIDS and poverty. All those are very relevant issues, but they are the focus of other UN agencies or the responsibility of interagency working groups, where UNFPA has only a very specific responsibility. This approach has

⁴⁰ These three scholars in 2011 conducted a wide world study on UNFPA’s Leadership Transition which benefited from the opinion and assessments of 18 leading experts and three in deep country studies under the sponsorship of the Center for Global Development, [think tank](#) located in Washington D. C., United States.

probably facilitated UNFPA's political acceptance. However, 'easy business' is not the reason for UNFPA's creation and existence.

Since world population growth is evolving toward stability by 2050, UNFPA's effort in the demographic areas could emphasize the support to those countries where their population dynamics is still constraining their development efforts. At the same time UNFPA's core mission within the United Nations System is the advocating, the support to sexual and reproductive health and reproductive rights, promoting, supporting and fostering national capacity building. This task is even more urgent in those countries where unmet needs are considerable, political, and cultural constraints impede the achievement of what is now considered an important element of human rights.

UNFPA STRATEGIC PLAN, 2018–2021 confirmed its core mission regarding reproductive health and reproductive rights. In fact, its strategic for that year affirms that:

UNFPA will organize its work around three transformative and people-centered results in the period leading up to 2030. These include: (a) an end to preventable maternal deaths; (b) an end to the unmet need for family planning; and (c) an end to gender-based violence and all harmful practices, including female genital mutilation and child, early and forced marriage (United Nations, 2017, p.7).

This statement represents a great advance in terms of specificity of UNFPA's mandate. Nevertheless, once more, the last phrase goes back to generalities that go beyond its mandate and add little to the clarity of this new mission statement.

The UNFPA 2022-2025 strategic Plan further reaffirmed that the goal in its new strategic direction foresees the achievement of:

Universal access to sexual and reproductive health and reproductive rights, and the acceleration of the implementation of the ICPD Programme of Action that contribute to the achievement of the three interconnected outcomes: By 2025, the reduction in the unmet need for family planning has accelerated. By 2025, the reduction of preventable maternal deaths has accelerated. By 2025, the reduction in gender-based violence and harmful practices (United Nations, 2021a)

This paragraph contains a clearer and focused thematic mandate, a better articulation between the thematic focus and the target populations, and the consideration of priorities to the most in need.

Support to Strategic Areas

Human resources

Most of UNFPA's professional staff come from the social sciences, including demography, statistics, sociology, gender, international relations, international development, and economics. Professional staff members also have backgrounds in public health, medicine, public administration.

Although UNFPA's staff professions includes a wide assortment of technical capacities, and often long and relevant experience in specific topics, most staff did not master the complexities behind a multidisciplinary thematic mandate, eventual adverse national counterparts, and a very dynamic international world, full of new demands and opportunities.

Regardless his/her entering background each and all Professional staff face the need to understand the basics of each thematic area, lead interdisciplinary teams, identify

country needs, sustain policy dialogue with national counterparts, the international community, NGOs and carry out effective communications with experts in core UNFPA fields. At the same time staff members must command skill to carry out successful fact-based advocacy, be familiar with new media developments and technologies, in order to impulse the UNFPA's agenda *vis-à-vis* its constituencies.

UNFPA has not planned and developed a bold permanent training strategy to develop/improve the matching between the existing or entering professional competences with the profiles needed to successfully conduct the functions required to advance the UNFPA's mandate. The variety of professions and extensive experience of most staff is a good starting point in order to take advantages of horizontal learning, based on knowledge and lessons learned sharing.

Although in job training is important for all UN agencies, in the case of UNFPA it is even more important due to the extent of the thematic mandate, the importance of articulating each piece of social sciences with health sciences within the mandate, the need to successfully deal with ideological opposition, and the reticence of government officials in confronting such opposition. At the same time there is a need to stablish productive dialogue with donors, United Nations Agencies and Programs, other international actors, local and international NGOs, the academic community, the local leaders and root beneficiaries.

Collaboration with United Nations partners key partners.

Since its creation in 1967/1969 it was clear that several UN Agencies had programs and activities that were complementary to UNFPA's mandate. The idea was to articulate those

common and related areas of concern, through joint projects that using UNFPA's resources could utilize the installed capacity of those agencies in order to i) optimize efficiency and efficacy of joint projects and ii) stimulate those agencies to increase their interest and expand their capacities in those thematic areas.

The list of those Agencies include World Health Organization (Family planning, contraceptives research and logistics; UNESCO (Sex Education and communication and cultural research); FAO (Family Life Education on rural settings); ILO (Family Life Education for the labor sector); UN Regional Commission (Research on population and development and training of national specialists); UN Population Division (Statistics collection, processing and dissemination), research on population and development support), among others.

Alliances for Project implementation between UNFPA and United Nations Agencies lasted for 23 years (1969-1992). In some instances, joint endeavors were successful, but UNFPA found that in some cases Agencies used the financial resources in areas that were not within the population field. UNFPA felt that some Agencies had not demonstrated any expansion of population issues within their programming and/or did not appoint suitable staff to support national project implementation.

In responding to the dissatisfaction with some United Nations partners, in 1992 UNFPA did not make the effort of solving the problem through high level concertation with UN partners and rather preferred to appoint its own multidisciplinary teams denominated CSTs (Country Support Teams) in Bangkok, Kathmandu, Amman, Harare, Bratislava and

Santiago de Chile, in order to help the formulation and implementation of Country Programmes.

After 15 years, by 2007, this strategy proved to be insufficient to accomplish its technical and strategic goals. First, it was not efficient in creating national self-reliance, it did not achieve substantial technical advances, while the valuable partnership with UN Agencies, weakened. (Kantner & Kantner, 2006, p. 105-106).

As a turning point, the UNFPA's new Strategic Plan 2022-2025 foresees to reinvigorate its relationships with the UN Agencies. High level negotiations are being taking place under the support of the UNFPA/UNDP Executive Board and it is expected that more fertile UN coordination will improve the expected programmatic results.

In issues related with quality of care and services in its Strategic Plan 2022-2025, UNFPA proposes to work with WHO, UN-Women, UNICEF, UNAIDS, UNDP, the World Food Programme, the United Nations Environment Programme, and with the International Organization for Migration -OIM-. To strengthened mechanisms and capacities to address discriminatory gender and social norms to advance gender equality and women's decision-making, UNFPA plans to work with UN-Women, UNDP and UNICEF. To reduce preventable maternal deaths UNFPA proposes to work with UNAIDS, UNICEF, UN-Women, WHO and the World Bank Group (United Nations, 2021, pp 10-14)

Besides, the creation of two United Nations bodies UNAIDS (1994) and UN Women (2010) offers UNFPA a very clear opportunity for the development of joint strategies while avoiding unnecessary overlapping. In Addition, new UN interagency mechanisms including the Millenium Developepment Goals (2000) signed by 189 countries and the

Sustainable Development Goals (2016) signed by all United Nations State Members constitutes an opportunity to find a niche that facilitates country actions even in countries that are not very enthusiastic with some reproductive health issues and will provide more visibility vis a vis the donor community.

Finally, the UN Secretary-General's strategy "Delivering as One UN" that seeks to consolidate all UN country programs under one roof, with one budget, one management plan, and one country leadership brings more coherence to United Nations assistance, more efficiency to transaction costs and higher leverage in negotiation with national counterparts. Nevertheless, this requires a bold presence of UNFPA at the interior of the United Nations team in order to guarantee that its mandate is safeguarded within a larger assistance package.

Considering that several UNFPA agenda contents have been the object of intense controversies in many countries and several international meetings, it could happen that, as a matter of self-protection, some United Nations sister agencies would prefer to distance themselves from UNFPA. This fact indicates that the country UNFPA team must have technical capacities, policy dialogue competences, advocacy resources and headquarters support.

Being part of the United Nations Secretary's package might bring some additional risks that UNFPA might consider. First, the visibility of individual agencies participants could lessen which has negative consequences vis-a-vis the donor community. Second, the impact attributed to individual agencies will be more difficult to assess, which also offers difficulties in terms of accountability to the donor community.

Cooperating with national governments

UNFPA's country assistance programs depend on what each recipient country determines; in many cases the strategy and thematic contents of those programs are perfectly aligned with the Cairo ICPDs Plan of Action. However, there are cases in which governments might have difficulties for embracing the ICPD Plan of Action because of political, ideological or religious reasons. The fragility of government officials in conservative settings can hinder their willingness to engage in reproductive rights programs. At the same time, in those cases, UNFPA staff might be fearful of upsetting government partners.

As stressed above, it is crucial that UNFPA country office staff is properly trained to conduct factual based policy dialogue and effective advocacy to strengthen decision making of concerned government officers.

It is very important to understand that the formulation of national policies is not only a technical issue; it has political, ideological and economic dimensions that shape the content of those policies. Country office staff also must be aware of those issues in order to create and strengthen the positive conditions for promoting sexual and reproductive health, reproductive rights, and population goals, in recipient countries.

It is also very important to understand that, due to voting numbers, the weight of development countries is high regarding the formulation of policies and programs at regional and worldwide level. Therefore, it is crucial to help those countries to align themselves with the ICPD Plan of Action. Likewise, it would be valuable prioritizing sexual and reproductive health, and population goals in their negotiations of bi and multilateral

assistance packages. To achieve these objectives the support of UNFPA country staff is also critical.

However, at this point it is necessary to stress the crucial importance UNFPA's leadership. It is encouraging to take note of the report by Nugent, et al. (2011) who found that since 2011 there is willingness of UNFPA's leadership to address controversial issues and take risks at the global level. This opens the path for a more assertive UNFPA presence at the country level.

Regarding the location of country offices and staffing size and composition, only exceptionally UNFPA has made a change. The Organization has been passive regarding change even when it is a fact that country needs are dynamic across time. Country offices could be strengthened, scaled down, or even terminated when the situation so merits. Headquarters management must be especially alert about this issue that could facilitate the receipt of additional support for priority countries.

In conclusion

UNFPA has been a crucial country support actor in achieving relevant advances in reducing the world population growth rates, reducing the fertility and mortality rates. UNFPA's role has been crucial in addressing women needs by providing reproductive health services and increasing the contraceptive prevalence and above UNFPA has made considerable advocacy efforts to advance in the achievement of a universal new paradigm: that all children be procreated by choice, not by chance.

These achievements were obtained thanks to:

- Mobilization of resources to support national institutional strengthening in population related areas in developing countries.
- Facilitating universal political agreements, reached in world and regional conferences, regarding the urgency of concerted actions in response to the challenges from rapid population growth and high fertility.
- Funding to the production and dissemination of relevant demographic information conducive to improve economic and social planning.
- Supporting to national governments for the formulation of population policies in the framework of their policies of economic and social development.
- Supporting to national governments for the strengthening of family planning programs in the context of their reproductive health services.
- Funding to governments institutions and the civil society for the formulation and implementation of enhancing strategies in the fields of sex and family life education, women and youth empowerment and demographic training.

At this point it would be extremely important for UNFPA to review some of its strategies that allow a more efficient response to those areas that exhibit gaps and unmet needs. The global advances in population issues and reproductive health might create the false impression that international assistance should be allocated to other areas. Nevertheless, some developing countries and social sectors in middle income countries still present rapid population growth and serious reproductive health unmet needs.

Therefore, the reformulation of its mission is of crucial importance for UNFPA. In so doing, the use of a more direct and focused language is convenient. UNFPA should restrict its thematic field to a more specific area within its original mandate.

The support to recipient countries to assure reproductive rights and universal access to sexual and reproductive health services, including contraception is perhaps the niche that

UNFPA could adopt, given pending unmet needs, and its special importance in terms of poverty alleviation, family wellbeing and women empowerment.

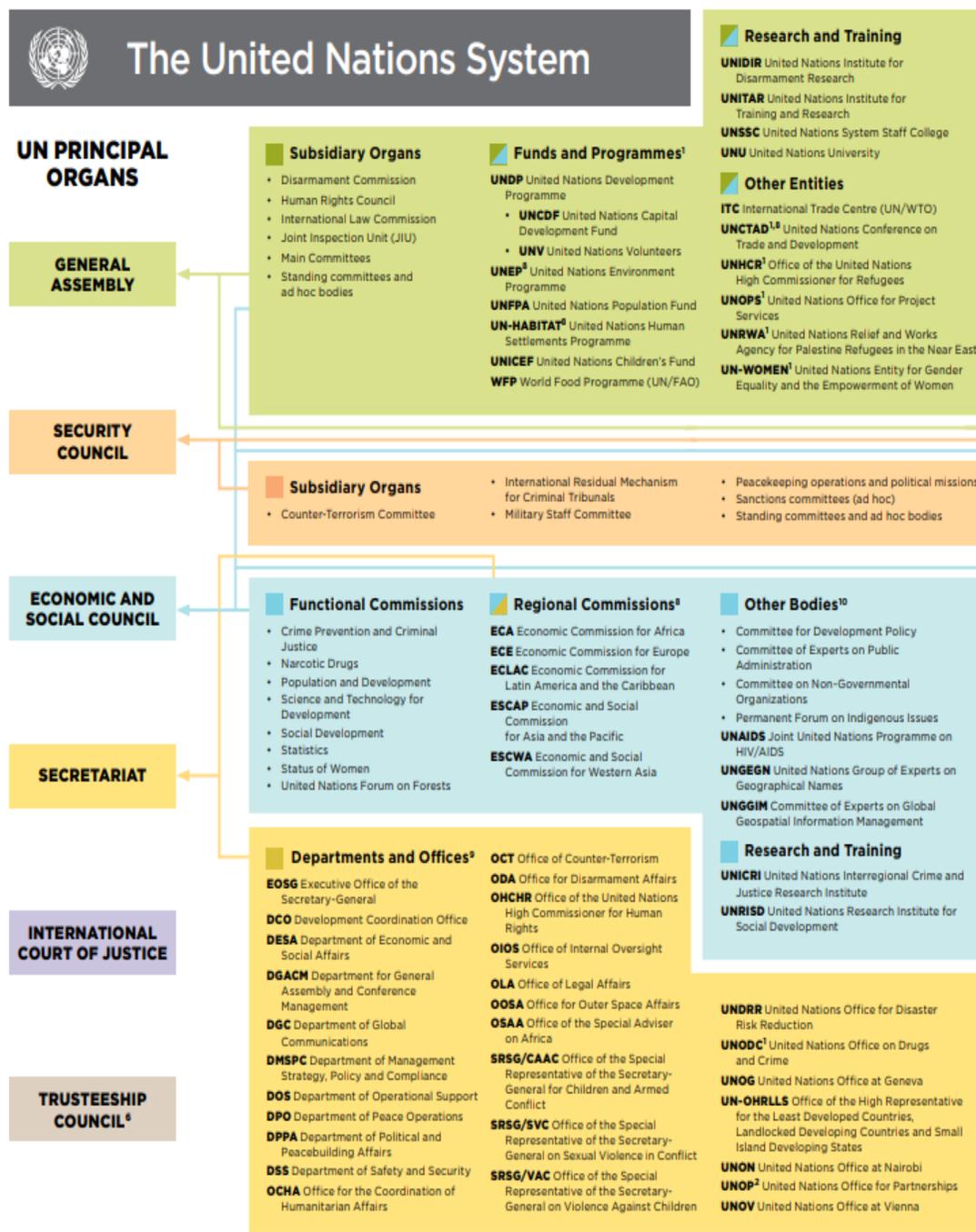
To properly attain its mission UNFPA should pay especial attention to its recruitment procedures in order to engage personnel with level of expertise in thematic areas of its competence. Equally important it is to guarantee recruitment highly qualified staff and high-level training in areas like policy dialogue, advocacy, fund raising and institutional negotiations with UN partners, other international actors in the reproductive health area.

The assessment of country office location is another issue that UNFPA might consider in order to focus its resources on those countries confronting higher deficits regarding universal access to sexual and reproductive health services. Currently many local UNFPA offices are located in countries exhibiting ample advances regarding ICPD Plan of Action, have well developed national capacities and therefore the impact of UNFPA is rather small.

The partnership with other UN Agencies, Funds and Programs continuous to be of high importance in order to provide a more efficient and effective support to priority countries. At the same time, it is of special importance to expand the number and quality of technical outputs and strategies that are required to enhance national capacities of all countries in terms of information, research and professional resources required in all phases of sustainable development.

Currently, UNFPA has a great opportunity to align its mandate with those relevant sustainable development strategies, guaranteeing by this means, a bolder presence in national and international agendas.

Appendix 1 United Nations Organigramme





Source:

file:///C:/Users/jairo/OneDrive/Documents/1%20Tesis%20final%20final/un_system_chart.pdf