Thinking the future

the sustainable human development in Mexico

Sergio Medina González

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To Ivana, Oliver, Camila, Santiago
and Rubén, inspiration for this book.

Índice

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Preface

It's been five years since this book was imagined in the hope and enthusiasm of contributing to reflection, dialogue and the design of public policies to promote a more humane, free, unified, supportive, equitable, inclusive and sustainable society in the XXI century. Over the years, many things have changed in Mexico and in the entire world. These have been difficult times for all, especially for the most vulnerable. At times, it seems that our present is limited to living day by day in the complexity and difficulties of our time, and to think of the future is only for dreamers.

I am a dreamer, I believe in the present and in a better future for all of Mexico. I live each day intensely without detriment to contribute to the future. I have been lucky in life but it hasn't been easy, as everything has been the result of effort, perseverance and daily work against adversity. At times in an individual manner, but many others, this work has been generational. I believe in teamwork, in the generosity and kindness of people, in the positive side of our actions. It is not naiveté, but true conviction for the welfare of people.

During the last ten years, I have combined mi passion for public service, research and university teaching. Throughout these years, I have found that on some matters the complexity of the reality of these times surpasses classroom theory and books.

However, I am convinced that there is no better present and future reality without first having imagined, dreamt, yearned, designed

and planned it. Science and knowledge work precisely to imagine and design the development and future of society, the greater the problems, the more relevant is the use of knowledge and science to solve them. I am convinced that without a mission there is no certainty of common destiny and without hope there is no future that will beckon us to unite our genuine differences and wills.

Mexico is large and I acknowledge the important achievements and contributions of courageous women and men that have given so much to our country, the value of our national heroes and the strength of our institutions. We have made significant achievements in social, economic, political and environmental matters, in spite of the complex circumstances we live in, mainly originated by a more globalized and interconnected world, as well as the reconfiguration that us Mexicans have sought to obtain from our country in a more diverse and plural environment.

The new millennium arrived with great expectations, but also with countless dilemmas and complexities. Past, present and future joined to fill our souls, dreams and hopes, to unite our differences and inequities. The moment we are living today invites us to make a stop along the way to reflect and wonder, as a society, where do we want to go in the XXI century? What is the future we want for our children and future generations in the short, medium and long term? What are we doing as citizens to contribute to the development of this great country that is Mexico? And, how are we preparing to face the challenges and vertiginous changes that our society and the entire world are experiencing?

We may have several points of view and genuine differences in responding to these questions due to our cultural, regional, political, social, economical and religious baggage, however, all these divergences may be set aside if we embrace the fact that we are all equal because we are all human beings. Acknowledging and putting the value of the person in the first place, which for a long time was forgotten or even omitted in our country, will allow us to establish a dialogue and agreement on what truly matters to us as a society. This is freedom, transcendence and the fulfillment of the human being.

Putting the principle of the centrality of the person in the first place in the design of plans, programs and strategies from the municipal, state and federal fields, as well as in our daily routines in the private field, will help us solve longstanding structural problems with hope and determination, and to successfully face new global and national challenges. It also will help us rediscover the path to the debate and agreement on the design of an inclusive country in harmony and democracy, and to face the political, economic, social and environmental plurality and complexity in which we live in the XXI century.

This commitment is the motivation of this book, convinced that by giving the person his/her central place in the process of the design of public policies in the three levels of government in our country, it will be possible to defeat the apathy, indifference, despair and the inertia in which Mexico dwells in in order to scheme the renaissance of a new stage of development in the national life facing the future. A new era in our history in which the rights, dignity and welfare are established as the compass that guides and gives meaning to the efforts of governments, of private sector, of the civil society organizations and of the families, in order to promote and consolidate the new paradigm of sustainable human development in every corner of Mexico.

The challenge is a great one and it is for all Mexicans. On one hand we need the complete society's knowledge of this sustainable human development vision, and the commitment of every Mexican to construct the intergenerational co-responsibility that makes the economic, social, environmental and political sustainability of the nation possible in the XXI century. Also, in some cases the redesign of a better institutional scaffolding in the municipal, state and federal field proves to be a pressing matter, one that promotes the centrality of the person in government plans and programs, and that places the human being as the focus of development strategies.

In this sense, is what in the author's view represents one of the determining factors for the arrival of this new vision of development, that is, attitude, habits and decisions that each one of us Mexicans takes on a daily basis and determines the paths of our life. This is

where gradually and systematically we build our present and future, as well as that of our children, at times consciously and other times unconsciously. It is with day-by-day actions from each of us and of our families and communities that we determine what happens in our environment, our cities, states, and the entire country.

It is true that institutions are fundamental for the achievement of the conditions, means and ends of human development, but more important is every person's daily action. For this reason, it is essential to be aware that the origin and achievement of sustainable human development in Mexico demands generational work from millions of people, which with genuine love and courage for Mexico, search for a fundamental change in the actual state of matters. A generation that dreams and fearlessly fights towards the future, for what they believe and yearn; a generation of no particular age, geographical location, socioeconomic condition or gender, that eagerly searches -as generations that preceded us did- for the rebirth of a more just, equitable, sustainable and harmonious nation for the fulfillment of every Mexican.

Faced with this challenge and responsibility, this book contributes from theory and science to this objective. The proposal revolves around the need to improve the organization of the city, state and federal reality, parting from a solid theoretical and methodological platform that strengthens institutions and promotes citizen participation. Thus, theory and science fulfill their genuine purpose of serving human beings towards the present and future of the country.

To think of the future of Mexico implicates conserving -without dogmatisms- what actually is useful to people. It entails will to change in order to accept modern and inclusive visions, it means acting with social sensibility to the genuine demands of the most vulnerable population, and this is what sustainable human development consists of. Thus -in these times of crucial decisions for national life- we must, above all, bring the best of us to benefit our country, rely on the great ideas of women and men of science who have dedicated their lives to the service of humanity, democracy, freedom and human dignity.

For sustainable human development to flourish and consolidate in the short, medium and long term in communities across the country, the will and determination of every one of us is needed, and that of our families, communities, schools, municipalities and states, and mainly of those who hold leadership positions to act with a deep commitment to Mexico. For this reason, this new phase of national life is to be called the era of concord and democracy as universal values.

Our appointment and responsibility with the present and future of the country requires, today more than ever, these virtues to build a more humane, just, free and united nation that our grandparents and parents dreamed of, and one that someday our children will demand us.

Introduction

Destiny has caught up with us and our national future appears complex and extraordinary in the face of old and new challenges in this century. The worn down institutional framework, the intimidated democratic normalcy and the fragmented social cohesion and collective vision that we now live in municipalities, states and the entire country, do not solve the complex reality that Mexicans face these days. We are all agents of this and in the same way without exception, we are all responsible for providing the best in each of us to successfully face these challenges and with it, gain the present and future of Mexico.

In this context and given the commitment and responsibility of proposing alternatives that allow Mexicans to move towards a full, fair, solidary and sustainable development, is that this book originates. Thinking the future, sustainable human development in Mexico is a book that describes the new paradigm of development, defined as sustainable human development. This new development perspective is founded on the principles of the centrality of the person, common good and the solidarity and auto regulatory capacity of society to ensure in the short, medium and long term, the adequate management of natural, human and financial resources in political, economical and social processes, with the aim that present and future generations -in an environment of concord and democracy- achieve their life projects over time.

This book is divided into four chapters. The first chapter, entitled "Sustainable human development in perspective" describes the evo-

lution of the concept of development internationally and in Mexico, setting out in detail the meaning and evolution of the concepts of sustainable development and human development, to arrive to the new paradigm of sustainable human development, which represents the path and vision of a comprehensive and harmonious development of man in society, to the environment.

This description reinforces the conviction that through the new vision of sustainable human development, two fundamental aspects of the life of human beings are articulated: the position of the person as the fundamental aim of public policies and the recognition of the environment as a collective asset that belongs to the present and future generations. For this reason, this first chapter stresses the need for progress in the development of strategies, programs and transverse actions, based on a holistic vision that in addition to considering ecological factors also understands the political, social and cultural situation.

The conceptual and philosophical wealth revealed in the last section of the first chapter -concerning the vision of sustainable human development-, leads us to a series of reflections and considerations that outline the gradual change towards a new relationship between the State and society, in which balance between success and social justice is generated; generational responsibility and rewards; as well as economic projects and commitment to the environment.

This way, taking into account conceptual and philosophical considerations previously described, the second chapter "A theoretical and conceptual framework for sustainable human development", describes the proposed conceptual framework for sustainable human development, as well as a social organization methodology based on the general systems theory, that visualizes Mexico as a system, composed of state and municipal subsystems.

This second chapter presents a systemic model for the creation of public policies from the local level, aimed towards the consolidation of sustainable development in the country. This model is the basis for the design of the new proposed model in this work, which is established and implemented on the general systems theory, which

is why the book not only accentuates the importance of values and inherent rights of the individual in the process of the development of society, but it also offers the necessary elements for this process to be carried out according to rigorous methodological standards, sustained technically and scientifically.

The third chapter, titled "A model for sustainable human development", describes the organization and operational performance of the proposed model. This chapter comprises the section with the most technical and methodological elaboration of this work, because it describes in detail the process of creating public policies, the articulation of the axes and dimensions of the model and the gradual realization of sustainable human development. At first it explains the importance and relevance of the model, stressing on the need to improve the organization of the municipal, state and federal reality parting from a solid theoretical and methodological platform that strengthens institutions and promotes citizen participation. It later describes the operating components of the model, called axes and dimensions, as well as the elements needed to multiply the benefits of the model, called levers. Finally, it details the operation of the model, making use of graphic elements that illustrate the process and timing of the creation of public policies in a short, medium and long term, emphasizing the importance of the symbiotic relationship between the centrality of the person and sustainability.

Finally, the fourth chapter, "Concord and Democracy for sustainable human development", describes the national concord and the universal value of democracy as the essential elements to create a necessary environment for the strengthening of sustainable human development in Mexico. This final chapter emphasizes the need to promote concord and democracy in society, consequently both virtues will strengthen values and attitudes that overcome apathy, indifference, despair and the inertia in which Mexico dwells in to solve challenges like insecurity, inequity, poverty, innovation and competitiveness, as well as environmental degradation, among others.

In closing, this final chapter invites the reader to pondering and dialogue, to live fully in concord and democracy, and to promo-

te the concept of sustainable human development with energy and enthusiasm in families, communities, cities and states. It is true that visions of development vary and in all cases are genuine to the interests of different social, economic and political actors; however, this methodological alternative to sustainable human development maintains that the values of concord and democracy are fundamental for the harmonious development of the country.

In summary, throughout the four chapters of this book, a democratic and participatory model proposal is built gradually, orderly and schematically, one with a long-term vision that, from the municipal level and through the joint participation of all actors of society in the states, comprises an alternative to successfully meet the present and future of the country.

It is appropriate to highlight that we should feel proud of our history, but not limited by it; it is necessary to evaluate new ideas but also be open to new thoughts that strengthen our skills and conditions to live in a more united, prosperous and sustainable country in the XXI century.

Thinking the Future is essential to have a better present and future.

Abbreviations

BID	Inter-American Development Bank
ECLAC	Economic Commission for Latin America
CIDAC	Center of Research for Development
CIDE	Center for Research and Teaching in Economics
CIDEAL	Foundation for Cooperation and Research Europe-Latin America
WCED	World Commission on Environment and Development
UNCED	United Nations Conference on Environment and Development (Rio Summit, Earth Summit)
CODHEM	Human Rights Commission, State of Mexico
CONACYT	National Council of Science and Technology
CONAPO	National Population Council
CONAPRED	National Council to Prevent Discrimination
COPARMEX	Mexican Employer's Association
SHD	Sustainable Human Development
ENOE	National Survey on Occupation and Employment
FAO	Food and Agriculture Organization of the United Nations
FCE	Fondo de Cultura Económica
FLACSO	Latin American School of Social Sciences
IMF	International Monetary Fund
G-8	The Group of Eight
HDI	Human Development Index
IIASA	International Institute for Applied Systems Analysis

IMCO	Mexican Institute for Competitiveness
INDESOL	National Institute for Social Development
INE	National Institute of Ecology
INEE	National Institute for the Evaluation of Education
INEGI	National Institute of Statistics and Geography
ITESM	Monterrey Institute of Technology and Higher Education
LGEEPA	General Law of Ecological Balance and Environmental Protection
NADB	North American Development Bank
OECD	Organization for Economic Co-operation and Development
OEI	Organization of Ibero-American States for Education, Science and Culture
NGO	Non-governmental Organizations
UN	United Nations
OSC	Civil Society Organizations
GDP	Gross Domestic Product
GNP	Gross National Product
PND	National Development Plan
PNE	National Plan of Ecology
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
PROFEPA	Federal Environmental Protection Agency
PROGRESA	Education, Health and Nutrition Program
PRONASOL	National Solidarity Program
PYMES	Small and medium-sized enterprises
SAGARPA	Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food
SEDESOL	Secretariat of Social Development
SEDUE	Ministry of Urban Development and Ecology
SEMARNAP	Secretariat of Environment, Natural Resources and Fisheries
SEMARNAT	Secretariat of Environment and Natural Resources
SEP	Secretariat of Public Education

SHCP	Secretariat of Finance and Public Credit
SNI	National System of Researchers
GST	General Systems Theory
NAFTA	North American Free Trade Agreement
UNAM	National Autonomous University of Mexico
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
HIV	Human Immunodeficiency Virus
WBI	World Bank Institute

CHAPTER I.
Sustainable human development in perspective

Every time a society's development is spoken of, there will invariably be ideas that are linked to the possibility that people themselves define the satisfiers that best meet their needs. Each individual possesses a different vision of the meaning of happiness and of the things that, from their point of view, are worthy of value. The majority of people and societies agree that they do not require a government that leads their development processes, on the contrary, they simple demand the opportunity to live in an environment that allows them to showcase their abilities and to obtain the best benefits they are capable of reaching within their own means, without facing injustice or corruption situations.

This denotes that people do not need government paternalism, they simply demand the opportunity to become the engine of their own development and consequently, in the biggest beneficiaries -along with their loved ones- of their daily effort and work. This is the vision of sustainable human development.

The concern for development has been a constant throughout the modern history of man, becoming a matter of permanent interest in universal thought, because through development, it is possible to respond to challenges and social problems such as poverty, exclusion, insecurity, unemployment, inequity, environmental degradation from the political, economic, environmental and social levels.

However, the conception of development hasn't always had the conceptual vastness that it has nowadays; for a long time the term development referred only to an economy's ability to elevate and

maintain the annual increment of its Gross Domestic Product (GDP). What nowadays is considered one of the means to achieve development, for many years represented its ultimate end.

With the prominence of this way of conceiving development, the widening of the breach between the number of people who held an adequate living standard and those who reached only levels of subsistence was accelerated; this dynamic caused the orientation in development strategies to present a major shift during the 1960's.

Nowadays, it is acknowledged that the measured aggregate income does not meet the needs of the inhabitants of a country, and that wealth is not the ultimate end that humanity searches for, although it is useful to achieve its development.[1]

In addition to the increment of the income gap of the XX century, globalization brought new concerns that arose from a progressive increase in the world's population, from the rise of organized crime networks, from the rapid progress in technology processes and the environmental degradation, which began to determine the development or stillness of nations around the world.

This diversity of aspects has motivated the emergence of new theoretical approaches to define development. Sustainable development and human development notions represent a major advance in the way of conceiving development, going from a theoretic and utilitarian approach, and an aggregate wealth concentration point of view, to another in which the decrease of resource overexploitation and environmental degradation, as well as the fight against poverty and the quest for higher levels of welfare for the people and human satisfaction are the fundamental objectives.

The importance of these conceptions of development has been fundamental for the holistic view of the XXI century's development paradigm: sustainable human development which places the individual as the main subject and object of development and sets its

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1.   United Nations Development Programme (UNDP), *Human Development Report 1990*, UNDP, New York, 1990, p. 11.

objectives in the long term, ensuring a better quality of life for the present and future generations.

Based on this, throughout this chapter the evolution of the concept of development internationally and in Mexico is described, through the concepts of sustainable development and human development, to locate the reader in the paradigm of sustainable human development, this way in the latter chapters it is possible to offer the theoretic and methodological framework necessary for the construction of a model for the design and implementation of public policies for sustainable human development in Mexico.

1.1 Sustainable development

In recent decades there has been significant growth in concern about environmental implications that come with economic growth and that closely relate to the development of mankind. Until the last third of the XX century, society had focused on economic growth as the only response to development, regarding nature as a challenge to be controlled and the physical environment as an inexhaustible source of resources at the service of man. This accelerated industrial development set man aside from sustainable thought, motivating high natural costs related to the overexploitation of resources and environmental degradation.

From the 1960's environmental issues awoke the interest of the scientific community, governments and civil society, who began to generate numerous studies and research papers on the environment and the possible alternatives to continue the development process without harming the environment. This series of postulates showcased inconformity that prevailed in the world in the face of the negative effects of economic growth, such as natural resource depletion, atmospheric degradation in rural and urban settings, forest and water devastation, among others, which reflected the urgent need to set limits on this growth strategy.

Consequently, the first conference on the biosphere promoted by the United Nations in 1968 -set in Paris- targeted its efforts on

the analysis of the world's energy reserves to maintain the economic growth rhythm of the time. Later, in 1972, the first report of the Club of Rome was published, titled The Limits to Growth. From this work, a more accurate vision on the scope of human activity as a result of a better comprehension of environmental problems and the promotion of respect for natural diversity was obtained.[2]

During the same year, the first United Nations Conference on the Human Environment took place in Stockholm; it was acknowledged here that there was an urgent need to invest in scientific and environmental research and to promote free trade under the concept of the rational use of natural resources. At this conference, Maurice Strong, the first president of the United Nations Environment Programme (UNEP), proposed the term eco-development, joining the concepts of development and environment considering that both were intended to improve the quality of people's lives.

In 1980, the International Union for Conservation of Nature announced the global conservation strategy, which punctuated the concept of sustainability in ecological terms, but with very little emphasis on economic growth. This strategy included three priorities in environmental terms: the maintenance of ecologic processes, the sustainable use of resources and the maintenance of genetic diversity worldwide.

Three years later, the United Nations established the World Commission on Environment and Development (WCED), led by Gro Harlem Brundtland. The working group, better known as the Brundtland Commission, began different studies, debates and public hearings on five continents, concluding in April 1987 with the publication of the Brundtland Report, Our Common Future, which established the need for a comprehensive view of development that was capable of modifying environmental policies worldwide and of

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2.   Meadows, Donella H., Dennis L. Meadows, Jorgen Randers and William W. Behrens III, *The Limits to Growth*, Universe Books, New York, 1972.

recognizing the responsibility of industrialized countries in global environment issues.

The report also defined the concept of sustainable development as "[...] development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[3]

This new vision of development and the environment arose as a response to the growing global interest in the protection of human surroundings and the sustainability challenges the world had to face towards the future. In this sense, sustainable policies should encourage interaction of people and their environment, as well as the need for greater collaboration between governments and society on issues of common concern.

In 1988 the World Meteorological Organization and the United Nations Environment Programme established an intergovernmental group of experts on climate change jointly in order to deepen the implementation of public policies with the emerging approach of development on an international level.

During the United Nations Conference on Environment and Development (UNCED) held in 1992 in Rio de Janeiro, the conceptual relationship between environment and development was strengthened, adjusting it to social and cultural proposals. Contemplating economic, political social and environmental notions widened the concept of sustainable development. In this scenario, each State adopted the commitment of leading its way towards sustainable development according to their own conditions, specific needs and objectives, so present and future generations have access to the same opportunities. To ensure this, a plan of action was created that included elements such as demographic growth, international trade, forms of production and consumption, and the external debt of developing countries.[4]

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3.   United Nations World Commission on Environment and Development (UNWCED), *Our Common Future: Report of the World Commission on Environment and Development*, Oxford University Press, 1987.

4.   This plan of action is known as "Agenda 21" and has become the basis of many national plans.

In addition, in 1992 two principle statements were formulated, as well as a vast action program on sustainable development world-wide:

·   Rio Declaration on Environment and Development.
·   Declaration of principles for a change in management, conservation and sustainable development of all types of forests.
·   Agenda 21, prototype of norms aimed at achieving sustainable development from a social, economic and ecologic standpoint.

A further step was taken in Japan in 1997 with the signing of the Kyoto Protocol, where the main topics on the agenda were the carbon dioxide emissions and global warming. Major economies were asked to reduce their greenhouse gases to the levels presented before the 1990's, during a period between the years 2008-2012.

During the XXI century, environmental issues have been world-wide placed with different dialogue forums such as the 2002 United Nations World Summit on Sustainable Development in Johannesburg, where the commitment of nations on the protection of the environment, social and economic development was renewed;[5] the United Nations World Summit in 2005 held in New York, in which the millennial commitments of the member nations were reaffirmed; the United Nations Climate Change Conference in Bali, Indonesia in 2007, which laid the groundwork for negotiations on the signing of a new agreement that would give continuity to the Kyoto Protocol, renewing and expanding commitments on global warming; and the G8 Kobe Environment Ministers Meeting held in Japan, where different strategies leading to reduce the emissions of greenhouse gases were analyzed, as well as many other regional summits on sustainable development around the world.[6]

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5.   United Nations, Johannesburg Declaration on Sustainable Development, United Nations, Johannesburg, 2002.
6.   Latin America, the Caribbean and the European Union Summit, Madrid 2002, Guadalajara 2004, Vienna 2006, Lima 2008; International Conference on Financing for

For the specific case of Mexico, although the work carried out by environmentalists on land use, the importance of the preservation of wildlife in in the country, the need to stop excessive deforestation in the forests since the 1960's is recognized, it wasn't until mid-1970's, in agreement to the discussions and the efforts that were being made at an international level, that awareness on the environment as a national whole began to develop. In this sense, the important work of Victor Urquidi, Jose Sarukhan, Mario Molina, Boris Graizbord, Jose Luis Lezama, Enrique Provencio, Alejandro Nadal, Norma Munguia, Gustavo Alanis, Gabriel Quadri, Julia Carabias, Victor Lichtinger and Juan Rafael Elvira, among others, managed to construct these actors as an iconic generation in the momentum of a solid environmental investigation, protection and conservation agenda from the educational, private, social and governmental spheres.

Regarding Urquidi and his important work on local and international forums, Alejandro Nadal points out that he "was a visionary in the debates on environment and development in which he actively participated, came to set up a research program that is still dominant and contains powerful ramifications for issues of great importance".[7] As a member of the Club of Rome and after attending the first United Nations Conference on the Human Environment in Stockholm, Urquidi warned from the 1970's about the importance of promoting sustainable and just development in Mexico, that involved the areas of public policies, economy, environment and culture in a comprehensive and systemic manner.

In a context of increasing concern for environmental degradation in the country, in 1971 the Federal Law for the Prevention and Control of Environmental Pollution was enacted, and in 1972 the Subsecretariat of Environmental Improvement was created. Mexico also

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Development, Monterrey 2002; 4th World Water Forum, Mexico 2006; Bonn Dialogues on Climate Change, Bonn, 2008; COP 16, Cancun 2011.

7.   Nadal, Alejandro (Ed.), *Obras Escogidas de Víctor L. Urquidi, Desarrollo Sustentable y Cambio Global*, El Colegio de México, México, 2007, p.13. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English).

attended the Stockholm Conference and shortly after was represented through the Ministry of Foreign Affairs in the board of the UNEP.

From 1983 interest in environmental issues by the federal government extended to areas of ecological restoration, territorial management, conservation, development and enhancement of natural resources, as well as the formation of an environmental conscience among the public. Thus the Ministry of Urban Development and Ecology (SEDUE) arose, with a Subsecretariat of Ecology, which in 1984 produced the first National Plan of Ecology (PNE, 1984-1988).

Towards the end of the 1980's, the actions of the SEDUE focused on the prevention and control of pollution with the creation of control systems such as the Water Quality Monitoring System, the Ambient Air Monitoring Network and the implementation of mandatory vehicle verification, as well as the implementation of environmental contingency plans in Mexico City.[8] The most significant advance of this decade occurred in 1988 with the publication of the General Law of Ecological Balance and Environmental Protection (LGEEPA), which showed a comprehensive vision of environmental problems and laid groundwork for the decentralization in the implementation and monitoring of environmental norms with state authorities.[9]

SEDUE disappeared in 1992 to make way for the Secretariat of Social Development (SEDESOL), who at that time took on the environmental responsibilities of the country with the creation of the National Institute of Ecology (INE)[10] and the Federal Environ-

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8.   Carabias, Julia and Enrique Provencio, "La política ambiental mexicana antes y después de Río", in Glender, Alberto y Víctor Lichtinger, *La diplomacia ambiental: México y la Conferencia de las Naciones Unidas sobre Medio Ambiente y Desarrollo*, Secretaría de Relaciones Exteriores/Fondo de Cultura Económica, Mexico 1994, p. 406. (In Spanish)

9.   Urquidi, Víctor L., "Los problemas del Medio Ambiente en las relaciones México-Estados Unidos", in Nadal, Alejandro (Ed.), 2007, op. cit., p.254. (In Spanish)

10.   Responsible for the generation of scientific and technical information on environmental problems and human resources training to inform society, support decision-making, encourage environmental protection and promote sustainable use of natural resources. Instituto Nacional de Ecología, Plan Estratégico 2001-2006, INE, Mexico, 2001. (In Spanish)

mental Protection Agency (PROFEPA), whose creation enabled the promotion of the compliance of all stipulated aspects in the LGEEPA, and to fill the gaps concerning the procurement of the environment, while the INE helped open spaces for dialogue between the federal and municipal entities of the country, as well as non-governmental organizations and associations focused to care for the environment.

At that time, Mexico became actively involved in international forums, and in 1991 joined the Montreal Protocol, concerning the suspension on the production and trade of chlorinated substances that destroy the ozone layer. Later, in 1992, signed the commitments of the United Nations Conference held in Rio de Janeiro. Also, with the establishment of the North American Free Trade Agreement (NAFTA) in 1994, and the subsequent creation of the North American Agreement on Environmental Cooperation (NAAEC) placed Mexico, with its trading partners United States and Canada in a position of greater vigilance and necessary collaboration on environmental issues.

The growing relevance of environmental problems at the national level led to the creation of the Secretariat of Environment, Natural Resources and Fisheries (SEMARNAP) in 1994, which in 2000 became the Secretariat of Environment and Natural Resources (SEMARNAT), transferring its responsibilities concerning fisheries to the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA). From that year, INE and PROFEPA became decentralized agencies, separate from SEMARNAT.[11]

Thus, at the end of the XX century, the global concern for the environment had led to the creation of new government agencies, the construction of a specialized legal framework and the generation of public policies aimed at solving specific problems such as air pollution in urban areas, the implementation of environmental regulations and the protection of biodiversity and natural reserves. Despite

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11. Guillén, Rodriguez Fedro Carlos (coord.), Instituto Nacional de Ecología, Quince años de políticas ambientales en México. Memoria testimonial, Secretaría de Medio Ambiente y Recursos Naturales- Instituto Nacional de Ecología, Mexico, 2007, pp. 16-17. (In Spanish)

these efforts, Mexico's environmental policy was not yet a priority in national consciousness, in government, or business sectors and civil society; that is, the country had not yet managed to coordinate actions of the federal, state and municipal governments, the corporate sector, the civil society organizations and mainly, from the public at large towards the consolidation of sustainable development.[12]

According to the position of José Luis Lezama, this lack of vision from the government to clearly understand what for years investigators in the environmental topic demanded form the world population, resulted in the inability to think globally on concrete issues.[13] The environment, understood as a collective good, should be recognized as belonging to the present and future generations, and thus be safeguarded by the all the actors through comprehensive strategies and coordinated medium and long-term programs.

Mexico's efforts to search for a social development harmonious with nature continued with the implementation of a series of programs, some of the most important ones are the Programa Nacional Hidráulico (National Water Program) (2001-2006), the Programa Nacional Forestal (National Forestry Program) (2001-2006), the Corredor Biológico Mesoamericano (Mesoamerican Biological Corridor), el Programa del Mar de Cortés (Sea of Cortez Program) and the Programa Ambiental para la Juventud (Youth Environmental Program).

Concerning the procurement and preservation of the environment in Mexico we can highlight the reform made to the LGEEPA in December 2001 concerning the transfer of powers in relation to the environmental sector from the federation to the municipalities; the obligation of companies involved in high-risk activities to carry out an emission registry and to hire environmental risk insurance, and the increased penalties for activities that threaten the environment. During the same period, the Law for Sustainable Rural Development

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12.   Urquidi, Víctor L., "Las Perspectivas de un Desarrollo Sustentable en México", in Nadal, Alejandro (Ed.), 2007, op. cit., p.215. (In Spanish)

13.   Lezama, José Luis, *El medio ambiente hoy. Temas cruciales del debate contemporáneo*, El Colegio de México, Mexico, 2001, p.113. (In Spanish)

was enacted. Also, in May 2005, the General Law on Sustainable Forest Development came into force, which that sought to create a new forestry model for Mexico, offering solutions to problems such as deforestation, illegal logging, as well as migration and poverty in forest areas. Despite these actions, some scholars perceived it was still necessary to carry out a deep and committed reflection by the government.[14]

Given the importance of the issues in question, in 2007 the federal administration placed environmental sustainability as one of the guiding principles of the National Development Plan. The document states that one of the main tasks the country faces is to include the environment as a key element in the areas of economic and social development; hence the importance of placing sustainability as a transverse guideline in public policies.[15] With an emphasis on transversal efforts, the Mexican government acknowledged that climate change entailed feasibility risks for economic progress, welfare and health, therefore it deemed necessary to coordinate actions, programs and public policies that involved all ministries and government levels, and not only the those responsible for the procurement and care of the environment.[16]

In recent years, Mexico has been able to undertake a renewed leadership in the international sphere, by promoting the creation of a global fund against climate change called Green Fund, which seeks to promote international consensus on carbon emission reductions. The fund is based on the principle of common but differentiated responsibilities, in which each country makes commitments according to their circumstances and development priorities, and it is also an economic stimulus program. Thus, it is proposed that each country grants financial contributions to the fund according to their possibi-

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14.   Ibídem, p. 274.
15.   Presidencia de la República, Plan Nacional de Desarrollo 2007-2012, Presidencia de la República, Mexico, 2007.
16.   Galindo, Luis Miguel (Coord.), La Economía del Cambio Climático en México, Síntesis, Gobierno Federal, Mexico, 2009, p. 7.

lities and can withdraw resources from it, as long as it can reduce or avoid carbon emissions. Mexico's commitment on climate change responds to what Mario Molina explains:

Climate change is perhaps the current global environmental problem that most concerns mankind; it is in fact, a problem that involves a complex interaction of scientific, economic and political matters. The impacts of climate change can be large and will occur over decades or even centuries. The actions necessary to address this challenge require long-term commitments to change traditional development patterns in many different parts of the world.[17]

In line with the Green Fund project Mexico announced, in June 2009, the Special Climate Change Programme, which is based on the 2007 National Strategy on Climate Change. The program aims to reduce full carbon dioxide emissions by 2012, and it also includes medium and long term plans. Specifically, the program emphasizes the need for coordinated actions involving all federal government branches, which confirms its support for the housing sector in the development of housing units that seek to save water, electric energy and gas, and involves a strategy to conserve ecosystems and reduce deforestation, among other actions. It also seeks to encourage a greater public awareness around environmental care by promoting a change in consumer habits and supporting private initiative in generating new technologies. Thus, Mexico is aligned in more clear and strong manner to the international vision that recognizes that it is less costly to invest today in measures that decrease the risks of climate change rather than controlling damages in the future.[18]

After the looking back on of some of the most important events the international and national environmental matters, it is clear that sustainable development has been placed as one of the fundamental

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17.   Molina, Mario, Testimonio de Mario Molina en la Audiencia del Comité de Energía y Recursos Naturales, Universidad de California, San Diego, 21 de julio de 2005. (In Spanish) (Translator's own translation of quote from the Spanish version)
18.   HM Treasury Stern Review, Stern Review: La Economía del cambio climático, London, 2007, p.3.

links in the evolution of development theories and in the creation of a vision committed to economic growth, nature and people's welfare. Both in Mexico and internationally, "protecting the environment for future generations has become a moral obligation to which virtually no one objects".[19]

However, the challenge goes beyond recognition or commitment to environmental issues; it is necessary to move forward in the design of strategies, programs and transverse actions, based on a comprehensive vision that in addition to contemplating ecological factors it includes the economic, social and cultural factors. In this task, it is essential to take full responsibility for making the protection of the environment in Mexico a coordinated effort between governments, private sectors and the civil society.

> If Mexico is to enter the sustainable development process, beyond feeble environmental policies, it will have to accept it as a commitment from the entire society. This will require progress in participative and effective democratization, in the design of long-term economic strategies with assessment autonomy, and to reverse environmental degradation, and the growing social inequality, […] and reaching general congruence between ends and means. That will be the great challenge for the XXI century.[20]

1.2. Human Development
The growing evidence that environmental degradation brought serious consequences for humanity caused a major shift in the way of

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19. Suárez, Vicente, "Intervención de Vicente Suárez en la Conferencia de Sujetos del Derecho Ambiental: Humanos y no Humanos", Serie de Diálogos Plurales sobre el Medio Ambiente 2009, Centro de Estudios Demográficos, Urbanos y Ambientales (CEDUA), Colegio de México, Mexico, 2009. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

20. Urquidi, Víctor L., "El gran desafío del siglo XXI: El desarrollo sustentable. Alcances y riesgos para México", en Nadal, Alejandro (Ed.), 2007, op. cit., p. 232. (Translator's own translation of quote from the Spanish version, document does not exist in English)

conceiving development, as analyzed in the previous section; however, this problem was only one of the global factors which during the last third of the XX century generated important global criticisms on the prevailing system. Thus, similarly to environmental concerns of that period, the need to draw an approach that placed the person as the key player and the main recipient of the benefits of development, allowed proposals from different areas and scenarios to arise on what development should mean in the light of a humanistic vision. As part of these efforts, the important work of international organisms such as the United Nations Development Programme (UNDP) stands out, who worked towards assessing the effectiveness of public policies that governments had implemented to face global challenges.

Comprehending that excessive emphasis on economic growth had jeopardized the governability of some nations by increasing poverty and limiting people's welfare, it was proposed to reorient the existing conception on economic development to one focused on people. As a result, development began to be considered as the opportunity for people to increase their abilities within society and make a better use of their skills in economic, cultural, social and political matters; setting aside the vision of development based on the accumulation of wealth. Thus, the vision of human development was positioned as a fundamental proposal internationally.

The perspective of the UNDP on human development was articulated in 1990 by the founder of the global Human Development Report, Mahbub Ul Haq, and the Nobel Peace Prize in Economics, Amartya Sen. This conception saw the person as the main object and subject of development, by indicating that man not only represents an element on the theoretical construction of economic growth, but must constitute the principal motive in the quest for its own welfare.

Thus, the concept of human development focuses on the ends that valued by people, not only economic wealth. The real aim of development must, from this perspective, be oriented towards creating an enabling environment for people to achieve a life endowed with the most valued elements that involve personal fulfillment, for the

fundamental objective consists of expanding their choices and welfare by increasing their overall satisfaction.

In this sense, the concept of human development coined by the UNDP is divided into two main parts based on their objectives: on one hand, it seeks to guarantee the formation of human capacities through the improvement of income, health and schooling of people; on the other, it attempts to boost the use these people make of their capacities for their use in work and leisure activities.[21] Thus, human development is achieved when people increase their ability to become the players that lead and determine their own way, parting from options and aspirations they freely choose. In this conception, social capital takes great importance by representing the group of norms, networks, organizations, traditions, attitudes and values that generate cohesion amongst society and enhance development.[22]

If quality of life is considered a subjective element, the UNDP has made a major effort to turn it into a measurable concept by establishing the Human Development Index (HDI), designed to evaluate progress or regression in living conditions of the inhabitants of each country.[23] Furthermore, the HDI establishes criteria on development, characterizes the design of policies, programs and actions of the public sector and defines the objectives that, according to this vision, are advisable to pursue in terms of welfare.

The HDI combines three components to assess the progress of countries in human development: wealth, -through the GDP per capita- life expectancy, -through the life expectancy at birth index- and education –through Mean years of schooling and Expected years of

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21. United Nations Development Programme (UNDP), *Human Development Report 2005*, Oxford University Press, New York, 2005, p. 21.

22. More information on the relationship between human development and social capital can be found in Chapter 3 of the present document. See: De Vylder, Stefan, Sustainable Human Development and Macroeconomic Strategic Lines and Implications, United Nations Development Programme (UNDP), New York, 1995.

23. It is important to recognize that a methodology such as this, which aims to measure global wellbeing, there is a risk of missing a number of issues that affect society, however, it is recognized as an important contribution with some level of international consensus.

schooling-, each one with the same weight. This index has become a reference point for international comparisons; many countries have even adopted it as a policy instrument and as a progress or regression indicator of their national policies.

The index ranks the level of human development countries according to three categories: high, medium and low. Countries with high human development are those whose HDI is 0.8 to 1.0, countries with medium human development have between 0.5 and 0.8; and finally, countries with low human development have 0.5 or less. This index has provided broad conceptual richness, as it enables the identification of certain variables such as education and health, which determine the quality of life of people and show tension points in order to solve priority aspects.[24] In addition, the UNDP publishes periodical reports on human development in different countries.

In Mexico, the Human Development Report on Mexico 2002 summons political, economic and social actors to think on development strategies that have been implemented in the country so far; while the Human Development Report, Mexico 2004: The Local Human Development Challenge, stresses the importance of variables other than income, education and health that limit or broaden people's development, such as security, access to justice and political action in specific areas. Finally, the National Human Development Report Mexico 2006-2007, Migration and its connection with Human Development, addresses social and economic aspects that determine the achievement of superior development levels in countries affected by the migratory phenomenon, such as Mexico.

Internationally, the 2010 report places Mexico in the 56th position out of 169 countries, while Norway ranks first and Zimbabwe last.[25]

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24.   Ul Haq, Mahbub, *Reflections on Human Development*, Oxford University Press, New York, 1995, p. 44.

25.   United Nations Development Programme (undp), *Human Development Report 2010*, The Real Wealth of Nations: Pathways to Human Development, undp, New York, 2010, pp. 143-214.

Table 1.1. Global Ranking of Human Development Indices, 2010.

Ranking	Country	HDI
1	Norway	0.938
2	Australia	0.937
3	New Zealand	0.907
4	United States	0.902
5	Ireland	0.895
6	Liechtenstein	0.891
7	Holland	0.89
8	Canada	0.888
9	Sweden	0.885
10	Germany	0.885
...	...	...
56	Mexico	0.75

Source: UNDP, 2010.

If in fact the vision of human development has not offered theoretical model of implementation to achieve high standards in the HDI, it has contributed, from the creation of the index, to the design and implementation of national and local policies for countries to reach higher levels of welfare. This, by focusing the attention of political actors on the need to channel social politic efforts towards the elements that constitute the index.

Specifically, and with joint efforts at an international level on human development, strategies and social politic programs of the Mexican government began to be modified in the 1990's, a period in which the country needed to react with quickly and forcefully to the social effects of a severe crisis prompted by a sharp devaluation of the Mexican peso, a sudden rise in interest rates and the consequent flight of investment. The 1994-1995 crisis showed its worst effects on the most vulnerable classes of the country, accentuating poverty levels and worsening the social inequity situation that previously

existed,[26] which is why the government undertook a series of emerging actions that sought to restore macroeconomic stability and halt the deterioration in the quality of life of Mexicans. The neuralgic points in the economic policy consisted of a strict control of inflation and public expense, while in the social aspect it was sought out to lessen poverty levels with the approval, in 1997, of the Education, Health and Nutrition Program (PROGRESA).

The development potential skills of the individual, through comprehensive measures in health, nutrition and education, coupled with the momentum of active citizen participation, constituted the main guidelines of PROGRESA. While this program inherited some of the characteristics of its predecessor (National Solidarity Program, PRONASOL),[27] PROGRESA made important changes such as the fact that most of the support to beneficiaries became monetary and not in kind, this afforded families greater freedom of choice. Progress was also made on the transparency of designation, efficiency effectiveness and targeting of support, so improvements were registered in operational and resource decentralization as well as the increase to the coverage and the quality of provided services.

Changes to the government's main social plan in fighting poverty were part of a general reorientation of social programs in Mexico, which involved moving from actions mainly focused on transferring income through various means towards comprehensive programs that encouraged investment in capacities, boosted human capital

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26. After the 1994-1995 crisis in Mexico, extreme poverty indices registered an unprecedented spike when reaching 40, 170 and 80 percent growth rates on a rural, urban and national level respectively, while moderate poverty levels reached growth rates close to 10, 38 and 25 percent. The moderate poverty and extreme poverty indicators defined by the World Bank refer to the percentage of the population who lives with two dollars or less per day for the case of moderate poverty; while extreme poverty is defined as the percentage of the population who lives on one dollar a day or less. For more information refer to World Bank, Poverty in Mexico: An Assessment of Conditions, *Trends, and Government Strategy*, World Bank, 2004, United States, pp. xviii-xix.

27. For more information on the National Solidarity Program, refer to Secretaría de Hacienda y Crédito Público, La planeación del desarrollo en la década de los noventa. Antología de la planeación en México, Tomo 22, shcp y fce, Mexico, 1992.

and gave people the necessary tools to become agents of their own development.[28]

This vision tried to break away from a merely patronizing model in order to approach a development model that would allow the expansion of people's freedom, especially the most vulnerable sectors:

> PROGRESA is an example of a distributive policy that aims to combat extreme poverty and that, somehow, follows the line of argument proposed by authors such as Sen. [...] the possibility of choice is manifested in three ways: first, in the acceptance of belonging to the program, second, in the possibility of using monetary support in the way that best suits the families' needs; third, in the commitment to fulfill the program's requirements.[29]

The transformations recorded in Mexico's social politics also represented a reflection of analysis and meditation on the negative effects the ineffective implementation of the neoliberal model had had in the country's most vulnerable population. Therefore, PROGRESA emphasized that sustained growth, although it was necessary to create the conditions that allowed the improvement of living standards, it deemed insufficient to broaden development opportunities throughout the country, promoting a more equal income distribution and to eliminate marginalization conditions among Mexicans. Thus, it was acknowledged that investing in peoples' capacities represented the key to expanding the freedoms and future development opportunities

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28. Levy, Santiago and Evelyn Rodríguez, *Sin herencia para la pobreza: El Programa Progresa-Oportunidades de México, Banco Interamericano de Desarrollo-Editorial* Planeta, Mexico, 2005.

29. Dieterlen, Paulette,"Progresa y la atención a las necesidades básicas", en Centro de Investigaciones y Estudios Superiores en Antropología Social (CIESAS), Alivio a la pobreza, análisis del Programa de Educación, Salud y Alimentación dentro de la política social: memoria del seminario, CIESAS, Mexico, 1998, p.14. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

as well as the possibility that the country's economic growth were guided by citizens and be sustainable over time.[30]

Despite the emphasis on developing the capacities and potential of families as one of the government's main objectives wasn't until the year 2000 when the concept of human development was placed as cornerstone of the National Development Plan as well as the strategy and government programs. Thus, during this period it was noted that inclusive society was based on a full human development in which equal opportunities and the social dimension of justice must be a priority.[31]

In this scenario PROGRESA changed its name in 2001 to Oportunidades, a Human Development Program, in addition, Congress approved substantial changes such as an expansion in program coverage and a three year extension of education scholarships, so these would cover up to upper secondary education of the beneficiaries; also, budget resources destined to human and social development programs were increased.[32] By 2009, Oportunidades had a budget of 24,413 million pesos while in 2010 it increased to 63,089.[33]

The positive impact of PROGRESA-Oportunidades shown in the reduction of poverty and inequity in the communities where it operates materializes through the increase in the transition rates between primary, secondary and upper secondary education. The program has also improved nutritional indicators of beneficiaries, allowing for the social politic to transcend the six-year government periods. An innovative part of the program consists of sharing the vision of the UNDP on human development by placing people at the center of the

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30. Presidencia de la República, *Progresa: Programa de Educación, Salud y Alimentación*, Presidencia de la República, Mexico, 1997, p. 5.

31. Presidencia de la República, *Plan Nacional de Desarrollo 2001-2006*, Presidencia de la República, Mexico, 2001.

32. In two years, the Oportunidades program doubled the coverage of families benefitted by going from 2.5 million families in the year 2000 to 4.2 million by 2003. Also, the budget of the program increased from 9.6 million pesos channeled in 2000 to 22.5 million pesos by 2003.

33. Expenditure Budget of the Federation for the fiscal years of 2009 and 2010.

development process and in particular, as decision-takers as to what they can be and do; in addition to conceiving poverty as the absence of one of the central components of life: human freedom,[34] defined by Sen as the ultimate goal of human development, which enables people to be, decide and act on what they value, and according to the possibilities of personal and intellectual growth to which they have had access to throughout their lives.

The constant efforts and actions in terms of human development in Mexico suggest that there has yet to be an answer to various aspects related to the reduction of the indices of poverty and unemployment, infrastructure, coverage and quality of basic services, as well as education and generation of human capital, among others.

Thus, despite favorable evaluations that national and international organizations have made to social politic programs such as Oportunidades; there has been insistence that these programs have proven deficient in stopping the poverty cycle in Mexico, since the intergenerational transmission of poverty can only be stopped when future generations obtain more benefits compared to the current generation, so they will be capable of reaching the possibility of carrying out the actions and activities that from their point of view are worthy of value for being happy, because "better nutrition, access to health and education services are necessary, but not sufficient to achieve that goal".[35]

The generation of human capital and increased revenue opportunities are fundamental for getting people to assume full responsibility in the development process of their family and community, and to make actions in human development made in the present pay off in the future. In addition to these elements, social policy programs of

34. Cruz, Carlos, Rodolfo de la Torre y César Velázquez (Comp.), *Evaluación externa de impacto del Programa Oportunidades 2001-2006*, Instituto Nacional de Salud Pública, Mexico, 2006, p.19.

35. Levy, Santiago, *Good Intentions, Bad Outcomes: Social Policy, Informality, and Economic Growth in Mexico*, Brookings Institution Press, Washington, 2008, p. 226. (Translator's own translation from the Spanish version of the quote)

the Mexican governments should consider matters of human security, migration, decentralization and democracy, among others, which affect the human development index.

In this regard, UNDP Mexico has focused its efforts towards fighting poverty and inequity, productive integration, encouraging democracy, preserving the environment and the strengthening of international productive cooperation, as well as collaborating with the government through a long term strategy that aims to evolve the country's economy, based on human talent.

This evidences that the momentum of the country's human development is a complex and multidimensional task that requires comprehensive solutions and above all, a coordinated effort between the federal, state and local governments, as well as greater citizen participation, so the implemented development model is sustainable over time and integrated in methodological terms:

> For middle-income countries, reaching development is not simply a matter of increasing public resources, but of improving institutional functioning. The existent diversity and inequality in the Mexican population have generated in response, a variety of policies and program that seeks to give attention to population segments that are very different from each other. This offer hasn't been generated in an orderly and comprehensive manner, probably as a result of the federal government's own programmatic structure, which organizes government action by sectors and lacks sufficient mechanisms to coordinate their actions.[36]

The vision of human development has found fertile ground internationally and in Mexico, as well as being established as an objective proposal in promoting development due to its ability to contemplate

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36.   Naciones Unidas México y Gobierno Federal, *Los Objetivos de Desarrollo del Milenio en México: Informe de Avance 2006*, Gabinete de Desarrollo Humano y Social /Comisión Intersecretarial de Desarrollo Social, Mexico, 2006, p. 21. (Translator's own translation of quote from the Spanish version, document does not exist in English)

the expansion of the person's capacities and improving their quality of life through very accessible indicators. Thus, the advantage of the Human Development Report not only consists of the existence of its index, but it also offers a number of detailed analysis founded on issues related to human development on a global level and in selected developing countries.

As evidenced by national and international efforts on human development and sustainable development, development has began to be conceived as a comprehensive and transversal aspect, as opposed to the traditional concept that only considered economic aspects; however, it is not enough to place human development or sustainable development as the guiding principle of public policies, there is also a need for greater institutional effort that generates solutions and articulates the involved actors and issues in a systemic manner.

In this scenario, it is essential that governments, the private sector and society move forward together and in a coordinated manner in expanding of capacities, and therefore, in people's freedoms. Along with the inclusion of players involved to move towards a sustainable model over time, it is essential that efforts made to rise the levels of human development and sustainable development have conceptual and methodological framework capable of converting efforts into real development levels.

1.3 Sustainable Human Development

The conceptions of human development and sustainable development previously described constitute the theoretical and philosophical preamble to the emergence of the concept of sustainable human developmen t (SHD) as a holistic vision capable of offering the benefits of both approaches in a comprehensive manner. Haq and Sen's contributions on the importance of a person's complete development and the growing interest of sustainability as a fundamental requirement in the process of development gave way for a new development paradigm that sought to respond to social, political, economic and

environmental challenges, and whose main purpose was to ensure complete welfare of people both in the present and in the long run.

In this regard, in 1994 the UNDP harmonized the concepts of human development and sustainable development by pointing out that an integrating vision of development was emerging: "the purpose of development is to create an environment in which all people can expand their capabilities, and opportunities can be enlarged for both present and future generations".[37] This development, made for and by people, which involves satisfying the population's necessities and improving their quality of life without compromising the capacities and needs of the future generations, represented one of the most important advances in the evolution of the concept of development.

Like human development, the paradigm of sustainable human development includes the human element as the real wealth of a nation, by allowing people to become the center of a development strategy that deals with creating an enabling environment for humans to carry out activities that, from their own perspective, are worthy,[38] extending this perspective to the long run. Development under this vision not only involves the basic needs of the population, but requires more effort to elevate the quality of life and to offer a range of economic, social and cultural possibilities necessary for people to expand their capacities and find an optimal space for their full realization. Mahbub Ul Haq reinforces this vision by indicating that development consists of enlarging people's choices:

> In principle, these choices can be infinite and can change over time. People often value achievements that do not show up at all, or not immediately, in income or growth figures: greater access to knowledge, better nutrition and health services, more secure livelihoods, security against crime and physical violence, satisfying leisure hours, political

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37. United Nations Development Programme (UNDP), *Human Development Report 1994*, UNDP, New York, 1994, p. 13.
38. United Nations Development Programme (UNDP), 1990, op. cit., p. 9.

and cultural freedoms and a sense of participation in community activities.[39]

In this regard, the creation of development opportunities and the establishment of conditions necessary for people to take advantage of such opportunities are assumed to be a shared responsibility between society and the state.

Thus, the State must ensure the existence of an institutional framework that offers a wide range of economic, social and cultural opportunities that people value as essential for their overall development as subsidiary and complimentary actors, as well as preventing and addressing gaps and limitations of the most vulnerable persons in society. For their part, being placed as the nucleus of the development process, individuals have the responsibility and commitment to take advantage of growth opportunities at their disposal, to potentiate their capacities, to become actively involved in the development processes in their communities, even taking on transformation leadership within them.

Thus, the state works towards people's development by creating the necessary framework for their fulfillment with the foundation and upkeep of the basis of a fair, free inclusive and democratic society, while people take responsibility of keeping this structure firm and strengthening it through their continuous participation and feedback, acting in favor of the common good.

Given its capacity as an engine of change, sustainable human development also places the individual as a vital complement in the decision taking, evaluation, implementation and control of government policies. Therefore, citizen participation acquires more relevance, for it is people who with their demands, concerns and knowledge monitor government actions and guide them to the conservation of a common good. Thus, farmers, businessmen, intellectuals, professors,

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39.   Ul Haq, Mahbub, Reflections on Human Development Oxford University Press, 1995, op. cit., p. 14.

youth and all the actors of the civil society make the commitment to join efforts for their country to progress towards the consolidation of a comprehensive development.

Therefore, sustainable human development should encourage a close relationship and balance of power between governments, the private sector and the civil society, so in a context of democracy and harmony, it is possible to respond to current challenges and face future challenges with more clarity and understanding.

The possibility of solving urgent and strategic matters without neglecting development and welfare opportunities of future generations is what allows us to reach this comprehensive development. Sudhir Anand and Amartya Sen explain this concept by pointing out that it is necessary to ensure that human development achieved in the past and what is trying to be achieved right now, can be sustained in the future--and further extended--rather than being threatened by cumulative pollution, exhaustion of natural resources, and other deteriorations of global and local environments.[40] In light of this vision, development seeks that individual's present freedoms, in order to be achieve their full development and a dignified life, can be enjoyed in the same or even greater extent by the following generations.

In this sense, sustainable human development also enables the implementation of sustainable policies, programs and strategies on economic, political and social matters, that put societies on the right track to ensure the future generations have the necessary means and conditions for their full development. It also guarantees the preservation of natural resources for the future, since the extent to which the population is aware of the need to preserve the environment; it can also display higher levels of health and income and rely less on a disorderly intake of natural resources for its survival. The need for a vision

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40.   Anand, Sudhir y Amartya Sen*, Sustainable Human Development: concepts and priorities*, United Nations Development Programme (UNDP), 1994, p. 4. Para consultar este artículo, puede referirse al siguiente enlace: http://hdr.undp.org/docs/publications/ocational_papers/Oc8a.htm (última consulta: mayo de 2011).

such as this becomes more evident when analyzing phenomena like poverty or environmental degradation, confluent recurring aspects.

Considering that people in poverty lack basic public services, adequate nutrition, high levels of health and education, a home with the necessary conditions for a healthy and hygienic life, it is realistic to assume that due to these shortcomings, people inadvertently misused natural resources at their disposal; which is why it is likely their localities will present irregular settlements, water pollution and an inadequate treatment of toxic residue; situations that represent a clear consequence of the lack of infrastructure, of the presence of an inarticulate normative frame and a lack of opportunities for human capital development. This inadequate demand for natural resources, far from addressing some of the immediate necessities, accentuates the poverty dimensions of those communities; meaning, there is a vicious cycle that is difficult to overcome without an active participation in the planning and execution of public policies.

Thus, environment damage has acquired the power to revert efforts to combat extreme poverty, and to negatively impact health and education services and in other areas in which progress is sought after in developing countries.[41]

In this sense, sustainable human development represents a holistic vision of development that seeks to provide answers to social, economic and environment challenges over time, so that the concepts of human development and sustainable development merge together to establish a development paradigm which, guided by the centrality on the person, ensures better life conditions for the current and future generations.

Figure 1.1 shows the concepts of sustainable development, human development and sustainable human development provided by the United Nations in their 1987, 1990 and 1994 reports, respectively,

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41.   United Nations Development Programme (UNDP), *Human Development Report 2007/2008*, Fighting Climate Change: Human solidarity in a divided World, UNDP, New York, 2008, p. 1.

and enables the analysis of the conceptual evolution of development worldwide.

Figure 1.1 Conceptualization of sustainable human development

Sustainable Development (1987)

Development that meets the needs of the present (political, social, environmental and economic), without compromising the ability of future generations to meet their own needs (Brundtland Report, 1987).

Human development (1990)

Process of enlarging people's choices. Its objective is to expand the range of opportunities open to people to live a healthy creative life and with the necessary means to function in their social environment. It is development of the people, for the people and by the people (Human Development Report, 1990).

Sustainable Human Development (1994)

Refers to a new development paradigm in which the human being is placed at the center of the development process. It involves satisfaction of the populations' needs and the improvement of quality of life without compromising opportunities and abilities of future generations to meet their own needs.

Source: Compiled by author

As reviewed in previous sections, in recent years a series of institutional actions and efforts have stood out in sustainable development and human development; so it is noteworthy that from the research field and while being supported on specialized international organisms, multiple governments have promoted a development vision,

that in line with the sustainable development vision, have sought that present and future generations are fully developed and enjoy the benefits of an adequate environment.

In agreement to the conceptual evolution of international development, in 2007 the Mexican government incorporated the vision of sustainable human development as the guiding principle of the strategies and public policies of the federal government for national development. In this regard, the National Development Plan 2007-2012 defines sustainable human development as the vision that "will give Mexicans today the satisfaction of their basic needs such as education, health, nutrition, housing and the protection of their human rights. It also means that opportunities for current and future generations can be expanded, and that development today won't compromise that of future generations."[42]

This way, SHD has been established as a proposal of great national and international relevance by giving the individual its rightful place within the development process and encouraging participation of different actors in society to project the achievements of development in a joint manner in the long run.
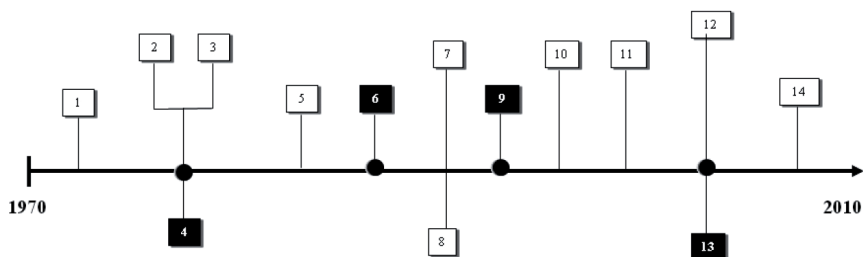
Thus, figure 1.2 illustrates how the concept of sustainable human development emerged internationally from a series of events and efforts previously mentioned, and gradually yielded a greater awareness on the importance of placing the person as the main actor and recipient of the benefits of the development process (See figure 1.2)

In this regard, it is important to highlight four key moments in this nearly 40-year time horizon; first, the emergence of the concept of sustainable development in 1987, along with the creation of the SE-DUE in Mexico; second, the definition of human development in 1990; third, the emergence in 1994 of the holistic concept of sustainable human development promoted by the UNDP; and lastly, the incorpo-

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42. Presidencia de la República, Plan Nacional de Desarrollo 2007-2012, op. cit., 2007, p. 23. (Translator's own translation of quote from the Spanish version, document does not exist in English)

ration of the sustainable human development vision to the country's government agenda through the 2007 National Development Plan.

Figure 1.2. National and International Historical Perspective
of Sustainable Human Development

1. 1972, First Report of the Club of
   Rome, The Limits to Growth
2. 1987, Ministry of Urban Development
   and Ecology (SEDUE), México
3. 1987, Brundtland Report, Our
   Common Future
4. 1987, Sustainable Development
5. 1988, General Law of Ecological
   Balance and Environmental Protection
   (LGEEPA), México
6. 1990, Human Development
7. 1982, Rio Summit

8. 1992, National Institute of Ecology
   (INE) and Federal Environmental
   Protection Agency (PROFEPA),
   México
9. 1994, Sustainable Human
   Development
10. 1997, Kyoto Protocol
11. 2002, Earth Summit (Johannesburg)
12. 2007, United Nations Climate
    Change Conference (Bali)
13. 2007, Incorporation of the concept
    of Sustainable Human Development
    in the National Development Plan
    (NDP) of the Government of Mexico
14. 2008, G8 Environment Ministers
    Meeting (Kobe)

◼ Evolutionary moments of Sustainable Human Development

☐ Events occurring between 1960 and 2008 related to Sustainable Human
  Development

Source: Compiled by Author

This way, given its importance in the world and the attention given to a number of issues that go beyond the strictly economic sphere, sustainable human development constitutes a fundamental vision for raising welfare standards of people. It also involves the need for a national atmosphere of harmony and for a democratic regime that guarantees the balance of the forces of government, the market and the civil society, as well as equal access to opportunities and benefits offered by development.

Given the conceptual richness and clarity it provides for the definition of development strategies for the different management levels in the government sphere, this book offers a model of generation and implementation of public policies oriented towards the progression of SHD in Mexico. In the same way in which human development or sustainable development lack specific formulations for their acquisition on behalf of governments, SHD doesn't present a theoretical and methodological framework that traces a path towards its benefits either, which are not defined.

Although there are approaches that explicitly acknowledge the paradigm of sustainable human development as the ultimate goal of the development process and as a powerful tool for economic growth and development based on human capital and social capital, which places people as the main actors and ultimate objectives of development, these do not discuss how such development can be obtained.[43]

Some other approaches go beyond by indicating that sustainable human development human development that goes hand in hand with the environment and it relies on science to indicate the consequences and the necessary measures to anticipate the actions of humanity for its development It also indicates that sustainable human development relies on democracy to define the approaches, concerns

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43.   For a discussion on this topic see: Agosin, Manuel, David E. Blom and Eduardo Gitli, "Globalization, liberalization and sustainable human development: analytical perspectives", Occasional papers, United Nations Conference on Trade and Development of undp, United States, 2009.Also see: Hasegawa, Sukehiro,"Development Cooperation", unu Global Seminar, 1st Kanazawa Session, Japan, 2001.

and decisions involved in development, considering aspects such as education, demographic changes, migration processes –among others- and their influence on development; however, these approaches do not offer a methodological framework for the obtainment of benefits that this vision offers either.[44]

Given this opportunity, the present document offers a theoretical approach comprised of a series of elements that allow, from a focus on people's welfare, how to achieve sustainable human development defined as a vision -founded on national concord and the universal value of democracy- is able to offer society a wide range of freedoms, only limited by the rule of law and respect for the environment, in order for people to have the necessary elements to define their needs and the way to achieve their objectives through their active participation in the implementation and monitoring of public policies and social actions, thereby ensuring the development of present and future generations.

This definition of sustainable human development emerges from the conceptual discussion undertaken throughout this chapter on the scope and meaning of sustainable development and human development, with the objective of articulating a methodology tailored to the needs of Mexico in order to access to higher levels of welfare for its population.

In this sense throughout the next chapter, there is a definition of variables that determine the gradual achievement of Sustainable Human Development in Mexico, to subsequently present a methodological (systemic) proposal for the construction and implementation of public policies for the SHD nationwide from any government level.

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44.   Sirageldin, Ismail, "Sustainable Human Development in the Twenty First Century: An Evolutionary Perspective", en Sirageldi, Ismail (Ed.), *Sustainable Human Development*, UNESCO, United Kingdom, 1991.

Chapter II.
Theoretical and conceptual framework for sustainable human development in Mexico

The quest for development alternatives that are capable of promoting the consolidation of an inclusive, participatory, equitable and sustainable society for nations, arises necessarily from conceptual premises such as sustainable human development (SHD). However, these premises, based on common welfare, can only translate into real benefits for the people through scientific and methodological processes able to push and drive the actions necessary to achieve the development goals of society.

Based on this reflection, along the following lines, this chapter offers the theoretical and conceptual elements of the proposed methodology of the book for the achievement of SHD in Mexico, with the aim of organizing efforts and focusing the government's and the civil society's development initiatives, in order to solve that which is of priority and trace a feasible path towards the long term.

Given the need to provide adequate theoretical support to the proposed development process and promote a change in the balance of power between the state, the market and citizens in making political, economic, and social decisions for the development of the country, this chapter presents the conceptual framework necessary to promote sustainable human development in Mexico. It also stresses the need to understand how Mexican society works as a system, it establishes the need for a systemic analysis of society to find technical and shared solutions to face issues the country has, allowing for scientific knowledge to be applied to the development of Mexico and offering an alternative way to seek consensus among the citizenry.

Thus, the general systems theory constitutes the theoretical framework needed to win the present and future of Mexico, by establishing the guidelines to be followed by society, governments and the private sector in the local, state and national levels to improve the quality of life of people. In order to describe the general systems theory, its application in public policy making and its use in the design of a model for sustainable human development in Mexico, this chapter is divided into four sections: first, the concepts and variables necessary for building a sustainable human development model are provided; second, some elements of systemic taxonomy are provided, along with their conceptual structure and a brief description of the attempts that have been made to implement systemic thinking in decision-making at a governmental level in Mexico, to make way for the discussion on the appropriateness of its use in this proposal; later on a model developed by the International Institute for Applied Systems Analysis (IIASA) is described, which is the basis for the model proposed on Chapter III; and lastly technical, political, economic and social platforms are presented, these are necessary so the public policies implemented by the proposed model achieve the required impact for obtaining sustainable human development.

2.1. Conditions, means and ends necessary for SHD in Mexico

In the face of the challenge of providing sustainable human development of a theoretical, conceptual and methodological framework to obtain higher levels of welfare for Mexican society, this section outlines a proposal for the goals of sustainable human development should be pursue given the social, political and economic characteristics of Mexico, and the way to reach to them. To achieve this, the following are the variables that, from the author's point of view, compose the conceptual framework of sustainable human development, for the situation that Mexico lives at the beginning of the second decade of the XXI century. These elements are perfectly interchangeable according to the needs or situations experienced in any country, city or locality, for which it is intended to use the model proposed here.

As was noted in the previous chapter, the government of Mexico has taken action to achieve sustainable human development in the country by placing it as the central axis of its National Development Plan; however, the scope of government actions often finds political, ideological, logistic, economic, social and cultural obstacles when attempting to transcend their approach to the state and local government levels and therefore translate into benefits for the population. This difficulty highlights the importance of developing a model that arises from the local level and whose variables may be exchanged according to the needs of every municipality or state.

With this logic and supported by a set of elements valued by people, such as freedom, equity, respect for human rights, social justice, human security and sustainability, among others, proposed by major international organisms[1] and leading academics in the field,[2] this work proposes the following variables as the conditions, the means and the ends of sustainable human development in Mexico (See Table 1.1).

As it will become explained in this work, the paradigm of sustainable human development must be understood as a set of conditions and means, from which the political, social, environmental and economic processes are transformed. Therefore, base aspects and defined means are the starting points, from which the local, state and federal public and private players must work together to achieve the ends of sustainable human development.

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1.   United Nations, the European Union, the Inter-American Development Bank, World Bank, among others.
2.   Amartya Sen, Mahbub Ul Haq, Robert Solow, Norberto Bobbio, Robert Dahl, José Miguel Insulza, and others.

Table 2.1. Conceptual framework of sustainable human development

Conditions	Equity Security Recognition and protection of human rights Acknowledgement that people themselves are agents of change in the development process Eradication of discrimination
Means	Productivity Competitiveness Cooperation
Ends	Freedom Sustainability

Source: Author's own.

The new international dynamics, the change in direction and volume of trade and migration flows, financial imbalances and the consequent increments in unemployment levels, high delinquency rates, the growth of the income gap between the rich and the poor and environmental degradation, constitute risk factors that make it urgent to adopt a new development paradigm. This imminent need allows the establishment of a set of social conditions that serve as a basis for encouraging development.

Ensuring social, economic and political equity in the access to resources for men and women, to respond to the growing demand for human security, incorporating the person as the center of development, designing strategies and programs to guarantee the respect for human rights and eradicating discrimination, as well as promoting sustainable development in all aspects of human life are the conditions on which the coexistence of people should be founded. Below, the conditions of sustainable human development will be described, to later explain the means and ends, which according to the prevailing current situation in Mexico should be considered as priorities for the country's development. The way in which the conditions are to be met, as a first stage of development; to later on enter the search for

the means and ends (second and third stages), carried out in the next chapter. This section only defines the variables that make up these conditions, means and ends in order to demonstrate their relevance in the search for development.

Equity

One of the main social challenges in Mexico consists of achieving greater equity amongst citizens. This search requires solidary and subsidiary support from the state to population groups who are in vulnerable conditions.

While universal rights declaration proclaims that all people are of equal worth-but where you are born in the world dictates your life chances.[3] Each person's development is different as a result of the positive or negative situations prevailing in the environment in which they're born and raised, which is why it is necessary to implement mechanisms to promote equity in the country, thereby guaranteeing that all people enjoy unrestricted access to the same opportunities.

Thus, before considering a definition of equity, it is important to clarify its differences and similarities with the concept of equality. While equality refers to the common basis of rights and responsibilities of all members of society, equity appeals from equality the consideration of specificities and differences, meaning, it refers to the joint estimate of similarities and differences included in a common gender. Thus, equity is located within equality, but insists on promoting differential treatment based on the particular needs of each individual or community, in order to end inequality and promote autonomy.[4] Equity also refers to justice because:

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3. United Nations Development Programme (UNDP), *Human Development Report 2005*, 2005, op. cit., p. 25.
4. Arrupe, Olga Elena "Igualdad, diferencia y equidad en el ámbito de la educación", Documento de trabajo, Organización de Estados Iberoamericanos para la educación ciencia y cultura (OEI),Argentina, 2002, p. 1. (In Spanish)

> Virtually everybody today believes in equality of something: equal rights before the law, equal civil liberties, equality of opportunity and so on [...] The idea that people should be consigned to an early death, illiteracy or second-class citizenship because of inherited attributes beyond their control violates most people's sense of what is fair.[5]

According to Haq, equity is a meaningful condition for the new paradigm of development, because its essence lies in the extension of equal opportunities for people of the present and future generations; in order for these opportunities are taken advantage of, there must be equal access to them.[6] Specifically, equity seeks to ensure equal access to development opportunities for all people, but not necessarily to the same results, because as previously mentioned, it is each person's responsibility to take advantage of opportunities to develop their skills.

Conversely, inequity restricts people's access to adequate living standards. This phenomenon, just like with equity, takes place in the individual and collective contexts, as evidenced by at least 3 categories of inequity: economic inequity, perceived income and access to goods and services, manifested mainly through unemployment and underemployment, and affect a large proportion of the population of the working age population; social inequity, which refers to a lack of access to basic social services to ensure a minimum living standard; and political inequity, which refers to the abuse of a full exercise of citizens' rights, including the right to security, freedom of expression, citizen participation and the freedom to be governed democratically.[7]

Regardless of the categorization made on inequity, it is a major obstacle to development. Promoting an environment of equity is

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5.   United Nations Development Programme (undp), Human Development Report 2005, 2005, op. cit., p. 52

6.   Ul Haq, Mahbub, 1995, op. cit., p. 16.

7.   Ferrer, Juliana, Caterina Clemenza y Víctor Martín, "Etica y economía, factores de un desarrollo sustentable", *Revista Venezolana de Ciencias Sociales*, vol. 8, num. 1, Cabimas, 2004, pp. 13-14. (In Spanish)

essential so through public policies targeted on economic, social and political aspects, the necessary transformations are generated to achieve development.

Equity creates people that are free in their decisions and capacities, which results in better life conditions. Advance of democracy in Mexico should result in welfare for those social groups that require greater opportunities from public and private institutions at local and national levels, such as girls, boys and teenagers with conditions such as malnutrition, abuse, violence and abandonment; women in situations of abuse and sexual exploitation; indigenous people; vulnerable senior citizens and people with disabilities, among others, who are crucial to consolidate a solid social foundation for the pursuit of development. Sustainable human development seeks to reduce inequity through a model that arises from communities and municipalities, which are the institutions in which inequities and differences are more easily identified. Therefore, sustainable human development seeks that citizens be in charge of monitoring and controlling social policies.

The essence of sustainable human development lies in that all people have equal access to development opportunities in the present and in the future. Equity is a necessary and essential condition for Mexico, a condition that will allow the inhabitants of the country to have access to a better quality of life. For this reason, the gradual achievement of full equity among society represents an important advance in the achievement of sustainable human development.

Security
Traditionally, security has been linked to the protection of the Nation-state against external threats; however, in the present work security takes on a human focus, shifting its direction towards people in their daily lives, homes, jobs and within their communities by including dimensions related to health, employment, education, the environment, as well as political and civil aspects of society. This category

of security is called human security, and was introduced in the 1993 Human Development Report.[8]

Human security includes two main aspects; first, it constitutes a fundamental element against chronic threats such as hunger, disease and repression; second, it represents a protection element against unforeseen and acute changes of day-to-day life at home, at work or in the community. Threats that in both cases may exist within any society.

Human security is centered on people and is concerned about freedom and the social opportunities man can exercise, which is why this concept is composed of: environmental security, refers to the balance between man and nature, as well as its uses; social security, which satisfies the basic needs of the individual and provides protection and an inclusive social environment; economic security, relates to human beings' possibility to reach a guaranteed basic income, to work freely in any lawful activity and to project their long-term expectations thanks to economic stability; public security, it is the State's responsibility to protect its citizens against domestic and international threats that may endanger their safety; legal security, which are the "rules of the game", that establish individual rights, communitarian freedoms and the obligations of people coexisting in society; and security to exercise freedom with responsibility, it is the behavior human beings must have in a free way, but with the appropriate respect to others and to the previously established rules.[9]

Thus, from its conceptual composition, human security is supported by democracy, hence guaranteeing itself a better quality of life. The concept is global and indivisible, because threats against security do not stop at national borders. Threats such as HIV/AIDS, pollution, hunger, terrorism, drug addiction, drug trafficking, unemployment, illiteracy and human rights violations are unacceptable aspects in

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8.   Sierra Fonseca, Rolando, "Integración social y equidad en la perspectiva del desarrollo humano sostenible", en Colección, Cuadernos de Desarrollo Sostenible 1, PNUD, Tegucigalpa, 2001. (In Spanish)

9.   United Nations Development Programme (UNDP), *Investing in Development, A Practical Plan to Achieve the Millennium Development Goals*, UNDP, London, 2005.

a democratic world. This is why human security is recognized as an essential condition to place Mexico in the path of sustainable human development. Just as with equity, this condition requires the consolidation of the rule of law to promote through an adequate institutional framework, an environment of concord in which people can enjoy their individual freedom through active citizen participation.

Recognition and protection of human rights
Respect for human rights constitutes is a central issue in the international debate on promoting and guaranteeing human dignity in its individual, social and material dimensions.[10] Just as the convention of human rights, sustainable human development seeks to guarantee freedom, welfare and dignity of the person; which is why it is impossible to refer to the existence of sustainable human development without a full promotion of human rights, because individually or collectively they provide principles of responsibility and social justice to the concept of development.

The protection of human rights is an essential condition for development but in turn is one of the main reasons for its achievement. As with equity and human security, the emphasis on the promotion of human rights must fundamentally take place in the circles where, with greater difficulty, violation to human rights are identified, that is to say, in small communities and municipalities.

These human rights, according to their evolution, cover a wide spectrum that includes what is sometimes referred to as the three generations of rights: *a)* first-generation human rights, which refer to civil and political rights, also known as classic rights; *b)* second generation human rights, which constitute economic, social and cultural rights, due to which the rule of law progresses to a superior stage, that is to say, to a social rule of law; and finally, *c)* third-generation human

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10. Human rights are those that all people have, by virtue of their common humanity, to have a life of freedom and dignity. They grant the possibility of moral claims that limit the conduct of individual and collective players and the design of social agreements, and are universal, inalienable and indivisible.

rights, a group of rights promoted from the 1960's to encourage social progress and raise the standard of living of all people.[11]

> Human Rights are a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, […] shall strive by teaching and education to promote respect for these rights and freedoms […] to secure their universal and effective recognition and observance, both among the peoples of Member States (of the United Nations) themselves and among the peoples of territories under their jurisdiction.[12]

This argument concerns all institutions in their social state and all human beings, who must place the respect to human rights in the first place to bring harmony and social equity necessary to achieve sustainable human development. Institutional support around human rights from governments must shelter as in the case of the conditions previously described, any public policy initiative.

Acknowledgement of the person as an agent of change
The development of the person is guaranteed through the expansion of their opportunities, which is a fundamental aspect of SHD. In this regard, the importance of this paradigm of development lies in the significance given to the role of people in their own development process, that is to say, from being simple individuals dragged by formal institutions to the conditions of life that are conventionally considered as ideal, they become the main promoters of the life conditions they value. Individuals have the ability and the need to expand their opportunities to access better health, education and income conditions, and also require freedom to participate and decide on their future. For this

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11.   Aguilar Cuevas, Magdalena, "Las tres Generaciones de los Derechos Humanos", *Derechos Humanos*, núm. 30, Comisión de los Derechos Humanos del Estado de México (COD-HEM), Mexico, p. 93. (In Spanish)

12.   United Nations (ONU), Human Rights Declaration, ONU, 2011. For reference: http://www.un.org/es/documents/udhr/ (last revision, may 2011). (In Spanish)

reason, acknowledging individuals as the protagonists of their own development process is a fundamental condition for development and materializes through the institutionalization of citizen participation and democratic normalization.

Individuals have the potential to set their goals, to pursue them and evaluate their compliance; this is part of their freedom as human beings. Thus, people become agents of their own development, to the extent that they can achieve the goals they consider worthy, they determine which a goals are their priority and outline a strategy to achieve them. While it is true that all people can value a healthy life, the acquisition of basic knowledge or enough resources to satisfy their basic needs, they do it differently according to their personal characteristics and circumstances. There are no universal formulas to involve people in their own development; however, civil society organizations work towards sensitizing the population on society's problems, since it is made up of citizens with concerns and specific needs.

A country that recognizes the person as an agent of change and is capable of ensure citizen participation will have greater development perspectives and possibilities than those nations that only have a merely economic approach. Sustainable human development is based on players who promote it, not only generating it but also valuing it, and such promotion and value make more sense in the local environment, as it is the closest environment to citizens and the easiest to participate in.

Eradication of discrimination
The fight against all forms of discrimination is one of the main tasks of any democratic society.[13] In Mexico, as in most Latin-American countries, there are still severe cases of discrimination. According to

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13.   Rincón Gallardo, Gilberto, Discriminación e igualdad de oportunidades, Conferencia del Consejo Nacional para prevenir la Discriminación, Yucatán, 2004. (In Spanish)

the UNDP, the presence of discrimination forms a clear evidence that democracy is not yet fully consolidated.[14]

Discrimination is the situation in which because of prejudice, a person or group of persons is treated unfavorably, usually for belonging to a social class, ethnic category, or their specific ideology.[15] It can also be defined as an omission, or arbitrary exclusion of rights and opportunities such as education, health and employment services due to physical, ideological, political, social or mental conditions that characterize the person subject to this act. Discrimination is related to specific practices that occasionally become habitual and cause severe damage to society, generating high economic costs and fragmenting the social fabric.

Locally, the most common types of discrimination are related to gender and socio-economic conditions, largely due to laxity and lack of institutional mechanisms to inform the public about their rights and about the acts through which, even by omission, discrimination takes place. Gradual but constant eradication of discrimination is an important condition for development due to the importance of building a cohesive and unified society to address economic, social and political changes that accompany the process of development from the basic cells of society: families and communities. The eradication of discrimination, as well as the rest of the conditions for sustainable human development, must be accompanied by appropriate governmental work, and fundamentally, by citizen participation that requires and ensure adequate performance of the institutions that seek development. The conditions for sustainable human development thus establish a social

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14.   United Nations Development Programme (UNDP), *La democracia en América Latina: hacia una democracia de las ciudadanas y los ciudadanos*, PNUD, 2004, p. 211. http://www.gobernabilidadde- mocratica-pnud.org/index_new.php (last revision, may de 2011). (In Spanish)

15.   Secretariat of Social Development (SEDESOL) and National Council to Prevent Discrimination (CONAPRED), *Primera Encuesta Nacional sobre Discriminación en México*, Mexico, 2005. (In Spanish)

setting for fair political and economic operation from the state, which would bring the overall development of society.

Once the social settings is in place, one that offers conditions of equity, security, respect, the promotion of human rights, recognition of individuals as the protagonists of their own development, and the eradication of discrimination; it is also necessary to ensure the functioning of financial means for development.

Means
The realization of sustainable human development proposed in this document depends on the gradual achievement of the five social conditions previously described, as well as obtaining the necessary means to consolidate the proper functioning of the economic sphere of the country. Such means, represented by productivity, competitiveness and cooperation, will largely define the political, social and economic circumstances that directly influence the development of the individual.

The term productivity in the framework of sustainable human development is used to promote the efficient use of available resources in society without compromising those to be used by future generations, since by having high productivity levels, society's individual and collective income rises. Meanwhile, competitiveness demands a reorientation towards the vision of sustainable human development, by encouraging changes in culture in order for people to take advantage of opportunities in life through work and innovation. Lastly, cooperation, seen as a means to achieve sustainable human development, is essential to balance the efforts of the market, the private sector and society, strengthening human, social and economic capital of Mexico.

By recognizing that sustainable human development means are needed to access the new paradigm of development, and that these should converge with the prior establishment of basic conditions, it is possible to establish public policies to safeguard the freedom of people and the sustainability of the process of development. For this reason, governments, the private sector and society must promote productivity, competitiveness and cooperation to achieve SHD.

These means, similarly to the conditions set out above, are elements that should be adjusted based on the context prevailing at the site of application of the proposed model, under the clarity that their nature must generally focus on economic aspects that provide dynamism and certainty to the conditions and at the same time become the vehicle for the gradual consolidation of development purposes. Thus, the following are the means that, according to this approach, will facilitate gradual access to the purposes of development; and which, in turn, similarly to the conditions, represent greater levels of sustainable human development themselves.

Productivity
One of the concepts constantly referred to in the analysis of global economic development is productivity, because it represents one of the main weighting factors of nations' economic growth. Productivity involves the efficient use of an economy's resources for the production of goods and services; which is why a productive country is characterized as such by its efficiency in using wealth, knowledge, energy and human resources to produce and distribute goods and services in a competitive market. In this sense, the OECD defines productivity as "a ratio of a volume measure of output to a volume measure of input use."[16]

Despite the existence of a certain global agreement on the definition of productivity, it does not serve a single purpose, but covers various topics such as:

- Technology. Technical change determines productivity growth. Technology has been described as "the currently known ways of converting resources into outputs desired by the economy", it allows countries to be placed in better situations in respect to their neighbors and commercial partners.

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16. Organization for Economic Co-operation and Development (OECD), *Measuring Productivity*, OECD, France, 2001, pp. 11.

- Efficiency. The quest for identifying changes in efficiency is conceptually different from identifying technical change. Efficiency means that a production process has achieved the maximum amount of output that is physically achievable with current technology, and given a fixed amount of inputs. Technical efficiency gains are thus a movement towards "best practice", or the elimination of technical and organizational inefficiencies.
- Real cost savings. Productivity measurement in practice could be seen as a quest to identify real cost savings in production.
- Benchmarking in production processes. In the field of business economics, comparisons of productivity measures for specific production processes can help to identify inefficiencies.
- Living standards. Measurement of productivity is a key element towards assessing standards of living. A simple example is per capita income, probably the most common measure of living standards.[17]

Productivity is a key component to the paradigm of sustainable human development; it seeks for people to fully participate in the production process to generation income and contribute to economic growth. Sustainable human development favors productivity of people by increasing their ability to work, and therefore increasing their progress and prosperity over time and through generations. Individuals –as the main reason for development- need to improve their work skills, income and quality of life.

In this sense, labor productivity is defined as GDP per hour worked, that is to say, how much each labor hour contributes to a country's GDP; it comes from an efficient management of production processes through better use of production factors and their combinations, or the decrease of intermediate goods and services.[18] Therefore,

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17.   Ibidem, pp. 11-12.
18.   Organization for Economic Co-operation and Development (OECD), OECD *Factbook 2010, Economic, Environmental and Social Statistics*, OECD, 2010. Consultar: http://www.oecd-ilibrary.org/economics/oecd-factbook_18147364 (last revision, may 2011).

to increase a country's productivity, it is necessary to explore specific reforms such as the reduction of labor inflexibilities and improvement of education levels, essential aspects identified by the International Monetary Fund (IMF) as windows of opportunity for Mexico.[19]

Although in general terms, governments and businesses are aware of the benefits of high productivity, Mexico still lacks an adequate level due –among other aspects- to the existing low level of human capital, because in spite of the existence of a large amount of manpower, it is not sufficiently qualified.

Other reasons for low productivity identified in developing countries such as Mexico are the lack of dynamism of companies, usually caused by high regulations and costly employment protection, as well as the lack of financing and limited credit for small and medium companies, aspects that obstruct the investment in productive capital and consequently inhibit the improvement in the quality of domestic products.[20]

In this regard, strengthening of productivity through timely interventions on behalf of governments and the private sector will result in the consolidation of the means of development, that is to say, the technical aspects of economic performance.

Competitiveness
Competitiveness is also a multidimensional factor for the economic development of nations, which is why various authors have tried to define it through diverse arguments and elements. The definition used in this text refers to the ability of a national economy to maintain and increase its participation in markets, improving the income of citizens. That is, it is understood as a process of generation and dissemination of favorable physical, technological, social, environmental and institutional capacities, which aim to develop economic activities

19.   International Monetary Fund (IMF, FMI in Spanish), *Perspectivas económicas: Las Américas*, FMI, Washington, 2007, p. 30. (In Spanish)
20.   Amos, Gabriela, "México Gran Visión", Convención Nacional de Delegaciones de la Cámara Nacional de la Industria de la Transformación, Mexico, 2004. (In Spanish)

that generate wealth and employment. For this, it is necessary to establish competitive advantages or differentiation in supply costs, with respect to those countries producing the same goods and provide the same services.

Competitiveness has been linked to factors such as the presence of cheap labor, abundant natural resources, the role of governments and public policies, among others. For example, there are claims that competitive countries should have cheap and abundant labor, however, there are countries with a small number of paid workers due to their demographic characteristics that, contrary to common belief, have high competitiveness rates. Another approach relates the competitiveness of a country to the amount of natural resources that it possesses, however, there are countries with few natural resources that exceed countries with large natural endowments in competitiveness.[21] On the relationship between competitiveness and the role of governments in public policies, it has been argued that a state with a minor role in promotion, trade protection and subsidies towards certain sectors, brings more competitiveness, however, there are economies whose governments have played an important role in many productive sectors, and once the government withdrew from the activities, countries continued their path of competitiveness.[22]

While the previous arguments are based on concrete study cases, they do not convincingly explain the meaning of competitiveness by themselves. A country does not reach high levels of competitiveness by reducing the wages of their workers, the solution has a more complex background, it requires various elements such as citizen participation, government transparency, cultural change, better infrastructure and adequate job training and education, as well as a regulatory framework capable of ensuring fair competition in the

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21.   Schwab, Klaus (Ed.), *The Global Competitiveness Report 2010-2011*, World Economic Forum, Switzerland, 2011, p. 37.

22.   Porter, Michael, *The Competitive Advantages of Nations*, Free Press, New York, 1995.

productive sectors of economies, among others, if the expectation to raise a nation's competitiveness truly exists.

Federal entities, as well as the country's municipalities, can achieve higher competitiveness levels through actions and public policies implemented by the corresponding authorities. Competitiveness depends on the participation and the balance of power between the government, the private sector and society, which should serve as the main promoter of development.

Cooperation

Cooperation is defined as the set of actions performed by multiple states, public and private organizations, international organisms, non-governmental organizations, multilateral institutions, persons, etcetera, who respond to shared interests in the face of new demands of globalization.[23] Cooperation is an imperious necessity and a fundamental means to achieve sustainable human development, which involves each inhabitant of a nation and which must flourish in the social, economic and political environments.

It is internationally recognized as a fundamental mechanism for foreign policy, because through it the exchanges of a country with the rest of the world are promoted, strengthened and invigorated. International cooperation allows nations to generate scenarios for achieving development, while at the national environment it strengthens the execution of activities and projects oriented towards fighting problems such as poverty, inequity, human rights violation, violence, insecurity, environmental degradation and all those discrepancies that affect society.

Again, democracy is a key element to promote cooperation, especially when the needs major changes to achieve development. The combination of efforts facilitates the solution of problems that plague

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23.   Gómez Galán, Manuel y José Antonio Sanahuja, *El sistema internacional de cooperación al desarrollo: una aproximación a sus actores e instrumentos*, Centro de Comunicación, Investigación y Documentación Europa- América Latina (CIDEAL), Madrid, 1999. (In Spanish)

developing countries like Mexico, such as the unfortunate surge of violence because of organized crime, the lack of formal employment, environmental degradation, among other factors. These phenomena can and should be addressed in a coordinated manner between the various authorities and orders of government levels, as well as among all sectors of society; because collaboration provides more guidance to countries, contributes to strengthen the rule of law and reinforces the capacities to achieve a comprehensive, human and sustainable development.

This co-operative atmosphere is obtained when the existence of solid institutions is combined, along with a proper management of public resources, political will and civic consciousness in every region, to abate negative aspects. In this sense, development is a task that requires cooperation from all inhabitants of a nation.

In Mexico it is necessary to reinforce these three means, as in the same way that the conditions, productivity, competitiveness and cooperation are key elements in achieving sustainable human development and its ultimate ends, embodied by freedom and sustainability.

Ends

The ends of sustainable human development, expressed with freedom and sustainability, extend beyond ideological, political and cultural borders due to their conceptual proximity and convergence in meaning to common good. For this reason, they are considered fundamental aspects to strengthen and consolidate the development of Mexico.

Such is the importance of freedom and sustainability as ultimate ends of sustainable human development, that these concepts cannot be limited to a goal that once achieved be set aside in its ongoing consolidation; on the contrary, both are elements with great dynamic potential that need to be continuously improved and strengthened due to their ability to multiply the benefits of any public policy and outreach to society. Thus, freedom and sustainability are not only considered the ends to sustainable human development, but they are also superior conditions and means to boost the development of people to ever-higher states of development.

Progress in the consolidation of freedom and sustainability involves placing society in the right path to sustainable human development; a path characterized by a conscious and responsible participation from authorities, political actors, entrepreneurs and the overall citizenship in whole, so ends can be achieved and constantly nourished. Freedom and sustainability are the goals of a new proposal of development, the ultimate aim of a well-informed society and the most clear and compelling opportunity to offer a better quality of life to current and future generations.

Freedom

Freedom is an element that is intrinsically linked to the possibility that the people constitute the main promoters of their development, due to the high weighting in the assessment that is made of it, Paz has named it as "an act both irrevocable and instantaneous, which consists of selecting one possibility among many [to constitute the] affirmation of what in each one of us is unique and personal, something that cannot be reduced to any generalization".[24]

Poverty, hunger, malnutrition, illiteracy and in general, lack of opportunities are a consequence of the absence of basic freedoms. This lack of freedoms responds to institutional weakness, unable to provide the necessary public services in an efficient way to the most vulnerable sectors of the population; thus, the existence of freedom translates into the opportunity for men and women to achieve a welfare level that satisfies their aspirations.

For Amartya Sen, phenomena such as famine, the lack of sanitary assistance, the lack of functional education, unemployment and abuse to political freedoms and human rights, severely limit fundamental freedoms of the inhabitants in poor and wealthy countries.[25] In this thesis, Sen identifies two fundamental roles of freedom

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24.   Paz, Octavio, Discurso en la ceremonia de entrega del Premio Cervantes, 1981. (In Spanish)
25.   Sen, Amartya, *Development as Freedom*, Oxford University Press, Oxford, 1999.

in the process of development, the first as the primary end and as the principal means to achieve development; with Freedom as an end, the success of society is evaluated in terms of the fundamental freedoms its members have, that is, the degree to which society has the freedom to do the things they value. The second role of freedom in the process of development implies that it is viewed as a means, that is, freedom is a determinant of individual initiative and social effectiveness since an increment in freedoms "enhances the ability of people to help themselves and also to influence the world, and these matters are central to the process of development".[26]

In its role as a means, freedom possesses an instrumental value and is again divided into five distinct types of freedom that are related and mutually reinforcing: *a)* political freedoms, *b)* economic facilities, *c)* social opportunities, *d)* transparency guarantees and *e)* protective security. All this helps to advance the general capability of a person to live more freely.[27]

The concept of freedom used in this text coincides with the position of Sen, who recognizes it as one of the basic purposes and as an inexhaustible means in the pursuit of development. This freedom, in any case, implies respect and promotion of human rights, the abatement of inequities of gender, income, education, access to goods and services, the guarantee of universal human security and the certainty that people themselves will determine and work in favor of the type of life they value. Similarly, to the extent that the State stimulates cooperation, competitiveness and productivity, citizens can achieve higher levels of freedom, which will consequently result in greater sustainable human development for society.

The ends of sustainable human development –freedom and sustainability- materialize the advance on the conditions and means previously discussed. Freedom is valued as a general ideal that responds to all areas of human life, because it involves economic, politic

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26.   Ibidem, p. 18.
27.   Ibidem, p. 10.

and social spheres, opening the range of opportunities for people to achieve lives that they find worthy of being valued.

Sustainability

The concept of sustainability, generally related to the field of the environment, has a reach that goes beyond the mere preservation of the environment surrounding the human being; its meaning also includes intangible matters, typical of human nature such as social and cultural conditions, economic aspects and its stability over time, people's political freedoms, with the implications of integration and permanence that the citizenry values, as well as legal certainty and the guarantee of a strong and permanent rule of law above political situations. Sustainability, according to the United Nations Division for Sustainable Development (DSD), is a form of development that meets the needs of the present without compromising the ability of the future generations to satisfy their own needs; involving the civil society, political parties and private and public institutions. Sustainability takes on the important task of translating these achievements from the present towards the future and sustaining them in a permanent way.

As Haughton and Hunter point out, sustainability encompasses at least three basic principles:[28]

- Inter-generational equity. In considering any human activity, the effects on the ability of future generations to meet their needs and aspirations must be considered.
- Social Justice. Sustainability requires that control over distribution of resources be more evenly exercised, taking account of basic needs and common aspirations.
- Transfrontier Responsibility. At the broad level, stewardship of the global environment is required. More specifically, trans frontier pollution needs to be recognized and controlled. Where feasible, the impacts of human activity should not involve an

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28.   Haughton, Graham and Hunter, Colin, *Sustainable Cities*, Kingsley, London, 1994. p. 16.

uncompensated geographical displacement of environmental problems.

Furthermore, these authors point out that sustainability must satisfy the human needs of equity, social justice and basic human rights of health, income, education, environmental integrity and ethnic and social self-determination.

Thus, similarly to what happens with freedom as the end of sustainable human development, sustainability also encompasses implicitly or explicitly, some conditions and means of sustainable human development. Repetto points out the economic context of sustainability by stating that:

At the core of the idea of sustainability, then, is the concept that current decisions should not impair the prospects for maintaining or improving future living standards. This implies that our economic system should be managed so we can live off the dividends of our resources.[29]

On his part, Robert Solow indicates that sustainability is a indicates of equitable distribution, because it "is an obligation to conduct ourselves so that we leave to the future the option or the capacity to be as well off as we are. [...] it is an injunction not to satisfy ourselves by impoverishing our successors.[30] In addition, he indicates that the problem with inter-generational equity lies in that consumption per head must be relatively similar amongst the different generations, because "if consumption per head were higher for a earlier than for a later generation, then social welfare would be increased if the early generation were to consume less and, correspondingly, save and invest more, so as to permit higher consumption in the future."[31] That

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29.   Quoted in Anand, Sudhir y Amartya Sen, 1994, op. cit., p. 13.

30.   Solow, Robert, "Sustainability: An Economist's Perspective", The Eighteenth J. Seward Johnson Lecture, Woods Hole Oceanographic Institution, Massachusetts, 1991, p. 3.

31.   Solow, Robert, "Intergenerational Equity and Exhaustible Resources", *The Review of Economic Studies*, Vol. 41, Symposium on the Economic Exhaustible Resources, United States, 1974, p. 4.

is, in order to reach general maximum consumption in all times, there must be an intrinsic agreement between generations.

In this sense, sustainable governments should be capable of generating public policies with long-term vision to encourage a democratic environment characterized by equal opportunities and the promotion of higher living standards for society; while people with sustainable vision should responsibly exercise human freedom to maintain balance in ecosystems, to rationally make use of resources and trigger their capacities so future generations are not deprived of their development opportunities.

As it can be seen, the conditions and means of sustainable human development represent aspects that, in all cases, raise the living standard of society and fall into freedom and sustainability as ultimate ends of sustainable human development to find their deepest meanings in terms of human satisfaction. These conditions, means and ends are those that make up the conceptual framework proposed on this document for the obtainment of sustainable human development in Mexico.

While SHD more adequately expresses the meaning of a comprehensive development for people than the concept of economic growth, sustainable development or human development, this theoretical construct lacked a theoretical and conceptual framework that could measure countries' advance in this direction. For this reason, this section proposes this conceptual framework, composed of the variables that were promptly described and categorized as the conditions, means and ends of sustainable human development. With these grounds, the theoretical framework of the model for SHD will now be described.

2.2. General Systems Theory and its passage through Mexico

Complex social bodies -such as communities, municipalities, states and nations- in addition to various actors endowed with different objectives and missions, also represent complex sets of internal relationships nurtured by communication networks that govern the lives

of their inhabitants. Mexico, just like the rest of the world, is attached to this reality by being immersed in the complex global system. For this reason, it is necessary that public policies that attempt to solve challenges –current and former- come from systemic thinking, since quest for plural solutions focusing on particular points without observing the system as a whole, does not offer favorable results for the society's democratic coexistence.

There are numerous examples of failed strategies and public policies around the world, that sustain the affirmation that a systemic vision provides greater clarity in the implementation of social and political actions to improve people's welfare. The fight against poverty through government programs unrelated to the efforts made by the organized civil society and the private sector, and away from proper education that allows the use of resources offered by the government to the most vulnerable sectors of society, is an effort whose results are far from those that could be obtained through systemic organization.

Another example of the need for adequate systemic planning of public policies oriented towards sustainable human development is the insecurity and organized crime plaguing Mexico. The sensitivity of the issue requires an approach from very different perspectives, such as the attention to drug addictions and preventing them, an education founded on ethical values, an adequate and comprehensive strategy to detect financial transactions from organized crime, police intelligence strategies to fight crime, international cooperation agreements, proper employment offers that discourage the entry of citizens to these markets, adequate shielding from corruption, a penitentiary system oriented towards social reinsertion and many other fundamental aspects that must move forward in an organized way to reduce the power of criminal groups and to elevate the quality of life of citizens. In this example, planning from a local environment takes importance.

Thus, one of the main proposals of this text consists of reorienting the way political and economical decisions are taken, towards a systemic point of view that enables a new balance of power between the state, market and society in decision-making: elements that in all cases, give pertinence to the approach presented in this work. That

is, the use of the general systems theory is proposed to outline public policies that will help consolidate sustainable human development in the country, due to the lack of a theoretical construct capable of directing the actions of society towards common and conventionally accepted goals like freedom and sustainability.

In this sense the general systems theory constitutes the theoretical and methodological perspective that offers greater possibilities of a functional approximation to sustainable human development under the broad flexibility with which it allows the participation of multiple and diverse actors in what is known as social system, as well as its ability to include the actions and interconnections of these players in the pursuit of common goals. For this reason, the general systems theory is established as a useful approximation for the analysis of the gestation, growth and implementation of public policies, as well as the measure of its results and its possible reorientation in case these do not fully adjust to the needs of society.

The general systems theory arises from the scientific principles of physics, chemistry and biology, sciences in which the subjects of study are natural systems that relate to each other, so the operation of each one of its components affects that of the others in an invariable and defined way.[32] The origin of this theory goes back to 1956, when the Society for General Systems Research published the book General Systems, where in the main article, Ludwig von Bertalanffy pointed out that it was necessary to integrate natural and social sciences by means of a general theory.[33]

Bertalanffy's contributions serve as the basis to transfer the analysis and understanding of natural systems to social systems through the establishment of general rules and conceptual formulations applicable to any field of knowledge. Given its ability to conceive objects of study as systems, the general systems theory is constituted

32. Haines, Stephen G., *The systems thinking approach to strategic planning and management*, St. Lucie Press, United States, 2000.
33. Von Bertalanffy, Ludwig, "General Systems Theory", General Systems, 1, 1956, p. 2, en van Gigch, John P., *Teoría General de Sistemas*, Trillas, México DF, 2008, p. 65.

as a theoretical approach that beyond explaining and describing the social systems and their relationships, it gives answers to challenges that must be addressed from different angles and in a transversely in XXI century societies.

According to Meadows, social systems are the external manifestations of cultural thinking patterns and of profound human needs, emotions, strengths, and weaknesses, and changing them is not simple.[34]

In Mexico there have been two attempts to apply the general systems theory in the social and political life of the country. During the second half of the 1970's, Russell Ackoff held courses, seminars and conferences on the general systems theory in the National Autonomous University of Mexico (UNAM), paying special attention to the idea that the systemic organization of knowledge allows "to build the best possible futures in the long term".[35] In his stay he wrote an essay in which he raised the possibility of implementing the systems theory in Mexico in order to solve certain problems in national development planning. Some of these proposals reached government agencies but were never executed.

When analyzing Ackoff's passage through Mexico, Vergara Anderson pointed out that "the serious problems of Mexico had been identified by him; their nature unveiled; their solution, at least in general terms, had been proposed, as well as the way to undertake them. All that was required was the real intention of those who in one way or another had the ability to implement these solutions".[36] That is, political conditions for decision-making did not favor the

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34. Meadows, Donella H., *Thinking in systems*. A primer, Sustainability Institute, United States, 2008, p. 167.

35. Vergara Anderson, Luis, "De cómo Russell Ackoff y Stafford Beer llegaron a condenar a México, y de cómo Niklas Luhmann nos ayuda a comprender sus extravíos y también alguno de los nuestros", *Revista Umbral* XXI, n. 21, verano, Universidad Iberoamericana, Mexico, 1996, p.48. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

36. Ibidem, pp. 48-49. (Translator's own translation of quote from the Spanish version, document does not exist in English)

systemic proposal of organization in the design of public policies. The control and political rigidity inhibited the emergence of a technical and scientific approach to social organization with a long-term vision.

Meanwhile, Anthony Stafford Beer approached the administration of President Miguel de la Madrid in 1982, to propose actions to give solution to problems plaguing the country. This proposal was based on a model where the central concept was the viable system, which was characterized by its survival ability –subsist or adapt- in the midst of a changing environment. The response to this work was similar to that received by Ackoff.[37] Thus, the opportunity to adopt a holistic vision of development was pushed aside, in which people's welfare would be privileged before any political action made by the state.

This brief review through the history of general systems theory in Mexico reveals some of the reasons why it was not possible to implement and support this way of perceiving reality. However, times have changed, the mentality and the way of governing are different, and the opportunities that are presented should be exploited in a rational and systemic manner, articulating municipal and state plans to a short, medium and long term human vision.

For the use of the general systems theory through a systemic model for sustainable human development, the presence of a society aware of the advantages that systemic thinking offers becomes fundamental, as a way of planning, organizing and executing projects aimed towards common good. In this sense, Mexican society has important and valuable historic and contemporary elements, such as solidarity and fraternity, which facilitate change towards systemic organization and development with medium and long-term vision, as sustainable human development offers.

The democratic normalcy of the country; the ever-growing social participation in the demonstration of concerns on behalf of citizens; the growing desire for global integration; the gradual –but steady- increase in education levels among the population; the sense of

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37.   Ibidem, p. 50.

belonging to a concept of mexicanity that is disperse but unmistakable, which respects the nuances brought on by ethnic and cultural diversity of Mexico; greater citizen awareness of the importance and need for greater social justice; as well as the natural conviction of the human being for greater levels of welfare that define Mexican society, are elements that show the need for gradual and systemic reordering, which places the person at the center of the development strategy.

For this purpose, the general systems theory has its own taxonomy and conceptual structure that allow it to effectively influence in the social environment.

This section briefly describes the conceptual structure that led to creation of systemic models considering certain fundamental concepts that aid this discipline in classifying and describing the integrating elements of systems.[38]

*Conceptual structure of the General Systems Theory*

The materialization of the general systems theory into real benefits for society requires scientific and methodological instruments that convert the concerns and needs of the population into concrete actions from the governments, the private sector and the citizenry. These instruments, known as systemic models, arise from a systemic planning that contemplates the complex nature of the existent relationships among actors of society. Based on this premise, systemic planning values the possible effects of actions on any of the components of the complex social system that represents a country.

Before attempting to describe the operation of systemic models, it is necessary to describe the conceptual structure that characterizes the difficult transition from systemic thinking to the creation of a systemic model. For this reason, the following the three stages through

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38.   For a more detailed review of the general systems theory, the reader may turn to specialized texts; van Gigch, John P., *Teoría General de Sistemas*, Trillas, Mexico DF., 2008; Luhmann, Niklas, *Sociedad y sistema: la ambición de la teoría*, Paidos, Spain, 1990; Colle, Raymond, ¿Qué es la teoría cognitiva sistémica de la comunicación?, Centro de Estudios Mediales, Universidad Diego Portales, Chile; among others. (Texts in Spanish)

which the creation of the systemic models came to be, as well as some taxonomic elements of the general systems theory, required to use the appropriate terminology in the description of the systems and their models. Figure 2.1 shows the transition from systemic thinking to the creation of a systemic model.

Figure 2.1. From systemic thinking to the systemic model

Origin ----> SYSTEMIC THINKING

Leads to ----> SYSTEMIC PLANNING

Propose ----> SYSTEMIC MODEL
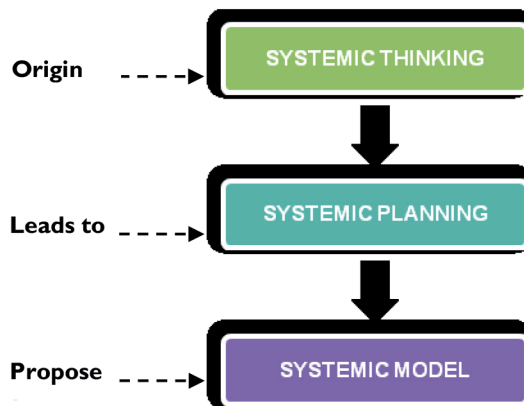
Source: Author's preparation

Systemic Thinking
Systemic thinking occupies a predominant in social sciences due to the need to comprehend and analyze the complex relationships that exist within social systems. Conceiving reality in systemic terms can energize and adopt common performance patterns among the members of society without obstructing resource optimization and obtaining higher levels of welfare for the population.

To think of systems, despite their complexity, gives a scientific and organizational quality to public affairs because the vision of totality can disintegrate into various systems, making it easier to define the processes that will accelerate and optimize the performance of social structures. Thus, systemic thinking is very useful to align actions,

strategies, programs, responsibilities and goals, from public policies that facilitate the successful operation of the system's components.

Current reality requires visualizing society as a complex network of interconnected systems and constituted by subsystems, which in turn are constantly exchanging information with each other and with the environment. Explaining and analyzing social systems permits anticipated actions to challenges that come from the development of humanity.

For Peter Senge, systemic thinking is a way of organizing ideas in an intelligent way with the purpose of giving them a meaning and structure to observe reality and its connections.[39] Systemic thinking has become a way of life that organizes and harmonizes the behavior of several western and eastern societies with high levels of development such as Germany, Switzerland, Norway, Sweden, Finland, Japan, South Korea, Canada, United States or Australia, which use it in the development of their political and productive projects. In these societies, systemic thinking has made possible to plan and project long term national policies that adjust according to needs that may arise.

According to Senge, some of the benefits that systemic thinking offers societies who adopt it are:[40]
·   Effective planning of activities
·   An analysis of the behavior of the system after the implementation of actions
·   A reference framework that organizes daily activities
·   Continuous learning from the successes and mistakes
·   Theoretical framework for decision-making, and for the diagnosis and solution of problems
·   The creation of a better path to create strategies
·   The identification of short, medium and long term results
·   The implementation of a common language for better communication

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39.   Senge, Peter, *La quinta disciplina*, Granica, Barcelona, 1990. (In Spanish)
40.   Ibidem, p.38.

Thus, given the advantages systemic thinking offers in decision-making, the classification of systems is crucial to achieve better understanding of the subject, below are some characteristics of the systems, relevant for this analysis.

Systems may be classified as abstract or concrete and open or closed. According to Gigch, abstract systems have elements that in all cases are constituted by concepts, while concrete systems have at least two objects or subjects among its elements.[41] On the other hand, open systems have other systems with which they relate, while closed systems do not interact. The idea of open systems provides important clues to understand how a whole cannot be understood by the simple sum of its parts, but as a higher goal derived from the wealth that collective participation offers.[42] In addition, each system consists of several subsystems that have specific functions to achieve the objectives of the system as a whole. Therefore, the systems' feedback is a process by which the system uses its own products as inputs.

Other features of the systems are: *a)* Activity, function of each element of the system that are in constant dynamism; *b)* Stability, representing the security that the system will remain "alive" because of their self-reproduction abilities; *c)* Purpose, refers to the causal element of existence of the system which makes it fulfill its functions; *d)* Evolution, ability to change and promote a syncretism between its elements through a cyclical relationship that allows development; and *e)* Adaptability, the possibility of system adjusting to changes in the environment to survive.[43]

Given that life in society is composed of an intricate set of complex systems, it is necessary to adopt a comprehensive approach that yields an proper solution to the whole system in issues as complex as poverty, inequity, corruption, insecurity and many other problems

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41.   Van Gigch, John P., 2008, op. cit., p. 52.

42.   Smith Acuña, Shelly*, Systems Theory in action: applications to individual, couples and family therapy*, John Whiley & Sons Inc., United States, 2011, p. 32,

43.   Luhmann, Niklas, *Sociedad y sistema: la ambición de la teoría*, Paidos, España, 1990. (In Spanish)

that involve political, social, economic or environmental levels, and are being faced by modern societies, like the Mexican society. Progress in this sense means taking the right path, "rather than stumbling and falling in the quagmire of small solutions which only cover a part of the problem and the system, and forget to consider the interaction and interrelationships with other systems."[44]

According to these elements, Mexico can be classified as a concrete and open social system, because of its relationships within itself and with its surroundings. Relationships within this system are cyclical and the interference of each of its elements in the general functioning is tightly linked to the multiple causal phenomena of the external environment. Also, Mexico is an evolving system because its inhabitants are living beings with wills of their own and different conceptualizations of the meaning of welfare and the means to achieve it. It consists of state, municipal, local and family subsystems, immersed in a constant process of information exchange, harmonizing the activities that allow a better general performance of the whole.

When social relationships within a nation are analyzed as information flows between clearly identified subsystems, the principle of lineal causality (cause-effect) is replaced by the teleological precept that leads to interpret the object not by itself, but by its behavior.[45] In this regard, it must also be mentioned that in order to reach success when using the GST (General Systems Theory), it is necessary to have a broad sense of responsibility and a positive attitude, as well as precise knowledge to generate conscience on the need to use systemic planning that ensures better quality of life for people. Below, this systemic planning and its implications for the construction of systemic models is briefly described.

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44. Van Gigch, John P., 2008, op. cit., p. 16. (Translator's own translation of quote from the Spanish version)

45. Colle, Raymond, ¿Qué es la teoría cognitiva sistémica de la comunicación?, Centro de Estudios Mediales, Universidad Diego Portales, Chile, 2002, p. 5. (In Spanish)

Systemic Planning

From systemic thinking it is possible to conduct systemic planning, which means developing a methodical process that can be applied as a strategy for building a systemic model. Although systemic thinking has its origins in the middle of the last century, its use is so up to date that it allows the creation of plans for the regeneration and securing of the development of people in society.[46]

Systemic planning is essential, as it broadens the knowledge and analysis landscape, and allows to choose the best course of action towards development so that it is at least possible to foresee specific scenarios such as actions to follow, how and when to carry them out. Thus, systemic planning proposes the bases to promote the effectiveness of a system, as it allows to anticipate and prepare the actions required to face obstacles and transformations of the evolution of the system. In a way, systemic planning grants greater control over how to manage the resources and efforts of the system.

In principle, well-structured planning starts from rationality and logic from those who carry it out, then the precision in each movement made will be crucial to achieve objectives, while flexibility will allow to react to changes and to adapt the system's operation to the changing conditions of the global system.

The design and implementation of public policies through systemic planning not only requires a society who participates when decisions are made and the commitment of the actors involved, but it also becomes a priority to have solid and transparent institutions in the three levels of government. Governments and legislators of the municipal and state levels have the possibility to make way to the analysis and discussion of systemic planning in the country because it transforms the expectations and hopes of citizens into short, medium and long-term strategic plans: and in turn contemplate the systemic nature of society to develop an action program in which the totality of the subsystems and members participates.

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46.   Haines, Stephen G., 2000, op cit., p. 34.

The actions agreed in systemic planning are undertaken and applied through a systemic model, as it is the instrument that guarantees the proper operation of all subsystems, as well as the certainty that subsystems won't obstruct each other. Through systemic planning there is a progression from the complex taxonomic and conceptual network of systemic thinking to the creation of systemic models for development.

Systemic Model
A systemic model represents the abstraction that describes the operation and structure of a real world system. These abstractions are traditionally presented through schemes, symbols, numbers or sets of variables, in this way aspects of the system that are relevant for the intended purpose are described. The model is the representation of the interconnection of each element and components that enable the understanding of the system operation.

Building a model implies collecting data on the behavior, interaction and purpose of the elements of a system. As Colle explains, a model requires a historic analysis of the system, which is why "[it is necessary] to consider the system as subject to the passage of time. Hence the importance of another concept: process, understood as the change in matter, energy and transformation over time. The dynamic dimension of an object becomes visible and is represented through processes".[47] Models are useful for representing reality, which is why it must be considered that systems are dynamic and that their nature is changing; whereas its components and requirements are transformed over time, the model must retain a flexibility that allows it to explain, analyze and face the changes occurring in the system or in its surroundings over time.

Translating systemic models into development strategies makes it easy to properly address the changing reality that is observed in socie-

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47.   Colle, Raymond, 2002, op. cit. p. 6. (Translator's own translation of quote from the Spanish version, document does not exist in English)

ties. Systemic planning and modeling attempt to eliminate uncertainty and to reduce error possibilities in the implementation of strategies, which enables the generation of public policies that are realistic, responsible and above all, that generate better life conditions for society.

For this reason, the model for sustainable human development proposed in this document has a systemic basis in terms of planning and operation, due to the relevance that the general systems theory holds in the pursuit of development. In the following section an example of systemic model is presented, one who has enabled the articulation of development strategies, organizing the parts of the system so as to optimize the benefits of the society where it takes place. This model focuses on rural communities and additionally; this proposal is taken as basis for the model proposal of this book.

2.3. A reference model

The systemic model for urban development proposed by the International Institute for Applied Systems Analysis (IIASA),[48] concentrates in rural areas considering that in many occasions it is there where the greatest economic, social and environmental imbalances of nations take place.

The model starts from the bottom up principle, that is, it locates the needs of the rural communities and channels the efforts of politics towards them, to later extend its benefits to other levels of broader influence. A clear example is the existence of a region with potential in dairy production, the model develops the production of these inputs to the highest possible level in order to raise the competitiveness of

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48.   Generally, the IIASA projects are global analyses of different problems, implementing the work of pure science in the formulation of public policies, which for more than two decades have made the Institute the main consulting source of International Organisms. As an NGO, IIASA makes proposals outside political motivations, that its, impartial proposals. This neutrality and impartiality is valued by the national scientific organizations and their members in Africa, Asia, Europe and North America, who appoint a representative to oversee the development of the Institute.

that region, also improving the exporting capacity of the community, the education level of the people who will trade those products, the necessary road infrastructure to facilitate commercial flows and so on, until proper human development levels of community life are reached. This principle is aimed towards creating an atmosphere of sustainability, so that economic, political and social activities allow the future generations the same use of resources than the present generations. This way of supporting local growth gradually transforms into a greater regional and national development sustained over the long term.

The IIASA model is multidimensional, because it proposes the development of rural communities through a process of implementation and execution of actions in different dimensions such as human development, the political and administrative level, science and technology, economic growth, infrastructure and the care for the environment, depending on the specific needs of the communities where the model is applied. Figure II.2 illustrates the six dimensions of the model proposed by IIASA for rural development.

Figure 2.2 Dimensions of rural development for IIASA
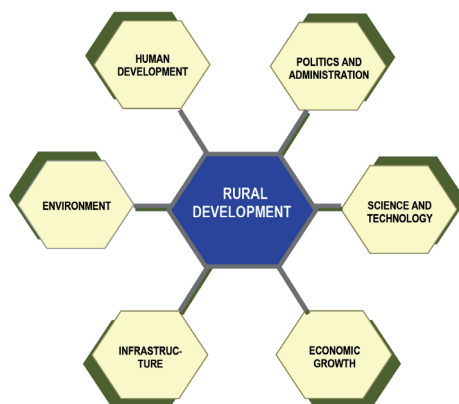
Source: RAPS-China, IIASA.

These dimensions show some of the areas on which development can be triggered in rural regions, seeking to maintain proper balance between the objectives, that is, to weigh the priorities of society, their current living conditions and how they obtain financial support. In addition, the model considers necessary to analyze the cultural aspects and environmental needs of the community in question, in order to achieve comprehensive development.

For IIASA, the model's objective is developing strategies that articulate public policies in rural areas with economic and social growth. Rural development is shaped by IIASA, as a 4-phase sequence for the construction and implementation of public policies, these phases are called: *a)* analysis, *b)* political negotiation, *c)* modeling y *d)* implementation phase.

Figure 2.3 shows these phases, divided into two areas that intersect one another due to the connection between two types of activities.

Figure 2.3. The process of Rural Development

Source: ERD Project IIASA.
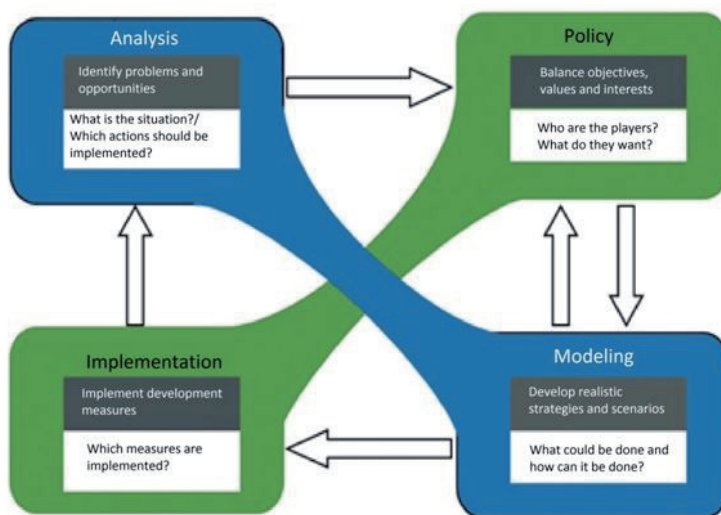
The blue areas refer to the phases that can be supported by research systems, while the green areas leave room for the participation of public, private and social in defining the objectives, values and interests, as well as implementation strategies.

This exercise is a constant dynamic of agreements, negotiations and actions directed to achieve development under systemic precepts.

The model represents a harmoniously organized system, which maintains continuous interaction between its elements and with its surroundings. Its application is done through a process defined by dynamic phases that allow its implementation based on a diagnosis, to later on continue with the construction of consensus and modeling, and to finally carry out the implementation phase, which includes feedback strategies. The following is the model developed by IIASA, reconsidered as a reference for the construction of the model for sustainable human development in Mexico to be presented in chapter III.

Analysis Phase
During this first stage, it is necessary to conduct a thorough analysis of the situation prevailing in the system, in order to provide an accurate diagnosis of its problems. This means that there is an analysis of economic, social, demographic, political or environmental problems, which begins when the population, the political class, businesses or any agent involved in the life of this system, identifies the existing problems, and recognizes that it is possible to obtain from it a solution that will bring benefits to society.

The most important thing at this stage is clearly identifying problems and describing the opportunities to solve them. During this stage of the model, society uses specialized scientists to apply the analysis of problems and to outline possible opportunities. Also, these provide an overview that describes the positive or negative changes that the modifications implied in the solution would bring.

To perform any action within a system, it is necessary to start from a diagnosis. A clear example of this dynamic can be found in the field of medicine: when a patient comes to a doctor's office and the doctor begins to examine them, the doctor creates a profile based

on the symptoms that the person first presents and studies the vital signs; only after verifying obtained data, can a diagnosis be made and a treatment prescribed. In the field of social sciences it is also necessary to measure, with all the affordable instruments, the conditions of development of every region: reliable statistics, precise indices, surveys and all the scientific methods to observe the situation in a radiographic manner. A precise diagnosis is the base for success in development strategies applied at a given time and space, because allows to address, with greater knowledge and security, the most significant problems of the region and to avoid the waste of resources.

The elaboration of the diagnosis can indicate the status of the local situation against of national or international parameters, or with respect to those with the highest or lowest indicators of some variable, in order for a decision can be made to take the right path towards the best performance of any dimension of the system. The analysis giving rise to the diagnosis must be made in a periodical manner to allow the implemented actions to adapt to the requirements of the prevailing situation and so the proposed approaches do not lose effectiveness when they are projected into the long term. A diagnosis with the precepts mentioned, gives essential information to formulate public policies directed towards development.

To make a accurate and adequate diagnosis on the prevailing situations in the region, IIASA presents an evaluation matrix that allows to scrutinize the situation of said region in detail.[49] Figure 2.4 graphically shows the analysis categories that the dimensions of the model should undergo to obtain an adequate analysis and diagnosis. It is not necessary that these diagnosis categories are made sequentially, but it is essential that the dimensions of the model go through an analysis based on these categories. Ideally, this situational analysis should be applied to each site under study, resulting in a diagnosis where needs and opportunities for development are identified.

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49.   Heilig, Gerhard K., Sustainable rural development, IIASA, Austria, 2004. Matrix extracted from the work done by IIASA investigators, which is applied to Rural Development.

Figure 2.4. Evaluation Matrix
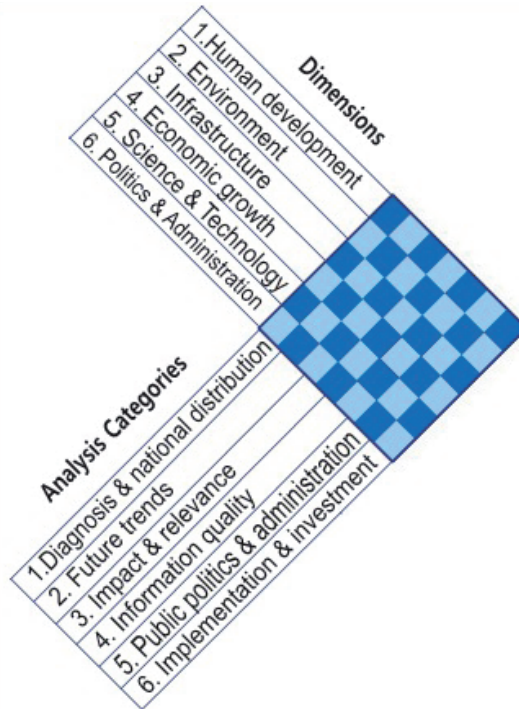
Source: ERD Project IIASA.

Policy Phase
Even having a clear and precise diagnosis on the particular situation of each locality, the next phase of the process is not simple. This phase –represented in figure 2.3 by the rectangle positioned in the upper right hand corner and referred to as Policy-, consists of presenting and discussing the main problems to be solved, to move towards a comprehensive development originated by dimensions. This means that the key players of society must reach agreements on the guidelines to be followed to promote growth and development. Therefore, this stage is highly relevant in the process, as it is the stage when

consensuses are built and political negotiations take place with the support of citizen participation and the intervention of politicians, planners and entrepreneurs.

The element that allows the construction of various development scenarios is present in the policy stage, because it is here where each player exposes the benefits or damages it would suffer with the implementation of a determined action. This way the impact is calibrated, trying to favor the majority of people involved and alluding the principle of democracy and the preservation of an amity environment at all times. This is the importance of reaching agreements and negotiations amongst all participants; it is a political work in the broadest sense, since it involves reaching consensus that clarify which are the main activities to be deployed in order to improve people's life conditions.

In the rural development model, farmers, environmental activists, food industry entrepreneurs, hotel and rural business owners, local politicians, among others, have different values and interests, which at times are opposite. This is where the political negotiation process and citizen participation can transcend into modeling scenarios for the implementation of public policies resulting from these negotiations.

Modeling phase
The third phase of the systemic model is modeling, in which strategies are developed and realistic scenarios supported by diverse investigation systems are established. Also, specific goals and objects are outlined, and the strategies and players for each project are defined. The political process in defining development premises is extremely hard when most players have different preferences. Building consensus is much easier when there is a previous planning of development, provided with scenarios and strategies that are based in real data.

Political discussions are much easier when the players can choose between a small number of real development alternatives. Usually the process of development must go through a period in which the modeling and political negotiation phases are in constant interaction,

during which the proposals get rid of entropic elements until viable and well-defined options are reached.

Implementation phase
The last phase of the model is implementation, which represents the time in which decisions are made to solve problems and where planned actions are developed and carried out. Planners refer to this state as a necessary cycle of development where the main objective consists on specifying tasks, to later designate them to the different players.

The implementation stage requires experts in aspects such as finance, management, agriculture, urban planning, commerce, tourism and any economic or social activity that may have to be implemented in the region under study. The implementation of policies and actions also requires citizen participation and the exercise of democracy, as well as ethical and harmonious attitude among public servants and entrepreneurs, as well as the intervention and support of companies and organisms that specialize in any subject that is relevant for the project. It is necessary that the implementation of public policies directed towards development in each one of the dimensions establishes goals and objectives in an accurate manner, and that these promote higher levels of welfare for society.

As mentioned previously, the systemic model described in this section works as a foundation for the construction of the systemic model for sustainable human development in Mexico that is proposed in the next chapter. The difference between the two models lies in the contribution by this document, a conceptual framework for sustainable human development that shows the ultimate end of the model through a series of variables referred to as conditions, means and ends of development. Also, the proposed model goes beyond the rural level to focus its attention on the importance of the person in all development phases and from all the government levels and geographical spheres; it also provides a clear description of the implementation and feedback phases in the process of development with its respective operative elements. Lastly, the systemic model for sustainable human development proposes, in the fourth chapter, the

need for an environment of concord and democracy to ensure its proper functioning and the resulting generation of development among subsystems in Mexico.

In this regard, it is important to reaffirm the relevance and importance of the use of the general systems theory as the theoretical placement that, from this perspective, permits that the proposed model offers a gradual development for the XXI century Mexican society. A society characterized by its desire for more equity and full respect for human rights, wanting of higher levels of human security and of an end to discrimination, to be established as the main promoter of its development and that of each of its members. A society aware of the benefits offered by higher levels of productivity, competitiveness and international cooperation in order to achieve the aspirations of full freedom and sustainability that as a population are shared and are synonymous of common welfare.

2.4. Considerations necessary for the implementation of the model

Political, economic, and social models of behavior require a group of basic assumptions from which a high level of effectiveness in their actions is obtained. In this sense, the socio-demographic characteristics of the place where the systemic models of development will be implemented determine, in good measure, the results that these can offer to the societies that implement them.

The prevailing equilibrium between the forces of the state, business elite, workers and the organized society –ideally governed by democracy- may determine the success or failure in the implementation of models. Also, economic and trade dynamics that prevail in this system are established as a good indicator of the scope the application of the model will have: the more agile, transparent and institutionally strengthened the legal structures and the markets who compose the system are, the greater the impact of the public policies implemented through the model. Lastly, the existing productive infrastructure and the human capital in the system are also key variables to achieve

greater levels of sustainable human development. Despite that in many so-called developing economies these assumptions are not presented or are presented incompletely, systemic thinking offers the advantage of gradually and progressively balancing the weight of the social players in decision-making and the implementation of the actions made in favor of development. In this regard, three examples of the implementation of the IIASA model for rural development are presented, which show the importance of certain platforms for the successful implementation of the model; to later present the technical, political, economic and participation platforms, which desirably should prevail in the systems in which the model will be applied to.

The cases of Germany, Estonia and China
The systemic model of IIASA has been applied in various regions of the planet, specifically in Europe and China, with positive results in the level of development of communities. An example of the implementation of the model is shown in the German town Scheunenhof, where the main economic activity was the extraction and industrialization of salt. The province was devastated after the German reunification, reaching unemployment levels of 20 percent. IIASA's project focused on promoting small companies through the association of breeders, restauranteurs and farmers, using regional products as inputs.

Applying the model, new jobs were created and there was a contribution to economic development of the region through primary producers. Scheunenhof is now recognized for their restaurants and rural tourism, which has resulted in greater ecologic awareness. In terms of public policies, this project was included in the rural development plans of the Ministry of Agriculture of Germany.[50]

Another example of the implementation of the model is Viljandimaa, Estonia, for eco-touristic development. After its separation from

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50. Heilig, Gerhard K., Anja Wickenhagen y Adriana Pontieri, Innovate Rural Development Initiatives. Case of Study 1: Scheunenhof. A project to promote direct marketing of organic farming products in Eastern Germany, IIASA, Laxenburg, 2002.

the Soviet Union, Estonia has experimented constant growth, finding in tourism an important source of income and employment opportunities. This project was implemented through the creation of an NGO called Viljandimaa Tourist Association, which develops the touristic sector by opening vacation centers in rural areas. The environment constituted a key aspect for this project, which is why the association sought the conservation of natural beauty of touristic spaces, considering it a vital element for the growth of tourism in the region.

This association, created by the community of Viljandimaa, established a network between the population, small and medium businesses, the government and other public institutions, which allowed the proper development of resorts that offer entertainment, seminars, excursions and other activities. On the political front, the government is part of this association, due to the need for an ally that economically and politically supports the touristic projects of the population.[51]

These examples show the articulation of the rural development process of a region parting from organization, joint effort and the proper use of the systemic model. Like these two examples, IIASA has launched more than a dozen projects taking place in Europe with the intention of developing the economy of the population in specific areas originating from the rural environment.

The model for rural development has also been applied in China with less satisfactory results. These nuances are explained, according to IIASA, because China had very different characteristics than those of the European countries.[52] While in the international context the importance of China is recognized, the way this country runs its development processes contrasts with the democratic models founded in free market found in Europe.

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51.   Heilig, Gerhard K., Anja Wickenhagen y Adriana Pontieri, Innovate Rural Development Initiatives. Case of Study 2: Viljandimaa. Ecotourism in Estonia, IIASA, Laxenburg, 2002.
52.   Information obtained from electronic corresponded with IIASA personnel during 2006.

During the implementation process, the members of IIASA noticed the lack of transparency and accuracy in the diagnosis that the analysis phase had thrown. Thus, the demographic and economic indices that were found were not consistent the reality of the country, which evidenced that it was not possible to implement corrective measures based on an inaccurate diagnosis. When evaluating the results, IIASA noticed that the problem lay in inadequate information as well as in modeling of public policies mainly based on interests that did not correspond to those of the communities.

As the implementation of the model for rural development did not have the same effects in different latitudes, traditional economic models have had diverse effects on the planet; while some economies near the Pacific have obtained significant dividends from the free market model; in Latin America the results have not been as satisfactory for all countries.[53]

Due to this clear heterogeneity between national systems in the world and the subsystems within each country, below are some desirable considerations that Mexico –understood as a system- should have for an optimum functioning of the model for sustainable human development. The justification for including the considerations that will now be presented, lay in the need to elevate the probabilities of success in the quest for development; although as it was previously explained, well-executed systemic models tend to correct asymmetries in the economic, political and social power and control quotas on behalf of the players who make up the system.

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53.   The processes of implementation of the market model in Latin American economies, as well as the route of countries that come from a socialist regime towards economic liberalism are widely documented. Stiglitz, Joseph, El malestar en la globalización, Editorial Taurus, España, 2002; Wade, Robert, El mercado dirigido. La teoría económica y la función del gobierno en la industrialización del este de Asia, fce, México, 1999;Todaro, Michael and Stephen C. Smith, Economic Development, Addison Wesley Longmann, Estados Unidos, 2009; Gros, Daniel and Steinherr, Alfred, Economic Transition in Central and Eastern Europe: Planting the Seeds, Cambridge University Press, Cambridge, 2004; among others.

Technical and methodological platforms

As shown in the examples already given, the first point of approach for the implementation of a development model is the adoption of a systemic way of thinking on behalf of the players of development. This thinking allows building logical interaction networks between various systems and subsystems, because by conceiving development from systemic thinking, resources are optimized and the uncertainty that comes from causal events is reduced. It is important to create strategies to elaborate public policies from a systemic platform, that is, every project must be made on the bases of a systematization that allows an interrelation between systems. Similarly, multidisciplinary groups that allow the efficient use of inputs are needed, originating from an accurate diagnosis, negotiations and agreements, as well as the design and implementation of public policies.

As the first point of the process, rigorous care is needed when gathering and handling information which the system has. If there is a lack of accurate facts, it is very difficult to reach agreements on the needs of the population, and consequently, developing public policies oriented to solving these challenges.

During this stage, it is essential to involve the public, private and social sectors, because the responsibility of a long-term development rests with them. This development must keep the fundamental characteristics of sustainability and expansiveness in the economic, political, social and environmental aspects, with the purpose that the sum of the development in the municipalities pays off in the states and the country. This does not indicate, however, that while the strategies in municipalities are triggered, the rest of the government entities remain static, on the contrary, strategies must be established so that growth is obtained from the three levels of government in a simultaneous and coordinated manner.

The technical knowledge necessary to carry out systemic planning and the construction of models can be provided to local governments on behalf of agencies that specialize in the systemic application of development models. These agencies must be identified and hired by governments to promote the development of their territories.

Political Scenarios

In modern democracies, citizen's environment is determined by the existing relationship between government and society. The strength of a democracy is positively connected to citizen participation and organization, with the respect that political parties give to the citizens, coexisting in harmony with different groups of interest, and in general, with institutional strength and the existence of the rules of the game capable of delimiting the economic power of political and business leaders, and properly distributing the wealth generated by society.

Through the demand of their collective needs, society provides elements that guide the decisions on public policies that are required to raise standard of living, or that influence in the readjustment to which these public policies must submit to in case they do not fully satisfy the interests of the population.[54] In this sense, it is desirable to raise citizen awareness on the importance of the organized participation in favor of sustainability and the respect for freedoms in the long run.

The political platform must be composed of institutions that favor sustainability and are directed towards giving conclusive solutions to economic, social, or political problems. This platform implies that future generations have the same or more favorable conditions than those of the present generations. This platform exceeds a merely economic development focus, to privilege one that also favors the comprehensive development of the person, increasing productivity and competitiveness, encouraging scientific and technological advances and reducing environmental impacts.

Additionally, democracy forms the most important political platform for the implementation of the model of development, since to achieve development it is necessary to have a democratic environment, whose basic function lies in the promotion and respect for the

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54.   Gabaldón, Arnoldo José, "Desarrollo sustentable y democracia", *Revista del CLAD Reforma y Democracia*, núm. 23, Caracas, 2002. (In Spanish)

fundamental values and rights of society. Democracy offers a system that enhances human rights, while it encourages leaders to respond to citizen's demands.

It is not necessary for democracy to be perfect for the development process to begin, since the process perfects it as it moves along; however, what is very important is the disposition of the population to maintain and increase the levels of democracy through the process of development. In this sense, society must be aware of the responsibility that freedom implies, and the compatibility of this value with governance; while political players should be willing to maintain and increase the level of democracy.

The fourth chapter further explores the importance of the universal value of democracy and national concord to facilitate the procurement of human development through the proposed systemic model.

The economic environment

Another one of the considerations prior to the implementation of a systemic model is having an analysis of the economic environment; it will provide the necessary conditions to implement the model. For public policies promoted by the model to bring greater opportunities of development to society, it is necessary to establish parameters related to the economic environment of the region where the model will be implemented.

First, systems and subsystems must have a dynamic business environment, where there is an interest for continuous improvement. The promotion of local productive diversification and the increase of the value added in the economic activities also result fundamental for the economic evolution of the region. It is also necessary to maintain and improve the environmental conditions of those systems and subsystems that develop any economic activity.[55]

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55.   Alburquerque, Francisco, "Metodología para el desarrollo económico local", en Del Castillo, Jaime., Barroeta, B., Bayón, María y Cordero, E., *Manual de Desarrollo Local*, Gobierno Vasco, Vitoria-Gasteiz, 1994, p. 313. (In Spanish)

Promoting innovative business activities is fundamental for regions to play a key role in the economy, bringing with it a further boost of wealth and productive employment. To achieve this change, it is necessary to stimulate –from the local environment- the design of public and private incentives to create job sources from the comparative advantages of regions and from innovative ideas, thereby providing a greater number of financial supports to micro, small and medium businesses.

Also, several things should be considered, such the dynamics of the local market, the production capacity of businesses, existing technology, credit support system, political and social aspects, as well as the historic and cultural heritage of the regions.

Government decentralization and deregulation are also fundamental for the economic environment to reach higher levels of competitiveness. This supports the argument that greater autonomy in the municipal administrations to support local initiatives, does not subtract importance to other public administration entities; on the contrary, a new division of functions among them will enable better resource use. Local authorities can lay the foundations for a greater economic promotion, as well as managing municipal associations to implement productive, urban and sanitary projects that facilitate economic growth and local development under careful vigilance from social collaboration.

However, since local economic development programs have financial constraints and skills, it is also necessary to consider them between two or more government levels in a coordinated manner. In addition, not all municipalities have the same possibilities and resources, so it is important to have support mechanisms to provide development capacities to all regions; this involves incorporating systemic logic on municipal management.[56]

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56.   Ibidem, p. 319.

Agreements and citizen participation

Lastly, another key element for the proper functioning of the systemic models is the population, represented as a participative body that exerts its most elemental powers. Questioning decisions and approving or censoring manifestations of political, social or economic initiatives is the social element that gives a meaning of citizenry to each and every act of government. Citizen participation strengthens democracy, properly shapes decisions and clarifies the road ahead. Civil society –increasingly over time– claims its central place in the debate on the models of development and the definition of the nation's future.

Campaigns in favor of citizen participation, as well as the needs conducive to reinforce its progress and strengthen the democratic system, are key to consolidate a model of development of any kind, but especially for a model that places the person over any other objective or interest, as it is done in the systemic model of sustainable human development. When a government places the tools in the hands of the population in order to generate proposals on the plan of action that will be carried out, and citizens see their needs reflected, there is more motivation to be informed, to make suggestions, to question and monitor government's decisions, in this way development is properly socialized.

Citizen groups, neighbor groups, NGOs and any type of organized citizen body determined to be involved in the political debate of the nation embody a new healthy and creative political activism that sets aside empty conflicts and rhetorical conflicts that lack real substance. These collective players of development focus their attention and effort to defend the right to identity, promote inequity disappearance, denounce human rights violations, promote equity in the distribution of income, question the depletion of natural resources, establish barriers against the expansion of criminal activities and defend the necessary improvements in quality of life.[57]

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57.   Sarmiento, Julio, "Políticas públicas para el desarrollo sustentable local. Nuevos escenarios y desafíos", *Escenarios*, núm. 10, febrero, Buenos Aires, 2006, pp. 9-10. (In Spanish)

The importance of these groups of people lies in the strengthening of citizens as active players, stepping away from the conception of disjointed individuals performing failed attempts towards multiple directions in the quest for development. Citizen participation allows and promotes proper flow of information; and works as a vital fluid of the system, nurturing each of its elements. Collective citizen players and their participation is fundamental, at least in three basic ways: *a)* they are channels of expression that bring legitimacy to development strategies, *b)* they constitute the way through which the community seeks to take over their own destiny, starting from the participation in public spaces, in the debate on the ends of development and in taking decisions, and *c)* contribute to the adoption of a style of development characterized by greater social integration and care for the environment, through the implementation of a group of resources and essential capacities for the deployment of solidary networks, social promotion and environmental protection.[58]

The challenge of adopting a development model that integrates and harmonizes economic, political, social and environmental aspects requires government structures appropriate to address such complexity, from an active citizen participation, a participatory and responsible private sector, as well as from solid institutions who guide the quest for development. Systemic vision includes, eases and guides the design of public policies to strengthen sustainable human development in the three government levels, while allowing the process of development to focuses on the needs of personal fulfillment.

The next chapter presents the construction, coordination and operation of a systemic model for sustainable human development in Mexico, one that seeks to serve as a guide to encourage a process of development based on the value and dignity of the person.

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58.   Idem.

Chapter III.
A model for sustainable human development

As it has been stated throughout this book, the most important value that any development project can embody is the respect for the fundamental rights of the human being, because respect for personhood is paramount in order for societies to be able to improve in the political, economic and social environments. If there is a lack of human identity in any environment, as advanced as it may seem in economic, technological, sanitary or educational terms, this value will be unable to deliver its benefits among members of society.

It is in this direction where sustainable human development pursues freedom and sustainability as necessary aspects for the welfare of society. Both elements ensure a series of social and political conditions, as well as the economic means to gradually strengthen the placement of the person as the main agent in the pursuit of development, and at the same time, as the main recipient of the benefits of this process.

Furthermore, sustainable human development ensures the fundamental freedoms of the person and extends them throughout time, which is why it represents a vision that encompasses the process of development in a longitudinally, that is to say, it considers each one of the elements in a nation's development, as well as their role over time. This approach is offered by the general systems theory, which facilitates the transit of the concept of sustainable human development from a purely theoretical state to an operative and practical state able to offer tangible benefits to the population through a model.

In the short term, the systemic model for sustainable human development provides clarity on the horizon, a path with which the majority of the population is satisfied and offers a way to welfare. In the medium-term it offers regional improvement of subsystems, which can develop their potential through their competitive and comparative advantages. Finally, in the long-term it is expected that advances on a regional level generate scale economies and a virtuous spiral that promotes development throughout the nation.

This way, after achieving state of development, it will be necessary to reestablish the adopted approach in the pursuit of short, mid and long term objectives sought through the implemented policies, as people's welfare will always have room for improvement. In Mexico, the situation that opens during the shifts in municipal, state and federal administrations offers the opportunity to make changes in approach in the pursuit for the objectives of development.

With this clarity, it is clear that planning a systemic model for sustainable human development in Mexico is not an easy task: the proposal requires a profound analysis that identifies the main obstacles that limit the growth of the country, to then identify the fields of action on which there will be action to improve the prevailing situation. This way, the three levels and the three government branches, the private sector and the population, from all fields of knowledge, and with transverse public policies, are those who have the responsibility of working in a coordinated manner in the full implementation of SHD.

Thus, this chapter is divided into three sections with the intention of arriving at the methodological response for the consolidation of national development: the systemic model for sustainable human development. In the first place it takes up the discussion on the need and relevance of the model, providing clarity on the inclusion of the conditions, means and ends of sustainable human development as the objectives of the model. Then, the operational components of the model are defined and described –axes and dimensions– as well as feedback elements –levers- that allow the model to lean on the properties of a system to achieve a country's development. Finally the

interaction of all these elements is presented, as well as the functioning of the model as a whole.

3.1. The importance of the model

A decade after the start of the twenty-first century, the country struggles to choose the path that will ensure the present and secure the future for Mexicans. Within these reflections, voices have been heard questioning the value of democracy in promoting development, when in fact the problem lies in the unwillingness of some actors to leave being certain practices and interests, which in the name of democracy, limit and impede certain necessary agreements to ensure inclusive and comprehensive development. While this happens in Mexico, developed nations keep moving forward and some developing countries are projected as the new leaders of global growth: China, India and Brazil are examples of this.

This suggests that only through active, informed and coordinated participation from all actors of society it will be possible to transform the current state of matters into a setting conducive to promote national development. Mexico needs a development proposal that is capable of offering an adequate frame to build public policies from all government spheres, sectors of society and the different areas of knowledge, in a longitudinal manner.

Given the importance of generating a sustainable human development model, this work presents the theoretical and methodological foundations to create public policies, as well as an adequate vision and approach to perceive Mexico as a system. In this sense, the model raises a number of advantages that reaffirm its commitment to national development, among which are: *a)* the centrality of the person in the process of development; *b)* The emphasis on long-term visión; *c)* development from the local environment; y *d)* a reassessment of the role of public players.

Besides these benefits and the perfectibility that its characteristics as systemic provide, the model for sustainable human development entails a never-ending quest for welfare, given the undefined impro-

vement limit that characterizes human nature, which will always try to extend higher levels of freedom for society in the long term.

In this sense, it is necessary to provide effective actions for the short term, but in a long-term planning context. Countries such as France, Spain, Japan, China and Brazil, to name a few, have plans for 10, 15 or even 50 years, in which necessary revisions and redefinitions are foreseen. Also, all the plans are divided into sectors of strategic scope for the country.[1] In Mexico long-term projects have also been made, such as Vision Mexico 2030 from the federal government, which offers solutions to basic needs and priorities of the people, without losing sight of the eventualities that might arise in the present and future. This vision is designed to last for multiple government terms regardless of ideological tendencies. However, in spite of clear and well-defined objectives, this proposal is a unilateral initiative that lacks consensus from other political parties, and so it is at high risk of not prevailing through time, as well as not offering a method of application.

As mentioned previously, the systemic model for sustainable human development must consider the need for certain conditions that form a solid base that enables proper access to development, with methods that facilitate and enrich the process and the ends which will function as a compass to maintain certainty of the accuracy of the objective pursued.

Figure 3.1 shows the composition of sustainable human development, which is obtained when its elements join and form a nucleus that cannot be corrupted by subjective criteria or isolated interests, referring to a concord and democracy environment that must prevail in the country; thus the establishment of conditions, the functioning of means and the achievement of the ends are the result of a complex systemic process of generating public policies.

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1.   Barranco, Alberto, "¿Y el largo plazo?", *El Universal*, May 21, 2007, Mexico, p. B5.

Figure 3.1. Sustainable Human Development

C 1

C 5   M 1   M 3   C 2

F 1   F 2

M 3

C 4   C 3

C= conditions
M= means
F= ends
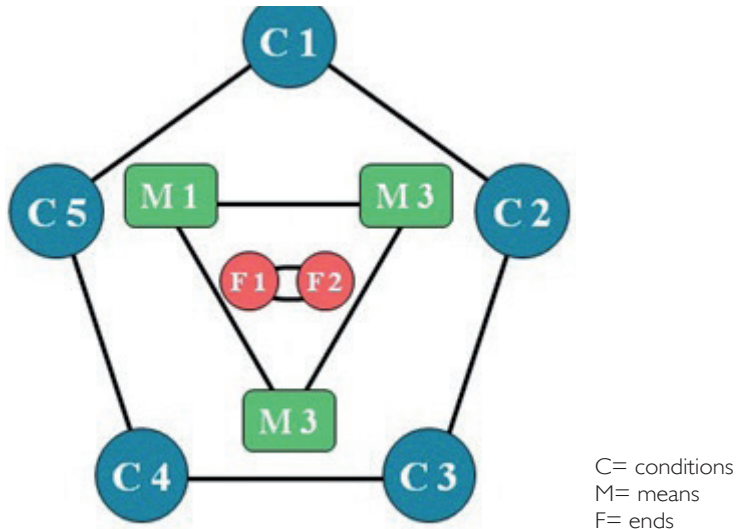
Source: Author's preparation

This section is limited to defending the hypothesis of the need for the model in Mexico, which is why the document concretely indicates that conditions, means and ends are perfectible at all time and that sustainable human development is not a state of things, but a dynamic and changing concept of society that is in constant improvement.

According to figure 3.1, the conditions of 1) equity; 2) security; 3) acknowledgement and protection of human rights, 4) acknowledgement of the person as an agent of change in the process of development, and 5) eradication of discrimination, serve as the basis and protection of the remaining elements, which is why they must be guaranteed, at least to some degree, and be perfected gradually over time.

For example, gender equity is a condition included in Mexico's legal frame, but it is not fully complied with. In this case, sustainable human development seeks that said equity expands to all spheres of

social, economic and political life in Mexico. For this, it is necessary to create specific public policies that strengthen gender equity. This doesn't mean that inequity will end or be solved with this policy; on the contrary, a continuous improvement and feedback process that is aimed towards sustainable human development will be required.

Similarly, the conditions constitute the platform on which means are built: 1) competitiveness; 2) productivity and 3) cooperation, that just like means, are perfectible elements and always tend to achieve the ends of sustainable human development. To significantly improve means, it is necessary to improve social conditions to some degree, so it is possible to move forward on issues focused on the economic sphere.

For example, a first step in the search for greater productivity in Mexico is to speed up the processes for business openness. However, this would not be possible if there wasn't a legal frame that ensured conditions such as respect to private property, equality in opportunities to start a business or the security of a stable financial system while carrying out transactions with a counterparty outside the country. Once these conditions are guaranteed, it is necessary, among other things, to amend the legislation, opening ways to a series of tax incentives and preferential rates on productive loans, as well as the promotion of a business culture through leadership courses, training, or the dissemination of public or private programs focused on these issues. This process, which aims to raise the position of Mexico in productivity, is gradual and can be perfected at any moment.

For its part, the ends of the model, Freedom and Sustainability, are the elements located at the center of figure 3.1 and protected by the means and conditions. The ends are also achieved, as are the other elements, in a gradual way.

The concept of freedom is so large that it is difficult to fully achieve it at first, however, the conceptual richness lies in that such freedom will constantly be fed back, bringing greater benefits for society in each stage of its development. Amartya Sen focuses his attention on showing that freedoms, besides being the final objective of development, also represent the most effective means to achieve

it. He argues that despite freedom of political participation or the access to education don't seem to be a part of the Gross Domestic Product (GDP), it is certain that an educated population may have greater access to wealth and welfare.[2] Another strong argument about freedom as means and an end of development is observed when Sen indicates that no democratic country has gone through famine and this is due to the existence of political freedom of citizens, which can be easily solved in a government change if the current one does not satisfy society's expectations.[3]

Therefore, sustainable human development is not just an idea that arises as a solution to national problems; on the contrary, it is a solid construction that has been around for a few years in the international academic environment and its evolution towards more specific and sophisticated states cannot be conceived without the work of multiple collaborators. As Schumpeter argues, "Scientific analysis is a never-ending struggle against our own mental creations and against those of our predecessors, in such way that it progresses, if it effectively does, in a zigzag manner".[4]

For this reason, it is necessary to find the conditions, means and ends of sustainable human development proposed in this work, through a systemic methodology that contributes to short-, medium and long-term actions to achieve the objectives of welfare of society in economic, political, environmental, scientific, technologic and cultural terms, among others. For the conception of sustainable human development from this perspective, we have started from experience obtained in collective work with scholars, from the participation in international organisms and at different government levels, as well as the deep desire to make this country a nation with concrete projects that enable comprehensive development.

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2.   Sen, Amartya, 1999, op. cit., p. 15.
3.   Ibidem, p. 36.
4.   Schumpeter, Joseph A., *Historia del Análisis Económico*, Ariel, Barcelona, 1982. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

In this sense, the model for sustainable human development in Mexico seeks to promote the responsibility of the building a common future, through citizen participation, the strengthening of coexistence and the encouragement of the principle the centrality of the person in society.

To obtain greater clarity on the orientation of development that Mexico has been on until now, and the new stage that it must begin in the pursuit of sustainable human development, the following sections explain the components and the operation of the systemic model for sustainable human development in Mexico, under the premise that the project may be perfected and modified according to the needs of every region where it might be applied.

3.2. Operation and feedback components

The continuous quest to consolidate development and the total welfare of society is the guiding principle and characterizes the operation of this model of development. This principle is embodied in the conditions, means and ends of sustainable human development, which are achieved through the operational and feedback components presented in this section. These components enable the implementation of the model and the continuous improvement of development, so that, after the analysis, policies and modeling stages, it is possible to act on specific areas of the country, through public policies presented in the implementation stage.

The implementation stage has two different groups of operational components named axes and dimensions. Thus, in the first term the axes of the model and their functioning are defined –articulated through dimensions-. The three axes of the model are composed of the concepts of 1) public security and justice, 2) economic growth and 3) human development, as it will be seen later on, are major health issues on the public agenda. Afterwards the seven dimensions are defined: 1) human capital, 2) environmental sustainability, 3) employment, 4) infrastructure, 5) innovation, 6) democratic normalcy, and 7) security and respect, which represent the strategic spaces where

public policies fall on after having been included in the functioning of any of the axes.

After the process of implementation, it will be necessary to have certain variables that ensure the continuous improvement of the model and that allow it to fulfill its objectives of actively engaging society and fostering higher levels of welfare. This improvement is carried out through the levers of the model, embodied by education, rule of law and citizen participation, which help reinforce the process of sustainable human development, maximizing the benefits of development among society and extending them to future generations.

Below, these groups of components are defined, as well as how they compose the model, to later thoroughly describe their operation and importance in the quest for human development.

The axes of the model
In this model the axes are defined as major national topics that nurture specific dimensions and guarantee the adequate functioning of the subsystems, they represent the essence of sustainable human development because each one of them is projected towards the short-, medium and long-term through goals and plans of action. These axes are articulated through political action, that is, through the consensus of agreements and negotiations between the public and private sectors, as well as society. Thus, the axes of the model represent the strategic areas to promote sustainable human development in Mexico, because they encompass the main challenges that the country intends to abate in the political, economic and social environments.

Because of the prevailing phenomena in Mexico in recent years, public security, justice, economic growth and human development have been chosen as the axes topics, however, these elements depend on the historical moment of society, which is why different subjects can be chosen as the model's axes in different places.

In relation to the axis of public security and justice, the book focuses its attention on promoting a legislative and judicial scheme acting on behalf of the rule of law and strengthening democracy, by abate irregular practices such as impunity, corruption and organized

crime. Through strategies that far from focusing on frontal combat against violence, they are oriented towards prevention, strengthening of the social fabric and the use of systemic planning to fight public insecurity from different angles, the objective of this of this axis is to disrupt the activities that threaten the safety of Mexico. With respect to the axis of economic growth, the emphasis of the book lies in the revival of the domestic market, diversifying external markets and the centrality of the person in productive processes. Finally, in the axis of human development, strengthening social capital through family and social institutions is the fundamental element to motivate greater coexistence and social cohesion among Mexicans.

The axes of the model visualize the idea of formulating structural reforms in all sectors and government levels to consolidate the comprehensive short-, medium and long-term project for sustainable human development in Mexico. This project will favor all environments of national life, sustainability, economic growth and governance.

Figure 3.2. Axes for sustainable human development
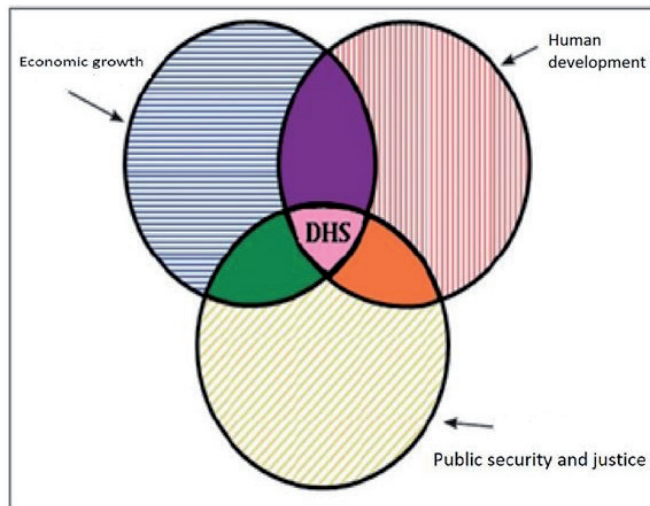
Source: Author's own.

Throughout the next sections a detailed analysis is made on the three axes and their interaction, furthering the goals that each of them possesses and the plans of action to consolidate them.

Public security and justice
In Mexico, organized crime has reduced the levels of tranquility and security of the population and has therefore affected their quality of life. Given the complexity of this and other problems in the country, it is necessary to have actions and transverse strategies covering financial, economic, commercial, educational, judicial and social aspects that engage all levels of government and sectors of society. In this regard, it is essential to guarantee a common front that promotes the value of freedom, the defense of democracy, full respect for human rights and compliance with the law.

The axis of public security and justice focuses on promoting political and judicial transformation to strengthen the rule of law through the strict adherence to legality and the proper administration of justice, defined as the main element of organization in society, which enables the coexistence of citizens and should be pursued and regulated by the state. Justice, as an essential component of the correct functioning of a community, represents the cornerstone of this axis, by providing citizens with security, confidence and certainty, generating prosperity and better quality of life. For this reason, demanding total respect for the rule of law from citizens and authorities pays off, undoubtedly, in a more harmonious, prosperous and safe society.

It is necessary for society to trust their governments again, which are perceived as "heavy, negligent and corrupt bureaucratic apparatus" according to the national Survey on Social Unrest made by the Latin American Social Sciences Faculty. The survey yields significant data on the perception of citizens in regards to the inefficiency in the administration and enforcement of justice: 72% of citizens believe the government has not supported them at all, 51% of people think that public resources are distributed among the powerful; 25% think it is alright to take justice into their own hands, while 33% thinks they

should not obey the law if it is unjust; and one of the most revealing statistics is that 90% thinks authorities usually violate the law.[5]

These figures show clear deterioration of the image of authorities, which is not illogical, because the rule of law and the administration of justice have been overwhelmed by corruption, drug trafficking, insecurity, political inaction and impunity, among others, which have intensified during the past years. These aggravating circumstances represent a clear obstacle to governance, which is why it is essential to multiply the efforts to make government activities transparent, promoting a good management of public resources, outlining and applying comprehensive strategies against organized crime, promoting citizen participation and demanding appropriate behavior from public officials from all government levels.

By ensuring an environment of security and justice amongst citizens through full respect for the rule of law and public policies that encourage citizen participation, combat crime at all levels and eliminate corruption, this axis of the model will ensure that the efforts for improving the quality of life for people from the economic and social environments find the necessary outcomes to translate into real welfare for the population.

Public policies that have influence in the public security and justice axis should be intended to elevate human security indices, promoting proper justice administration and income distribution, strengthening institutions, ending police impunity and public corruption, ensuring economic competition that boost the potential of Mexicans, disarticulating organized crime cells and eradicating illicit markets, as well as generating greater participation of people to procure their own benefit through the association, reporting and cooperation among towns and communities.

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5.   This survey was conducted as part of a joint study between academics from UNAM and FLACSO called "Modernization and social unrest in Mexico". This study come conceptually from two categories, human security and discomfort with the institutions, and governance problems.

Economic growth

The importance of economic growth as an axis to achieve social well-being, rather than the end of all human activity, allows to reformulate the way in which the public, private and social sectors must influence obtaining development. While some developing countries have directed their efforts towards economic growth through trade liberalization and privatization, their populations have suffered, in greater or lesser extent, consequences such of inequity in the distribution of benefits, the decrease in their purchasing power and unemployment, among others, caused by these growth processes that lack order and planning. In this sense, it is urgent to reorient the growth policy to a more inclusive and equal vision that also promotes social responsibility among the sectors that are most favored by economic growth.

Recent decades have seen that the conception of growth that has prevailed in the western world is based on an economic model founded on commercial openness, deregulation, government downsizing, privatization and the increase of domestic competition, aspects that in most occasions they were accepted without considering political and social characteristics of the countries that implemented it.

This model has been criticized for its lack of sensitivity to problems such as poverty, the emergence of informal commerce, social inequity, the lack of educational and health systems, as well as environmental devastation. For this reason, World Bank has developed a diagnosis that explain what happens with the persons in developing nations that are immerse in economic processes adhere to that model. The poorer a person is, the less resources he or she has to plan a future and save. The same logic applies to businesses and governments. Therefore, in poor countries, where most of the income is spent on satisfying the needs of the moment, saving shortage hampers domestic investment both in physical capital and human capital. Thus, with the lack of new investments, the economy's productivity cannot improve

and, as a result, people's incomes cannot increase, thereby preventing development in the rest of the aspects of society's life.[6]

This vicious cycle seen in figure III.3 can be broken through economic growth in which all sectors of society participate, in order to strengthen the internal market and diversifying foreign trade. When the process of growth is embraced and led by entrepreneurs and citizens, the government acquires a greater participation margin in economic growth, since the money that finances public expense favors the most vulnerable sectors of a country; also through proper levy, productivity rises to encourage the creation of businesses and companies. For this reason, the systemic model for sustainable human development in Mexico considers economic growth that is linked to human development.

Figure 3.3. The vicious cycle of poverty
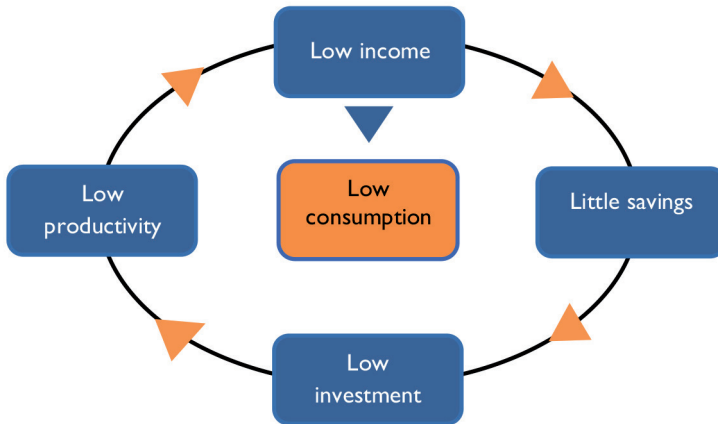
Source: World Bank

6.   World Bank, *Más allá del crecimiento económico*, The World Bank Group, Washington DC, available in Spanish at http://www.worldbank.org/depweb/spanish/beyond/beg-sp.html (last visit, May 2011).

Economic growth enables sustainable human development through the provision of resources capable of raising the standard of living, because "development is the central objective of human activity, while economic growth is a means that could become very important in providing it".[7]

Sustainable human development linked to economic growth as a support axis allows people to develop their skills, achieve their goals and gain access to better life conditions in a sustainable manner. As people's income increases, they are able to achieve higher levels of satisfaction, creating an upward spiral that eventually will come converge in a state of comprehensive development in society.

This upward spiral must be based on the reactivation of the domestic market from local economies, since according to the ECLAC, a "systemic competitiveness without social integration is a futile endeavor".[8] This integration means that economic regions work as a system, generating economies of scale and virtuous cycles of economic growth and human development.

In order to form a sustainable economic growth, this model promotes the creation of strategies formulated according to the capabilities and advantages of every municipality, to enable them to maximize their benefits and reduce social inequity. Besides searching that such maximization is combined and integrated with other regions maximizations.

Finally, it is imperative to highlight the importance of an adequate combination among the macroeconomic indicators and the attention to social and human issues, because despite focus on the person, no development model must ignore the order of economy, since

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7. Ranis, Gustav and Frances Stewart, "Crecimiento económico y desarrollo humano en América Latina", CEPAL, *Magazine* n. 78, December 2002, Chile, p. 9. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

8. Comisión Económica para América Latina y el Caribe (CEPAL), *Descentralización y desarrollo económico local: una visión general del caso de México*, CEPAL, Santiago de Chile, 2002, p. 7. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

it is the sphere that in the last instance provides credibility to any country for productive investments to flow and receive the necessary international support for its development.

This way, an economy that favors the development of the person and at the same time generates the necessary certainty to attract domestic and international investments, due to its institutional stability and strength, it will be capable of strengthening its domestic market, increasing its growth and employment, as well as guaranteeing a gradual broadening and, thus, decreasing of the income gap.

Human Development

The comprehensive development of the person implies an increase in their welfare and personal fulfillment levels, which is why the joint effort of the public and private sectors as well as of the civil societies, should be aimed towards improving coexistence in society from family and creating social networks that allow people to elevate their social capital and enjoy the opportunities of development in the educational, labor and recreational environments. For this, it is important to have an institutional framework that promotes social coexistence based on the values of respect and solidarity.

Thus, human development is constituted as an axis of the model, by considering that the person's welfare is positively related to the creation of solid social capital, through an adequate education system and the strengthening of social networks.

Pierre Bourdieu defines social capital as the aggregate of the actual or potential resources that are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition.[9] In this manner, the need for association that people have, coexistence strategies and the social bonds built throughout life, provide the necessary tools and knowledge to cover their expectations and trace the path of their own development,

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9. Bourdieu, Pierre, "The Forms of Capital", en John Richardson (ed.), *Handbook of Theory and Research for the Sociology of Education*, New York, 1986.

provided that these social relationships are founded on trust and commitment, as well as on security and reciprocity.

In this sense, the National Survey on Social Capital in the Urban Environment, Mexico 2006, made by SEDESOL and the UNDP, shows that social capital is a protection system that has positive effects on people's economy, citizen participation and social responsibility, that is, on development. Some interesting results reported in the survey are: 48.5 percent of the population believes that people help others less than they did a year ago and 42 percent believes this is due to a poor economy. Another indicator specifies the lack of concord among Mexicans by showing that 25.1 percent of respondents do not participate in organizations because they are not invited and 18 percent because "promises are never kept in organizations".

This survey also demonstrates the high degree of segregation among Mexicans, by indicating that 26.7 percent of respondents does not feel identified with the inhabitants of their locality because of their educational level and 1.5 percent because of the ethnic origin of their neighbors. Generally, neighbors gather only when their interests will be served; 29.1 percent meet to solve public service issues such as electricity and drinking water, however, only 2.2 percent gathers to solve education problems and 5.6 percent to address pollution and environment problems. A strong fact is that 53 percent of the respondents believe that people do not contribute to solve needs in their locality because "everyone is only interested in their own problems".

According to the survey, 30.8 percent think that the right to a well-paid job is almost never respected and 20.4 percent think that never happens; 50.6 percent disagree with the phrase "in Mexico the law protects everyone equally" and 33.2 percent believe that when they are right, it is alright to go against the law.[10] Finally, according to the survey, most Mexicans resort to their family first hand to borrow money, for assistance with the care of their children or a sick family

10. United Nations Development Program (UNDP), *Encuesta Nacional sobre Capital Social en el Medio Urbano México 2006*, PNUD y SEDESOl, México, 2007. (In Spanish)

member, and assistance in paperwork and procedures, which shows the importance of family in Mexican society.

The results of the survey show that the weakness of the social fabric in Mexico generates uncertainty, mistrust and insecurity in the workplace, education and everyday life environments of people, which in turn is reflected on greater inequity, deterioration of public security and a decrease in the growth rate of the economy. For this reason, it is urgent to strengthen existing social networks and to create new citizen networks that can foster public policies that will connect the different sectors of society, so that based on concord and social responsibility, it is possible to open the way to greater development opportunities for better quality of life.

Promoting social cohesion and strengthening the social capital must start from the family, to later on spread to the community and the municipality, since from these environments it will be easier to rebuild the foundations of social structure and recover lost open spaces in the face of social problems such as rape and addiction. In this sense, it is crucial to acknowledge that the differences in regions stem from economic, political and institutional partners, which is why it is necessary to search deeper in the specifics of human development, in the elements that explain it and in the possibilities of public and social action starting at the local level.[11]

Social networks that are woven from the local environment from the sense of belonging to a community, generate by themselves greater security among people, due to those people feeling sheltered by various networks of support and protection, but mostly due to the fact that the people who are part of them are recognized as having certain cultural elements that unify and represent them, such as traditions, values, beliefs and norms of behavior. This builds the idea of us as a collective work towards the consolidation of a better country, setting aside individualistic interests and resulting in acts of solidarity,

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11.   United Nations Development Program (UNDP*), Informe sobre Desarrollo Humano: México 2004*, PNUD, Mexico, 2005, p. 47. (In Spanish)

social responsibility and citizen participation. For this reason, it is paramount that public policies focused on social issues are oriented by this axis of sustainable human development.

Human development is presented as the solution in the face of rupture and tearing of social networks in our country by offering, as an axis of the model, the consolidation of the social capital from the family and community, encouraging the creation of opportunities for citizen participation and democratic action, as well as promoting comprehensive economic growth that may help mitigate the uncertainty and apathy among the population.
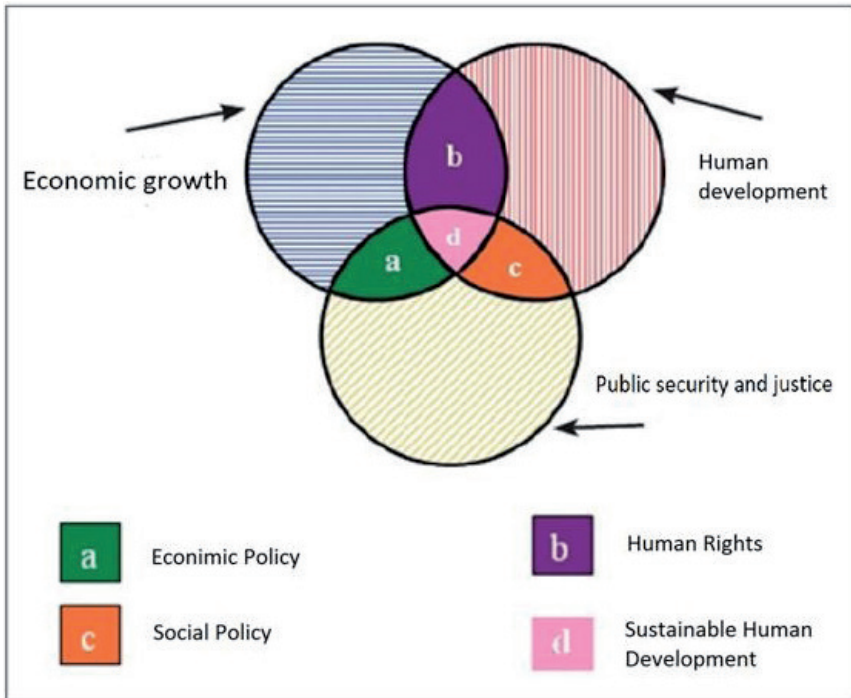
Interaction of the axes of Sustainable Human Development
The systemic model seeks to consolidate greater sustainable human development through the progress of the three axes of development, which constitute the issues that should guide municipal and state agendas, as well as the national agenda from this perspective. In turn, the areas in which these axes interact are also relevant. The pairs in figure III.4: a) economic growth - public security and justice, b) human development-economic growth y c) public security and justice-human development, are an important part in implementing public policies, because of their degree of influence on national development.

The intersection of the axes of human development–economic growth, lead to the social policy of the country and some of the dimensions of development fall on it, the interaction between the economic growth–public safety and justice axes originates the regulatory policy in which the projects that require an investment arise and the necessary resources are obtained in order to implement sectorial public policies. Finally, the intersection of the human development–public safety and justice axes, lead to government policies on human rights matters arising from fair legislation and the acknowledgement of the

person as an engine, receptor and transmitter of the progress made on its development process.[12]

Figure 3.4. The interaction of the axes of sustainable human development

Source: Author's preparation

Figure 3.4 shows the areas of interaction of the axes of sustainable human development, whose scope is determined by creativity, leadership and the abilities of the citizens and public policy makers

12.   The intersections are independent concepts that are formed from the elements of the axes that compose them. In Mexico, economic, social and government policies in regards to human rights are promoted in all cases, by multiple institutions and agencies.
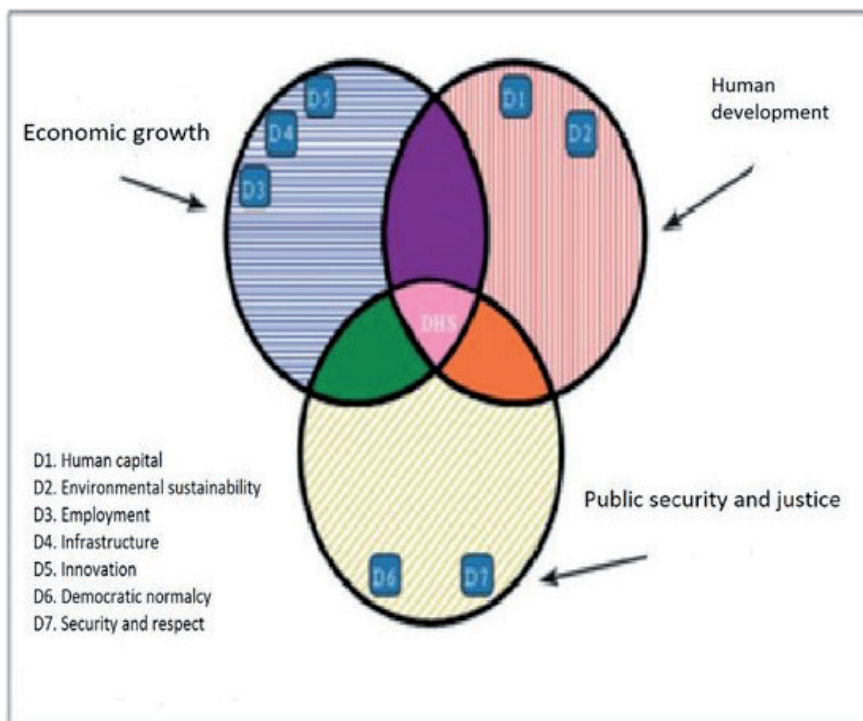
in the system, in order to make proposals for solutions and resort to the necessary specialists to plan and apply the model.

The dimensions of the model

The dimensions are the strategic areas of public policy implementation, positioned inside the axes to articulate the necessary actions and trigger sustainable human development. The model has seven dimensions that just as the axes, must be interrelated through political action. The dimensions are instruments on which public policies are launched, because they represent specific sectors in which resources and efforts from the local, state and federal governments, as well as the private and social sectors, should be invested. The dimensions may affect any of the axes, depending on the priorities and needs of any of the local or state subsystems, and may even participate in the intersection areas of the axes if policies are required in these areas of the model. Figure 3.5 shows an example of the way in which dimensions could be distributed among axes, according to prevailing requirements in a given area or population.

Just as the dimensions of model for rural development, shown in Chapter 2, are examined through a series of analysis categories; the dimensions for sustainable human development, besides being placed in the axis of development, are also reviewed through a matrix similar to that shown in figure 3.6. The matrix allows a balance on the current scenario and the future trends in each one of the dimensions and the way they impact the development of the region in order to shape public policies specific to each locality.

Figure 3.5. Dimensions for sustainable human development

Economic growth

Human development

D1. Human capital
D2. Environmental sustainability
D3. Employment
D4. Infrastructure
D5. Innovation
D6. Democratic normalcy
D7. Security and respect

Public security and justice

Source: Author's preparation

To implement the model it is necessary to obtain statistic information that covers in detail the dimensions at each location where the model is implemented. It also requires a diagnosis and an analysis of the trends of the goods and services which represent real or potential comparative advantages, in order to begin to apply the model from the local level. With these data, the population of every locality will be able to identify the weaknesses and strengths of their geographical environment, as well as the strengths and opportunities they should take advantage of.

Figure 3.6. Evaluation matrix for sustainable human development

Dimensions

Analysis categories	1. Regional diagnosis and distribution	2. Future trends	3. Impact and relevance	4. Information quality	5. Public policies and administration	6. Implementation and investment
1. Human capital						
2. Environmental Sustainability						
3. Employment						
4. Infrastructure						
5. Innovation						
6. Democratic normalcy						
7. Security and respect						

Source: Author's preparation, based on the IIASA model.

In order to clearly state how the model of sustainable human development works, below a conceptual description of the dimensions of the model is made, how they work, as well as some environments in which public policies can be applied within each. For this, it is necessary to carry out a diagnosis and statistical analysis that yield relevant information in order to make decisions in terms of the impact and results of implementing public policies in any location where they are applied.

Human capital

Investing in people is one of the triggers of human development, besides being one of the main welfare generators. Education, training, recreation, health, nutrition and the environment that people live in are factors that allow them to achieve and maintain the freedoms mentioned in the first chapter, which are ultimately those who consolidate sustainable human development.

The emphasis on education and health becomes the priority, especially among younger Mexicans, who require appropriate education and health services, with the objective of them taking advantage of the sport, recreational and cultural offer, present in their environment and that will consolidate them as persons capable of contributing with their creativity and desires in favor of development in their regions.

It is necessary to provide young people with education according to the international requirements of the job market and a specialization in priority sectors for economic growth. It is also essential that they develop their own and substantiated criteria, that will allow them to choose the areas that meet their needs and beliefs. It is also essential that the job market welcomes all young people who complete their studies in order to keep alive their motivation and commitment for a better preparation.

Lastly, specialization is a means to maximize the benefits among people that make up the workforce;[13] the implementation of this model is intended to emphasize the support to women and men who in many occasions cannot fully develop their capacities because they are forced to divide their time and strength among household activities. The importance of investing in the welfare of children, coupled with the support required for workforce development, demonstrates the need to work for the opening of child care centers to enable women

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13.   Becker, Gary, "Human Capital, Effort and Sexual division of Labor", *Journal of Labor Economics*, Vol. 3, Núm. 1, Part 2: Trends in Women's Work, Education and Family Building, United States, 1985, p. S33-S58.

and men to develop fully their skills in the labor market, without neglecting the care and education of their children.

For those people with dependents, it is essential to ensure sufficient income to satisfy their basic needs and those of their families, and to ensure continuous training and specialization, which nurture creativity and reinforce the desire to excel and become leaders. With this, it is possible to achieve that make men and women fully exercise the freedoms and citizen participation called by the universal value of democracy.

To solve these criteria of great importance to the nation, it is important to emphasize human capital, which seeks to improve the productivity of labor and productive capital. As argued by Lucas, a constant level of effort of human capital accumulation produces a growth in the rate of accumulation, regardless of the level at the beginning of the process, this implies that the more you empower people, the more productive they become and learn more easily.[14]

As it has been mentioned, the programs the government adopt must be accompanied by constant monitoring and supervision, to ensure that the human capital dimension is placed in a spiral of improvement. The crucial point for the success of a program that aims to develop human capital is not in the resources invested in it, but in its duration and accompaniment. If the program ends before citizens voluntarily start investing the amount needed in human capital, the program will fail in the long run. According to Strulik "the government must invest in human capital until the citizens have the financial capacity and the conviction that investment pays off in fruit for the economy in general and their children in particular."[15]

Another important factor of human capital is providing people adequate levels of health. Health services required by society must

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14.   Lucas, Robert E., "On the Mechanics of Economic Development", *Journal of Monetary Economics*, Vol. 22, 1988, United States, p. 39.

15.   Strulik, Holger, "On the Mechanics of Economic Development and non-Development", Work Document 9904, Cambridge University, United Kingdom, p. 17. (Translator's own translation from the Spanish version)

provide the entire population of immediate and safe attention, as well as prevention services necessary for wellness. It is necessary that the health system does not allow girls, boys, women and men die from preventable causes. It is also necessary to awaken in people a culture of prevention in order that health systems only address the needs that cannot be foreseen through the socialization of their causes and consequences.

Diseases such as eating disorders or smoking can be controlled through relevant information and the strengthening of prevention campaigns on their negative effects.

As it has been mentioned, it is necessary for governments to invest resources in the adaptation of an infrastructure capable of providing access to all kinds of opportunities to society, however, it is essential to prioritize the most disadvantaged rural areas that lack basic education and health services. In this sense, the migration of the rural population to urban centers becomes one of the social phenomena that must be addressed with greater urgency due to the fall in productivity of the field, and the uncontrolled growth of urban expansion, which causes food shortages, insufficient public services that meet the needs of large cities, and a huge spread of irregular localities. For this reason, it is necessary to develop focal nodes in all economic regions of the country so that the distance between rural communities and their nearest urban center is shorter and less expensive. These projects are systemic public policies for sustainable human development.

Development can only separate public policies conceptually, because by bringing educational and health services closer together or by extending roads to rural communities to prevent migration and strengthen the field, it also means investing in infrastructure for development. For this reason, the model analyzes and defines the nation as a system, because by positively influencing any of the dimensions of the model, the positive impact will also have effects in other areas and latitudes of the system.

Environmental Sustainability

This dimension suggests that to build sustainable human development in Mexico it is necessary that the present generations have deep ecological awareness that materializes in the proper use of environmental resources, so that future generations have access to those same resources.

According to the United Nations, most of the global warming that has been registered on Earth since 1950 is the result of growing levels of greenhouse gases, so continuing with this environmental degradation implies a gradual destruction of the human habitat. Unfortunately low-income people and the countries with the most pronounced infrastructure lags face the worst ravages of climate change. Communities unevenly settled over hills and riverbanks, so common in our country, are the main victims of the pollution discharged in large cities and metropolitan areas.[16]

Areas rich in natural resources like oil, natural gas, timber, water and minerals can and should be positioned, from this approach, as the protagonists of sustainable human development in the country. For example, the National Institute of Ecology (INE, by its initials in Spanish) states that in Mexico, wildlife has uses in food, textiles, medicine, religion and ornaments, which can be seen in the markets in the countryside, in homes and gardens of the country.[17] Therefore, it is necessary that all that diversity is utilized optimally and additionally be available to any generation of Mexicans, present or future and only natural evolutionary cycles of the Earth influence global climate change.

Unlike cities, where people live and work in an environment created by man, rural areas are more dependent on their natural resources and on a suitable environment for activities such as tourism and food production, forest resources and energy, among others; so

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16. Storms, drought and frost have a greater impact on the most vulnerable sectors of the population.
17. National Institute of Ecology (INE).

that any measures implemented to promote development must be assessed considering their environmental impact.

In this respect, the operation of programs and policies undertaken from any of the dimensions of sustainable human development in Mexico should consider the responsibility of developing their activities under the criteria of sustainability, mainly when there are international environmental commitments responsible for establishing the guidelines for the adoption of behaviors and mechanisms. Also, there are policies that can be implemented explicitly and strictly on environmental sustainability in order to promote the three axes of sustainable human development.

Employment

Obtaining sustained economic growth in the long term requires, according to the traditional approach of the economy, that nations focus their attention on the increase in savings, in order to increase production by investing in capital and labor. However, this approach has been severely criticized for the alleged lack of sensitivity to issues such as equity and social inclusion. In this sense, there are approaches that make greater emphasis on economic growth strategies with human development that focus on the education and health of citizens, as well as strengthening social capital and employment.

Moreover, as Figure 3.3 shows, the urge to save is essential for economic growth because it usually translates these savings into productive investment. The stability and flexibility of the economy, meanwhile, also represent mandatory factors for economic growth, given that they encourage foreign investment and allow the creation of new businesses.

Given this scenario, it is important to note that one of the alternatives for employment growth in developing economies is to focus the efforts of economic and social policies in promoting knowledge and innovation, as well as increasing the quota of aggregated value that applies to local products. Foreign capital inflows, a better of resources, government investment in appropriate infrastructure and mainly, the consolidation of a quality education system, are the factors de-

termining sustained economic growth that generates employment, as Mexico needs.

In this sense, public policies and legislative reforms in economic matters must be reoriented toward achieving a competitive environment that encourages corporate and financial culture among citizens, and that promotes promote both access to funding opportunities for entrepreneurs, such as generating new jobs by the companies, and the creation of new educational schemes focused on competitiveness and business leadership for citizenship. This emphasis on strengthening human capital to increase employment levels in the country becomes evident while recognizing that most OECD-countries (Organization for Economic Cooperation and Development) have seen a considerable growth in the demand for labor with higher skills and educational levels in the past decades, and to the evidence that this trend will continue in the long haul.[18] Therefore, people will have the necessary tools to position themselves as the main promoters of the development process.

The economic sphere is, after health and education, one of the highest priorities for people, because of the large number of freedoms that the certainty of having solved the basic needs provides. The imagination that enhances the ideal of the country or the ability to design projects for better living conditions of the people, thrives when humans have given vital channel for their needs as they develop within a democratic culture. Thus, it is clear that the full development of a person must be accompanied by economic stability and an environment where democratic values prevail, aspects that are guaranteed when people have access to economic resources coming from a fair and adequately compensated job.[19]

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18. Bjørnstad, Roger, Marit L. Gjelsvik, Anna Godøy, Inger Holm and Nils Martin Stølen, *Demand and supply of labor by education towards 2030, Linking demographic and macroeconomic models for Norway*, Report 39/201 Statistics Norway, Norway, 2010, p. 33.

19. The National Survey of Occupation and Employment made by INEGI shows that in the first quarter of 2011, 28.5 percent of the employed population works in the informal sector, clearly showing the weakness of the domestic market and the lack of the regulations, as well as the lack of employment opportunities able to provide sufficient incentives to prevent a third of Mexico's employed people to work outside the framework of legality.

The engine driving this improvement in the economic sphere is found in all regions of the country: in rural and urban areas, in manufacturing and services, in municipal and state governments, and in general, in each and every Mexican. Thus, in rural areas, biotechnology, ecotourism, productive specialization, agricultural and livestock consulting and countless other rural services should promote the creation of a new regional economy. While in more developed urban areas, it is essential to decentralize activities and to subsequently create new focal points that have the necessary infrastructure to sustain urban and industrial challenges. Thus, in rural and urban areas, sustainable human development will be ensured, supported by extensive labor supply to extend the freedoms of individuals to access higher levels of welfare.

Infrastructure
Investment in infrastructure is a fundamental aspect for sustainable development, human development and economic growth. Schools, hospitals, child care centers and welfare centers, among others, provide adequate spaces for improved quality of life for Mexicans in urban and rural communities.

Energy and environmental infrastructure increase sustainability in a country, while waste treatment plants, clean power generation plants, water treatment plants and dams, among many other projects, gradually increasing life expectancy of forests, jungles, rivers and lakes. Finally, productive and urban infrastructure such as roads, lighting, electric power, industrial parks, ports and airports, rural roads, irrigation, urban roads and railways, among others, strengthen the country's productivity and Mexicans' employment, as all these changes include a larger number of people in the productive sector and attract more domestic and foreign investment to the country.

According to the North American Development Bank (NADB), Mexico needs to invest more than $ 25 million annually for infrastructure financing in order to lessen lags of the country in this issue. The public services that require the most attention are sewage, since only 35 percent of waters are treated, and municipal roads, since

only 50 percent of roads are paved. The NADB also specifies that in Mexico it is necessary to increase the regulation of public services so the government may obtain the necessary capital to reinvest in infrastructure, as the price paid for the services does not reflect the real value of its cost. Additionally, the agency states that implementing an adequate infrastructure requires political will in order to reduce subsidies, implement structural reforms and an appropriate regulatory framework, as well as the professionalization of services.[20]

Adequate infrastructure can have positive impacts on the country's development: for instance, a road can turn a small town into a tourist attraction, a power line can drive the transformation of a rural community into a leading producer of milk, egg or any agricultural or livestock product, a voice and data line can connect remote places to any other place in the world through the Internet. Also, infrastructure development can extend the sphere of influence of the formal economy and public administration; that is to say, it promotes better organization in the country. In addition, it is a transformation engine of economy and society because it creates labor options and brings production centers and consumption centers closer together, creating economies of scale and new markets.

Mexico, like other developing countries, has important programs for strengthening productive infrastructure on behalf of international organizations. The NADB finances infrastructure projects for economic development of the border region between Mexico and the United States. The Inter-American Development Bank (IDB) is collaborating with Mexico to extend funding for infrastructure projects in the federal and state levels, emphasizing works with the private sector or public-private partnerships, in addition to donations for activities that improve the business climate for investment in infrastructure. Such activities include strengthening public sector capacity to prepare and manage projects, identifying potential barriers for

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20. Pérez-Gea, Armando, *Retos de Infraestructura Básica Municipal*, North America Development Bank, United States, 2009. (In Spanish)

investments, advisory services, technical assistance and training for
regulators;[21] however, these services and facilities must be managed
by the communities through their governments or contracted agencies
for these purposes.

As mentioned, policies to promote the development of infrastruc-
ture or any other dimension of the model also drive human develo-
pment, economic growth and sustainability of natural resources in
all areas of government.[22] For this reason, it is necessary that efforts
are not duplicated during the creation of public policies since this
would result in a waste of resources; also, the involvement of entities
involved in the development and implementation of policies should
not overlooked, this would result in the failure to include important
assessments of the impact of said public policies within the system.

Innovation
A World Bank study indicates that about half of the differences in
income and per capita growth in countries is due to differences in the
creation of productive factors commonly linked with technological
advances.

Economies with more research and development have faster
growth in the manufacturing and agricultural sectors than countries
that do not invest in these areas. Unfortunately, developing countries
like Mexico not only don't employ insufficient amounts of investment
in research and innovation, but their rate of adoption of technologies
developed by advanced countries is also very low.

According to the World Bank, Mexico has a poor and declining
patent production compared to similar economies. Insufficient inves-
tment in research and development is attributed to low cooperation

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21.   Inter-American Development Bank, Internet information consulted during the month
       of May 2011: http://www.iadb.org/es/proyectos/proyectos,1229.htm
22.   The experience of having worked in the Micro regions Strategy at SEDESOL, supports
       the premise that through infrastructure there can be significant support to social and
       territorial development in the country's poorest communities. See report Micro regions
       Strategy results in www.microrregiones.gob.mx.

between the private sector and universities, as well as the lack of public resources for the development of this sector.

The dimension concerning innovation within the model has a special connection with the dimensions of infrastructure, employment and human capital, as one of the main features of economies leading the field of technological development is the education of its population.

Thus, to achieve a sufficient number of scientists able to develop and innovate through new products, processes or general findings that allow the country to position itself at the lead of scientific knowledge, nations have three basic choices: 1) short term: the import and repatriation of scientists, accompanied by substantial investments in technology referring to their knowledge, 2) long-term: investment that involves all levels of education and resulting gradual creation of scientific knowledge, and 3) a combination of the two previous options, accompanied by numerous educational policies and technical investment.

Sometimes general knowledge is that countries like Japan are more technologically advanced, or that South Korea has, unlike other countries, unusually rapid technological changes. These claims, however, do not mean that the stock of useful knowledge is greater in Japan or that grows faster in Korea.

According to Robert Lucas, when it comes to technological differences between countries general knowledge is not what is being discussed, but the knowledge of some people or subcultures.[23] Based on this reasoning, we can say that technological progress in countries occurs when governments implement policies to increase their competitive advantage through the accumulation of specific human capital among their residents.

Globally, the most favored areas by scientific research and those that bring greater financial rewards are genetics, biotechnology, cybernetics and robotics; however, the number of Mexicans involved

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23.   Lucas, Robert E., 1988, op. cit., p. 15.

in these branches of knowledge is very low. According to the general report of the status of science and technology of the National Council of Science and Technology (CONACYT, by its initials in Spanish), in 2007, Mexico had only 10,904 researchers within the National System of Researchers (SNI), distributed between the areas of knowledge according to graph 3.1.[24]

Graph 3.1. Members of SNI, per area of knowledge 2009
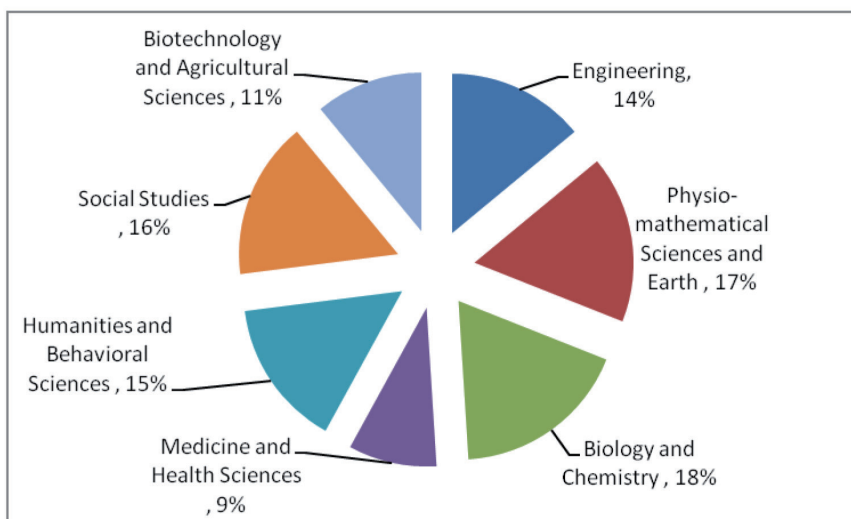
Source: SNI Database, CONACYT.

As it is shown, the diversity and concentration in study areas is not a problem in Mexico, however, the total number and geographic concentration of researchers is. 39 percent of researchers in Mexico are located in the Mexico City, while the rest are distributed in all 31 states.

24.   National Council of Science and Technology (CONACYT), *Informe General del Estado de las Ciencia y la Tecnología México 2009*, CONACYT, Mexico, 2009, p. 262. (In Spanish)

The purpose of innovation being placed as a dimension of the model is based primarily on the need of an education sector linked to science and technology in Mexico, and consequently a more sophisticated production sector, since only through this it is possible to connect economic the growth rhythm and social development of Mexico with the inertia of developed countries.

Democratic Normalcy

Normalcy in democratic practice refers to the ability to translate the benefits that democracy provides to better quality of life and higher levels of development for present and future generations. That is, democracy at its most advanced state, recognized as an appropriate and consistent system of government and social organization, enabling communities, the private sector, academia and the public at large to show behavior of legality, stability and normalcy in order to progress in welfare levels. In this sense, it is not enough to elect leaders democratically; it is also necessary to create new mechanisms to steadily promote the value of democracy in municipalities, states and the federation, and in the public and private sectors. Therefore, democracy must be consolidated as a way of life at every level of society.

Progress in this direction requires a large commitment of political actors, to put the interests of the people above personal interests. Similarly, it is required that the private sector and civil society take responsibility in creating the necessary channels to strengthen democracy and to build a more inclusive, fair, and participatory country. Thus, with determination and long-term vision, each actor of society will be able to strengthen and nourish democratic normalcy from different angles and in a constant manner.

Despite the advantages offered by democratic normalcy for nations that achieve it, some of the emerging democracies in the developing world have generated mistrust in society and discouraged the public about the benefits of this political system by not giving in implementation and feedback, tangible benefits and a better quality of life for people. In this sense, the Latinobarometro 2008 survey shows that 34 percent of Latin American respondents think it is possible to

become a developed country with other systems of government other than democracy, while only 57 percent of Latin Americans support democratic regimes. While just over half of respondents supported democracy, it is important to note that the percentage is greater than the 54 percent shown by the survey in 2007. For the specific case of Mexico, the percentage of people who supported the democratic regime fell in 2008 to 43 percent compared to 48 percent last year, while satisfaction with the regime also decreased from 31 percent in 2007, to 23 percent in 2008.[25]

Given this result, democracy in Mexico should be translated through effective programs and strategies in a wellness able to convince people that citizen participation, full respect for the rule of law, transparency in the exercise of power, among other practices, contribute to increase people's freedoms and to strengthen a development model focused on the interests of the human being. Likewise, democracy as a system, should be prioritized as the most suitable path towards the consolidation of a sustainable development model in time, by providing the right tools to strengthen the coordinated work of society in generating new and better opportunities for development.

Security and respect
A fundamental aspect for the consolidation of the rule of law in Mexico is ensuring freedom, security and respect for the guarantees of individuals. However, according to the Amnesty International Report 2011, in Mexico, human rights violations, far from decreasing, violence has intensified during recent years towards different sectors of society and for numerous reasons. The report highlights the excessive use of force by police and military commanders, killings of journalists and threats to freedom of expression as well discrimination against indigenous people and migrants crossing the U.S. border. Additionally, the agency reported the existence of high levels of violent crime

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25. Latinobarómetro Opinión Pública Latinoamericana, *Latinobarómetro 2008*, Latinobarómetro Corporation Santiago de Chile, Chile, 2008.

related to drug trafficking.[26] According to the 2011 report, during 2010 in Mexico there were more than 15,000 deaths related to violent criminal gangs in the north of the country and more than 50 military and 600 police officers of all branches of government were killed in incidents of violence.

Also, according to the National Survey on the Dynamics of Household Relationships of the National Institute of Statistics and Geography (INEGI, by its initials in Spanish), violence against women is also one of the recurring problems of the country, as 5.6 million women over the age 15 claimed to have experienced some form of violence in the home, community, workplace or school, and almost 70 percent of them reported having been insulted or offended by males.[27]

These and other human rights violations that occur in Mexico can be lessened through surveillance public policies and support for social policies and organized crime fighting policies, as well as implementing awareness campaigns against all types of violence against any member of society. In this sense, through the implementation of systemic public policies in the dimension of security and respect, there can be progress in the respect for law and human rights. It is difficult achieve a balance in this area, since the actions that represent an abuse of power for certain sectors of society, for others means the potency necessary to enforce the rule of law. This implies that authorities and citizens should conduct themselves with adherence to legal standards that protect the rights of the people, in order that judicial intervention is not given to subjective interpretation.

Just as the axes and the dimensions of the model allow the implementation of public policies generated through a systemic process involving all actors of society, feedback components allow continuous improvement of the system, to establishing the fundamentals for harmony among the members of society and the permanence of the

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26. Amnesty International, *Informe 2011: el estado de los derechos humanos en el mundo*, Amnesty International, Spain, 2011, pp. 311-315. (In Spanish)

27. The National Institute of Statistics and Geography (INEGI), *Encuesta Nacional sobre la Dinámica de las Relaciones en los Hogares 2006*, INEGI, Mexico, 2006, p. 47. (In Spanish)

democratic regime voluntarily. These components, defined as the levers of sustainable human development, encourage citizens to become actively involved in obtaining higher states of development and prosperity.

The levers of the model
The proper implementation of the model on the axes and dimensions described above requires constant feedback that allows materializing and maximizing the progress of sustainable human development in the conditions, means and ends of development. This process is carried out through the levers of the systemic model for sustainable human development in Mexico, which are defined as instruments that feed the model, and in turn strengthen and amplify the progress of SHD, permeating the whole system with the benefits achieved.

These levers consisting of education, the rule of law and citizen participation are the catalysts that maximize the benefit of the actions that are applied in any of the subsystems, to transmit them to other social subsystems that belong to the system. Another benefit of said levers is that they allow each implemented policy to have a multiplying effect on the achievement of results, focused on the goals of the municipalities or states of the country.

The following describes the levers on the sustainable human development model and simultaneously describes how the intervention of each acts as a catalyst, that is to say, how these levers strengthen the axes and dimensions of the model through the positive effects that they trigger.

Education
Education is a priority for the present and future of Mexico. At all levels it is, without a doubt, the best path that society can take to ensure higher levels in the quality of life of its citizens, for contains many opportunities for personal development, family, municipality, the state and the country as a whole.

Education determines the role to be played by men in society, contributes to what the person ought to be and contributes to the co-

llective imagery with a clear vision of what is and is not recommended for society. Civilized behavior, constructive discussions, care for the environment, respect for peers, understanding of the functioning of institutions, understanding the relationship between humans and their environment, and the development of creativity are some of the elements that education should promote in society, which is why it represents a key lever for the development of the person.

Furthermore, education is the root of a constructive state and competitive citizenship at all levels, for in it lies the formation of the political class, scientists, entrepreneurs, leaders and all those involved in the conformation and functioning of society. For this reason, it is essential that all sectors of society actively participate in education, promoting the advancement of society oriented in the same direction: sustainable human development.

Involving all actors of society in the educational process of the nation strengthens the country's democratic culture. Also, by sowing in citizens a democratic culture through education, participation is strengthened, not only in education but also in all aspects of life. The classroom is, after the family, the center where students learn and express the democratic values of a person, that's where children and young people learn to be participatory, respectful and responsible. Therefore, education is the epicenter of the structural changes that the country needs.

Thus, education is a fundamental lever for detonating and providing feedback to sustainable human development in Mexico in the short, medium and long term. By providing more and better educational opportunities for society, people also get the opportunity to star in their own development and that of their community, because they acquire the skills needed to trigger a human and sustainable development based on freedom and intergenerational responsibility.

Education is a vital link in the sustainable human development feedback generated by public policies aligned to the axes and dimensions of the model, as the education of the people allows the progress made during the development process to be capitalized holistically by citizens in all aspects of his life.

Rule of Law

The rule of law is also essential to improve democratic coexistence, stability and social peace in Mexico. For its consolidation, it is imperative to ensure the observance of law and full respect for human rights.

Like education, strengthening the rule of law is a fundamental lever for sustainable human development to guarantee order and security necessary to ensure the existence of an environment conducive to the pursuit of development by the people, not obstructed by remote aspects of legality and law. In this sense, the conceptualization of the rule of law as a lever focuses on three issues that are essential for SHD: the centrality of the person and their relationship to the rule of law, the role of the family and education in the pursuit of rule of law through a citizen participation and the coordinated action by the three levels of government in building a free and safe society.

The rule of law has the fundamental objective of guaranteeing the full welfare of the individual in society; that is to say, it must provide the appropriate framework to create a climate of order and security capable of protecting humans. It should also help in the process of development of the people, allowing them to reap the fruits of their hard work, promoting equity, transparency, monitoring and the free competition in a formal market, among other factors. For its part, the effort and the work of the people should be reflected in higher levels of education, health and income, as well as increased productivity through deregulation, recapitalization and investment in infrastructure, among others. Thus the rule of law is positioned as a lever capable of mitigating, directly or indirectly, some of the causes of poverty, crime and social inequity.

Furthermore, strict adherence to the law must be based on adequate education to allow the rule of law to become a desirable condition for the development of society. For this, the family and education take on a key role in forming conscious and responsible citizens, able to take a lead role in monitoring and enforcement of the law. The possibility for the public to understand that the rule of law provides access to higher levels of development; contrarily, detachment from it leads to negative processes linked to higher levels of insecurity and

crime, so its compliance is an opportunity to decrease problems like crime, impunity and the informality of markets, among other things that transgress the law.

In Mexico, the rising wave of violence and crime that has so hurt and outraged the country, reveals the need to consolidate the rule of law through the articulation of a coordinated effort between the three levels of government, with the purpose that the country moves forward in a common direction towards the consolidation of more advanced levels of freedom, justice and security. Thus, strengthening the rule of law ensures a solid foundation for increasing short-, medium and long-term development.

By uniting the actions of the three levels of government and leading them towards the same goal, the rule of law also ensures the economic, political and social sustainability. At first, access to employment opportunities and economic growth is strengthened over time, through the prevalence of an orderly and respectful market towards the economic rights of society, in turn, political freedoms allow for present and future generations to become actively involved in building a long-term democratic regime; and finally, full respect for the fundamental rights of the person allows the development of society.

Citizen Participation

Lastly, citizen participation is established as the last of the levers of sustainable human development, by placing the person as an active subject in the political, social, cultural, ecological and economic transformations of the country. Through participation, society is directly involved in the feedback process of the model and enables it to reach greater levels of freedom and sustainability.

The possibility of increasing the levels of welfare in society and that these levels are projected into the short, medium and long term, becomes more feasible when society is actively involved in demanding their rights and freedoms, and expresses their opinions through concrete proposals to improve their situation through participation in forums and through campaigns that weave the deepest values of

humanity and rise the urgency and necessity of placing the person in the center of political action.

In this sense, citizen participation inhibits negative aspects such as impunity and corruption and at the same time facilitates obtaining better services and opportunities for the population. By allowing the interests of society to be reflected in public policy implementation, public participation is established as a multiplier that projects well into the future.

With this clarity, it is clear that public participation strengthens democracy and sets it in society as a universal value because it encourages a type of a citizenship with more interest in staying informed about public and private events. This leads the destiny of the nation towards a higher level of development with society's preferences.

This participation is encouraged largely by civil society organizations that promote rights from different and varied fields of action in an organized manner. These organizations represent the needs and demands of society in favor of further development, to improve the quality of life of society and to preserve the natural resources of the planet, among other many issues. For this reason, the participative citizen plays an important role by leading social, political, economic and cultural organizations in strengthening democracy.[28]

Thus, citizen participation not only means a full exercise of citizenship to promote the rights of society and to monitor governments' fulfillment of their obligations, but also constitutes a lever for sustainable human development because it augments the efforts of citizens in the pursuit for development.

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28. For a review on how citizen participation, through Civil Society Organizations, contributes in the quest for development see: Gell-Redman, Micah and Caren Kang, "Plenty of unfinished business: The United Nations, Civil Society, and Global Development, *The public Policy Journal of the Cornell Institute for Public Affairs*, Vol 10, No. 1, Fall 2006, United States, 2006, p. 63-65.

3.3. Functioning of the model

As mentioned previously, the interaction between the axes, dimensions and levers allow public policies emerging from a process of analysis, policy and modeling, to be implemented efficiently and placed in a continuous spiral of improvement. This complex process will be exposed next, through the explanation of the operation of the systemic model for sustainable human development in Mexico. The result of this process is the implementation of public policies capable of improving the conditions, means and ends of society, and therefore, increasing levels of sustainable human development.

The dimensions, as described, are windows of opportunity to act on via specific policies, developing each of the three axes of development. The operating core of the model, composed of axes and dimensions, allows for efforts to be materialized, those that in a transversal manner consolidate a better country for present and future generations of Mexicans. Meanwhile the levers legitimize public policies and allow continuous feedback of the process, by engaging a society that is informed and willing to actively take part in the DHS.

This section begins with a description on how to carry out the steps of analysis, political negotiation and the modeling of public policies that take the model of construction policies from IIASA as a reference, as outlined in Chapter Two. The first section describes the emergence of public policies from 1) the development of a diagnosis that includes available resources and existing demands, 2) negotiation between different actors in society with diverse values, interests and goals, and 3) the modeling of strategies and scenarios for implementing these policies. The second section explains the implementation stage, that is, how the policies, once analyzed and projected, are set in motion and introduced in strategic areas to achieve sustainable human development gradually. Finally, the third section describes the way in which development generates further development through the levers.

Analysis, policies, and modeling of public policies

Consistent with the systemic model for the generation and implementation of public policies of IIASA, in this model it is also necessary that each public policy for development starts from sound analysis and transits further through the stages of political negotiation and modeling, in order to achieve an implementation with favorable results. This process, described in Chapter Two, is once again taken into account to build the systemic model for sustainable human development given the benefits it has for the systematization and standardization of the process of public policy making, referring to the transversal quality of the process and its continuous improvement.

The first stage in the creation and implementation of public policies is an analysis of the political, economic, geographic, demographic, and social context of localities in which there is intention to implement the model, in order to successfully do so. This assessment will provide information on the resources available to the subsystem, describing its strengths and weaknesses, areas of opportunity and threats both within and outside the subsystem. It should also consider the demands of its people, as it is they who are thoroughly aware of the needs problems of their community, as well as the strengths. The analysis must be thorough and objective, placing the interest in consolidating sustainable human development before all else, and preventing personal interests bias those who carry it out.

Once the analysis has been carried out, it is necessary to identify, expose and discuss which are the needs or problems that require the creation of public policies to promote sustainable human development. At this stage, called policies, there is an evaluation of the objectives, values and interests of the stakeholders with the intention of reaching consensus that tend toward the common good. This stage is particularly complicated, given the political, socioeconomic, and cultural differences, and for this reason, it is essential to guide and maintain the direction of public policy proposals in the pursuit of sustainable human development and, if possible, count on neutral agents direct the process. Thus, despite the differences that may exist between stakeholders of the subsystem being analyzed, the urge to

abate the prevailing issues and shared concerns in order to give future generations better development opportunities than the current ones, keep society together and guide it into the necessary agreements within an environment of harmony and democracy.

In this context, the values of empathy, respect, tolerance and harmony make more sense, and help to strengthen democratic practices in order to include all actors of society in generating consensus for the creation of public policy proposals. These proposals will not necessarily be the best, nor the most advanced, therefore they will require deep negotiation, evaluation and analysis in which all social groups must participate.

Ideally, application of public policies must be carefully evaluated before their implementation, therefore the importance of modeling. The simulation of the application of policies is just as important in this process as the experiments in laboratories for vaccine production, or making scale models for the construction of buildings. However, in the social sciences such simulations are very difficult to carry out because of the high social, political and economic costs an experiment in this area would imply. Once the strategies have been put in place, it is necessary to once again analyze the values and interests of the citizens involved. This feedback prior to the implementation of policies is essential and should be repeated as often as necessary to ensure, as far as it is possible, the proper implementation and operation of each of the initiatives.

Figure 3.7 depicts the process of creating public policies through systemic model for sustainable human development in Mexico. From the stages of analysis and policies, as well as from ongoing modeling strategies and scenarios, public policies develop to strengthen sustainable human development in some of the subsystems of Mexico.

Public policies, axes and dimensions
The implementation stage of the model focuses on the operation of the three axes and the seven dimensions of sustainable human development, once the policies have been designed, built and analyzed for a specific geographical and political space. The dimensions, as

described previously, are lines of action on which it is necessary to implement public policies to promote greater levels of development through the axes. Some dimensions are more compatible with certain axes than others, but in all cases there are synergies between axes and dimensions.

Figure 3.7. The creation of public policies
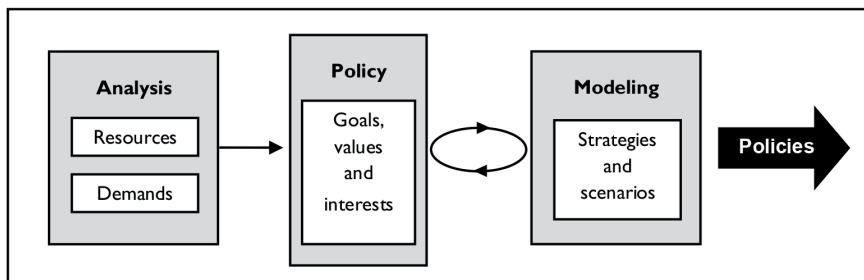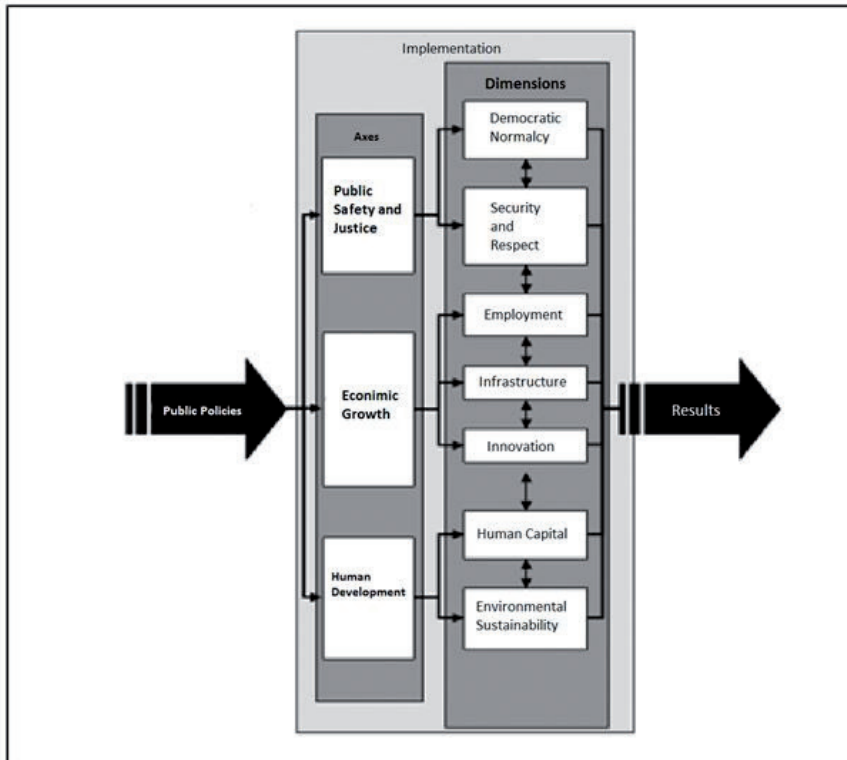

Source: Author's own preparation

Once public policies have been developed and have the consensus of the citizens, political actors and productive local bodies where they will be carried out, is necessary to decide on which strategic axes will said policies be implemented. Afterwards, it will be necessary to achieve the projected impact through the corresponding dimensions, so as to begin the process of sustainable human development.

Figure 3.8 shows how the axes and dimensions of sustainable human development interact, and how pre-conceived public policies are embedded in the operational stage of the model.

Each axis has a special influence over certain dimensions, as their relationship depends on the degree to which concepts can relate operationally. For instance, all legal aspects are part of the public safety and justice axis; however, other dimensions or lines of action may be a part of this axis, ones that relate to other axes of development, such as economic aspects, income distribution, etcetera. Similarly, dimensions relate to each other according to their functional and operational proximity. While some have a closer relationship, there

will always be a possible link between the rest of them. A clear example is the strong relationship between democratic normalcy towards security and respect, or between innovation and infrastructure, but all other relationships are also possible.

Figure 3.8. Implementation of policies

Source: Author's own preparation.

Since sustainable human development is not a limited purpose, but a constant process in which windows of opportunity to improve the quality of life of individuals will always be found, each element con-

tributes its operability, applicability, continuity or objectivity so that, following a responsible, committed, honest and perseverant process, a state of affairs is reached where matters can always be improved, and are always driven by the principle of the centrality of the person.

Figure 3.9 shows the combination of the process of public policy making, the articulation of axes and dimensions, and the attainment of sustainable human development. The arrow starting from the analysis stage and ending at sustainable human development represents each of the public policies that in the short, medium and long term will result in sustainable human development for Mexico. Thus, the systemic model for SHD in Mexico plays a vital role for the welfare of the citizenry as a mechanism to promote progressive values and freedoms.

The stage in which eventually the implementation of public policies transitions towards SHD is one of the most complex, since sustainable human development does not occur immediately after the implementation of policies, but rather gradually and the process is always perfectible. After implementing the policies in the different dimensions, the conditions, means and ends, are impacted to give rise to new reassessment and decision-making. This ensures the continuous improvement of development, gradually consolidating the central role of the individual and the importance of promoting sustainability in the social, economic and environmental aspects. Figure 3.10 shows the path of the axes and dimensions of the system towards the conditions, means and ends of sustainable human development.

In this step of the process, ideally there will be some degree of sustainable human development, achieving conditions, means or ends that are better than the initial ones, but that are still perfectible. These conditions, means and ends represent intermediate reference points to continue with the infinite process of sustainable human development. The following section explains in detail how, through a continuous feedback of the model carried out through the levers (education, Rule of Law and citizen participation), it is possible to arrive at more advanced stages of sustainable human development in the short, medium and long term.

Figure 3.9. Public Policies and Sustainable Human Development
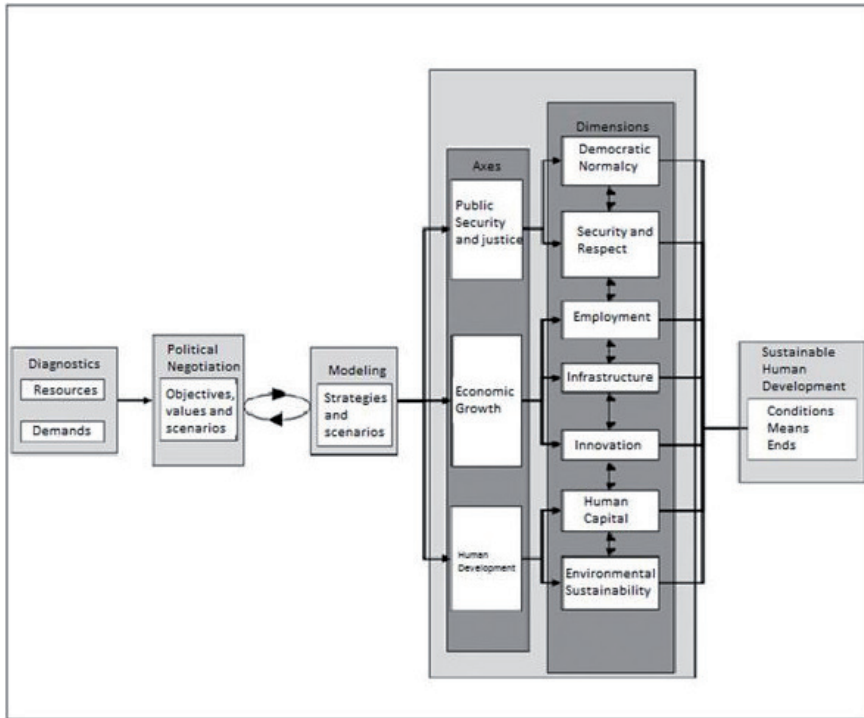
Source: Author's own preparation.

Figure 3.10. Axes, dimensions and sustainable human development
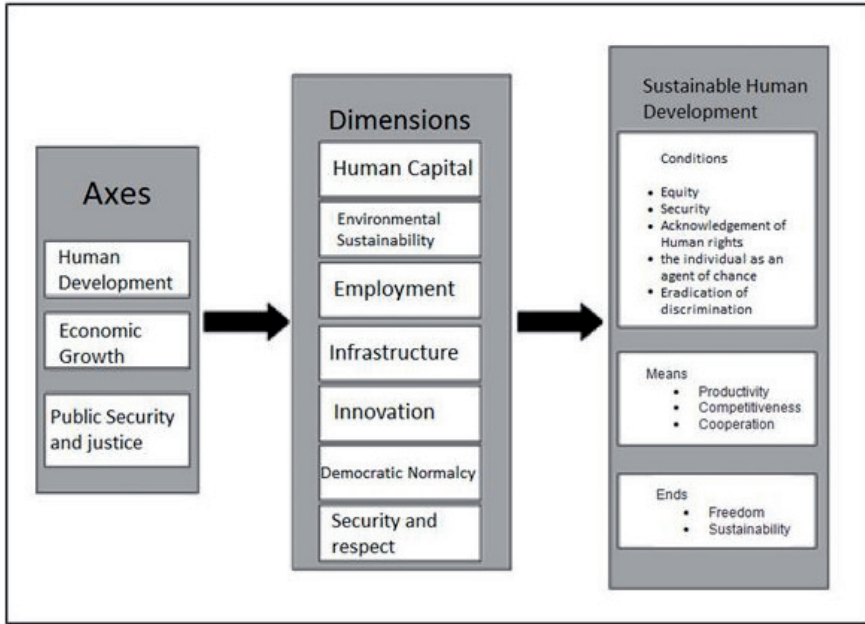
Source: Author's own preparation.

Feedback of the model

The consolidation and perfecting of sustainable human development in Mexico require the application of a systemic vision that preserves open channels of communication between the different subsystems and preserves feedback in this process.

As noted in Chapter 2, the systemic model considers an intense interaction between the different subsystems and stakeholders, in order to achieve consensus, agree on strategies and carry out actions that tend towards the common good. This evidences that success in the implementation of public policies will depend, in great measure, on the ability, knowledge and willingness of the stakeholders to opt for dialogue and even consider the possibility to correct the path in

case these public policies diverge society from the consolidation of sustainable human development.

In explaining the process of public policy making, there is an emphasis on the importance of continuous adjustments to ensure these policies respond to the needs and specific problems of a certain location. However, in this process that directly involves public policy makers, the rationality considered in the economic theory is virtually impossible to obtain.[29]

In fact, decision makers only have "split knowledge of the conditions surrounding the action and a slight perfection of the regularities and laws that will allow future consequences deduced from knowledge of the present circumstances."[30] This suggests that any action taken in a system can bring both favorable and unfavorable consequences for the rest of its components, and even if the ideal situation would be aware of the consequences and impact any action will have in the application of public policies, in social sciences these predictions are very limited. Sometimes the consequences of the implementation of a public policy are gradually reflected, which is why policy makers begin to perceive them when those affected express their agreement or disagreement.

In this regard, it is essential that the systemic model for sustainable human development makes use of its feedback components, which will allow to correct the inaccuracies arising after the public policies have been implemented and to gradually perfect the conditions, means and ends. Thus, education, rule of law and citizen participation are positioned as the levers needed to underpin the consolidation of sustainable human development in Mexico. Below each of the three levers is briefly reexamined in order to expose their role as catalysts in the consolidation of development in the country.

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29. According to which the outcome is when the person takes their decisions after analyzing the cost-benefit relationships of all existing option

30. Simon, Herbert, "A Behavioral Model of Rational Choice", *Models of Man, Social and Rational: Mathematical Essays on Rational Human Behaviour in a Social Setting*, Nueva York, 1957, p. 78. (Translator's own translation from the Spanish version)

As previously mentioned, education must consider the proliferation of a democratic culture that embraces the values of respect, inclusion and solidarity. These values are vital to spread in society the principle of centrality of the person, to promote the importance of dialogue, coexistence in harmony and participation. Upon receiving a comprehensive education that promotes a culture of democracy, people will be increasingly prepared and committed to actively engage in the process of creation and implementation of public policies. Only through responsible and educated society will it be possible to strengthen social capital networks and move to higher states of development.

In this direction, citizen participation also aims to involve citizens in the development process. Thus, the model of sustainable human development, places the person at the center of the tasks of national public life, while promoting the creation of channels for citizen participation that promote the values of solidarity and empathy and involves citizens in the changes that the country needs. Ideally, the private sector, government and civil society must work together to extend and take advantage of the range of possibilities that a person has to participate actively and responsibly in political, social, economic and environmental life in the country.

It is true that the problems prevailing in Mexico appear to have no quick solution or they discourage people and slow down public participation, however, it is essential the government does not cease its attempt to actively involve society, recognizing the capacity and impact that the network composed of organizations, foundations, educational institutions and other civil society stakeholders has in the development process. In the same manner, it is essential that Mexicans keep the fighting spirit that characterizes them in working together and in harmony in order to build a better country for generations to come.

This certainty that Mexicans need to become involved in a free and orderly manner in the political, social and economic life of the country is embodied in the rule of law. Full respect for the rules and laws of the country is the basic framework to maintain peace and

harmony in a society; ensuring the rule of law entails full respect for human rights and strict compliance and monitoring of the obligations citizens have. Thus, the rule of law is established as a fundamental lever to ensure that the benefits arising from the implemented public policies are distributed equitably and fairly, and under the terms and conditions contained in the law.

The rule of law and citizen participation find a common field of action when citizens are actively involved in the process of monitoring of compliance with the law; the right that people have to express their demands and the ability to be actively involved in country's political life keeps the process of creating and implementing public policies under strict quality control, tending to higher states of sustainable human development.

This is the way that education, public participation and the rule of law are positioned as the levers that supplement the systemic model for sustainable human development, as shown in Figure 3.11. The levers drive a steady improvement of the conditions, means and ends, and therefore gradually generate higher states of development.

The importance of the levers lies in the ability they have to endorse the principle of the centrality of the person, by granting the responsibility to be actively involved in the development process of the nation, and the monitoring and enforcement of the law.

The levers intensify the impact of each of the policies undertaken on behalf of SHD, by allow citizens to easily obtain development in the short, medium and long term. The continuous feedback of the model, combined with systemic planning of public policies, allows gradually achieving the consolidation of the conditions, means or ends, reconsidering new goals in a short, medium or long term every time a process is complete.

Figure 3.12 shows such temporality. Each of the extended horizontal blocks represents gradual compliance with objectives, in some cases short-term objectives will only represent at some point, means or conditions for longer terms goals. The figure only shows dimensions, which means that these are behind the axes; within each block there is strong feedback guided by the levers in each of them, this

mechanism is repeated again and again to move into higher states of development.

Figure 3.11. Systemic model for sustainable human development
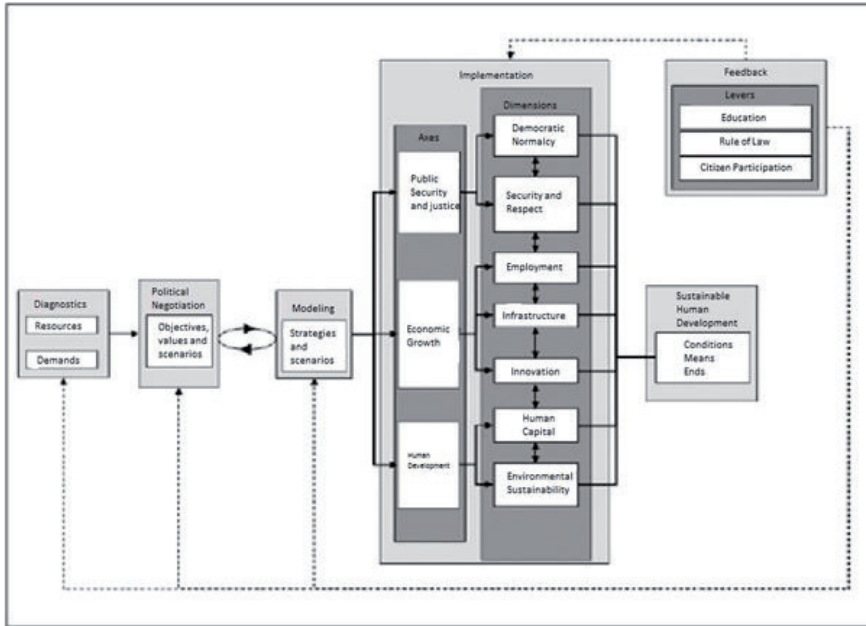
The long-term vision implies that the systemic model for sustainable human development seeks to transcend the periods of government. That is, regardless of the political party that is in office in the municipal, state or federal government, long-term objectives should be retaken by subsequent administrations, because they have been designed and constructed in accordance with a long-term philosophy.

The ability to set a path with long-term goals is only possible when within a framework of harmony and democracy, governments, the private sector and the civil society agree on the importance of the centrality of the person despite political, ideological, cultural,

social or economic differences that may exist. As will be discussed in chapter four, concord lays the basis for overcoming the differences and reaching agreements that tend toward common welfare, while democracy is the only political system capable of correcting its inaccuracies by involving all society actors in the consolidation of better living standards for present and future generations.

Figure 3.12. Temporariness of sustainable human development
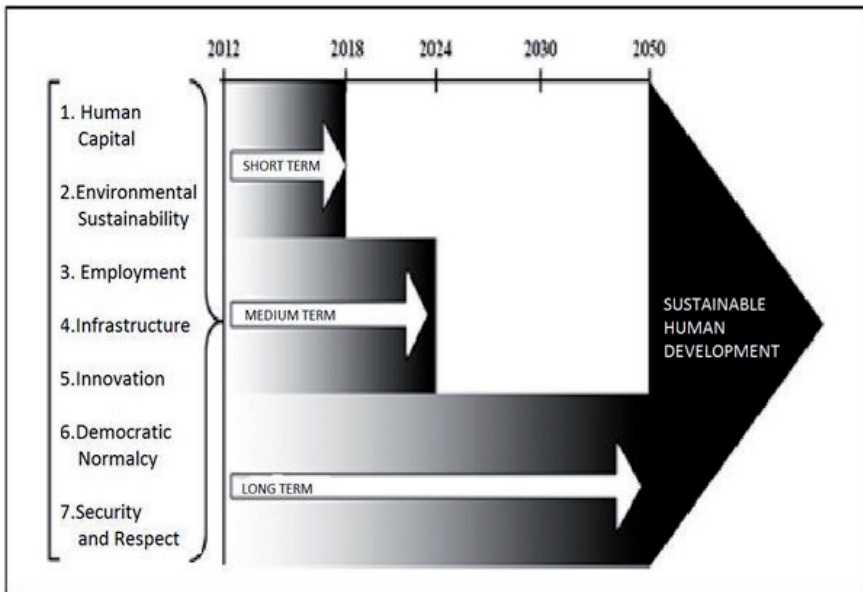
Source: Author's own preparation.

Chapter IV.
Concord and democracy for sustainable human development in Mexico

The consolidation of sustainable human development in Mexico requires, in addition to locating the person at the center of the design of municipal, state and national public policies, as well as a methodology and technique as the one offered by general systems theory, and two fundamental factors for social coexistence and development: concord and democracy. These elements provide a number of positive aspects that constitute the optimal scenario for the proper functioning of the systemic model of sustainable human development in Mexico. For this reason, a democratic regime in which concord prevails is a key element for the operation of this model.

Thus, harmony brings the social element necessary for socialization and the implementation of the systemic model, in addition to sowing in the soul of the people, that harmony required to identify pending tasks and define the reforms Mexico needs in this century. Inspired by this premise, the will of Mexicans will remain unwavering, as they will pursue fair and useful objectives, always oriented towards the common good.

Meanwhile, democracy brings a positive social meaning linked to the development of the individual and society: the value of the person. In addition to locating freedom and sustainability as centers of the operation of society, democracy also permeates all forms of communication and regulates human activity in all its forms, which is why it involves creating a culture that is truly directed to the development of the person.

National concord and democracy universal values, not only are one of the greatest challenges of Mexico today, but also a great opportunity to project the country's development towards the short, medium and long term. Current circumstances open the possibility of placing Mexico among the countries able to demonstrate that when harmony and democracy permeate the political and social environment, development is more feasible, more sustainable over time and adjusted to the needs and desires of the population.

While in Mexico higher levels of development have gradually been achieved, it is clear that this development has also been slow and distorted, since by establishing itself as a young democracy with concord levels lower than those desired, the country has progressed in terms of welfare, but not at the pace desired and expected by society.

In this context, this chapter highlights the importance of an atmosphere of harmony and democracy to consolidate a successful model for sustainable human development in Mexico. Thus, in this chapter, the concepts of harmony and democracy are first defined, in their role of key elements for creating the necessary environment for the operation the model of development. Subsequently, national concord and democracy as universal values are linked to the conditions, means and ends of the model, so that through them, sustainable human development is gradually strengthened and nurtured. Finally, recognizing that sustainable human development requires the participation of all actors in society, the last section of this chapter presents an invitation to all Mexicans to work for sustainable human development, each one from their environment.

4.1. National concord and democracy as universal values

Thinking the future entails recognizing and appreciating the achievements and goals reached during the two hundred years from the start of the fight for national independence and the hundred years from the Mexican Revolution, but equally important, it involves designing new proposals that strengthen the path of prosperity, peace and national development. Such proposals should not be based on

violence and confrontation, but rather, on the political, economic and social transformation that Mexico needs, it should be built on concord and common understanding that only by placing the person in the middle the process of national development, the country will be able to successfully address the challenges present and future of the nation.

The need to trace a new path for Mexico requires the work and participation of every citizen who makes up the country; this way, governments, the private sector and civil society will be taking on a real commitment to national development. The ability to provide the public with the natural right to forge the way to their own welfare is included in democracy, by being a political system that is able to authenticate the freedoms of the individual and extend them over time.

Thus, harmony and democracy encourage an environment conducive to sustainable human development in Mexico, since, as discussed in Chapter Three, these values bear a close link with the processes of creation, implementation and feedback of the public policies that make up the model. Each of the processes of this model uses concord and democracy to optimize their performance and provide society with a harmonious environment that facilitates their search for wellbeing.

Democracy agrees with the goal of placing people at the center of the development process by allowing access and active participation of society in the social, political and economic debates. This allows the model to gradually achieve higher states of sustainable human development through the feedback process. Meanwhile, concord, as a desirable element in a democratic regime, represents the possibility of transforming political and ideological confrontations in constructive discussions with more substantial content in order to exploit the wealth that arises from differences, as opposed to the immobility generated from discordance. Dialogue in concord allows to favor the supreme interest expressed in public welfare above any other interest. By choosing the preservation of an atmosphere of empathy and respect, it is easier to make progress in a coordinated manner in the planning and implementation of the changes that the country needs.

Below the concepts of national concord and democracy are briefly defined as universal values, in light of their importance in the natio-

nal context to promote the model for sustainable human development in Mexico.

National concord

The hope for a better future, in which the dreams of millions of Mexicans are embodied, compels society to work in creating actions and strategies to combat poverty, insecurity, human rights violations and environmental devastation, however, this coordinated effort entails great difficulties. When differences in political, economic, cultural, social, ideological and geographical terms are added to the indifference, apathy and lack of will on the part of stakeholders from different sectors of society, the achievement of the necessary arrangements for the development sustainable human is impeded.

This evidences the importance of a harmonious atmosphere to find, despite these differences, the necessary consensus to overcome paralysis and move into higher states of sustainable human development. Concord refers to the recognition of others as a complement and accomplice in building a better country, that is, it represents civil coexistence in favor of the common good. In this sense, Aristotle states that concord is somehow related to friendship by stating that

> […] Is not enough, for there to be concord, for two parties to think the same way about a given object, whatever it may be. It is necessary also have the same opinion in the same circumstances [...] Concord becomes a sort of civil friendship, since it comprises common interests and all the needs of social life.[1]

Thus, even though the proposed means for achieving development are not exactly alike for all citizens, it is essential to agree on the same ends: the need to reduce inequity, to ensure full respect for human rights, to eradicate street violence, to improve public envi-

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1. Aristotle, *Ética a Nicómaco*, Alianza Editorial, Madrid, 2008, p. 271. (Translator's own translation of quote from the Spanish version)

ronments with plans for the environment and in general, to improve the quality of life for all Mexicans, especially the most vulnerable. Thus, the centrality of the individual as subject and object of national development is authenticated as the compass that should guide each of the public and private efforts to ensure the common good.

Spinoza on the other hand refers to harmony as the union of spirits among citizens to achieve peace and security, these being the ultimate goals of the State. He also points out that living in harmony and full respect for the rights of individuals represents the most appropriate situation that the State must guarantee.[2] In the same way, he notes that, "if human nature were made so that men more vehemently wished for what is more useful to them, no art to achieve harmony and fidelity would be needed. But, as human nature is formed very differently, the state must be organized so that everyone, both those who govern and the governed [...] do what the common good requires".[3]

This thought leads to the recognition that all matters pertaining to the common good must be addressed by citizens with a positive and proactive attitude, appealing to the values of empathy, respect and solidarity that should characterize all stakeholders in our society. Aristotle says that this attitude is characteristic of good men, being willing to sacrifice their own interests in exchange for social welfare:

> [...] such a concord exists between good men, as these agree with themselves and each other, because they remain on the same principles [...] the will of men and remains stable and does not change as the ebb and flow of a narrow, they want things fair, convenient and aspire to them in common.[4]

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2.   Spinoza, Baruch, *Tratado político*, Alianza Editorial, Madrid, 2004, p. 127. (In Spanish)
3.   Ibidem, p. 132.(Translator's own translation of quote from the Spanish version, document does not exist in English)
4.   Aristotle, 2008, op. cit., p. 272. (Translator's own translation from the Spanish version)

This concord, described as a civil friendship guided by the goodness of people, is the value that should permeate every aspect of society and thus the behavior of citizens so that, guided by a deep commitment to Mexico, it is possible to solve both old and recent problems that have hurt society. This concord implies that society is capable of giving preference to a positive vision rather than the coincidence of strategies for obtaining it, therefore it is essential that people take full responsibility and work together to abate the negative situations prevailing in the country.

In this regard, it is important to think about how this value is conceived in Mexico. The first national survey on discord and concord among Mexicans, conducted by Consultores en Investigación y Comunicación,[5] gives important information about how Mexicans perceive the value of concord and its importance for detonating the changes the country needs. According to the study, 55 percent of respondents associated the term "concord" with the ability to establish agreements and live in harmony, while 30 percent did not know meaning of the word. Likewise, Mexicans believe it is in the family where a higher level of concord prevails, giving it a score of 8 on a scale of 1 to 10, while the area with the lowest level of concord is that of Mexican politics, with a score of 4.6.

The survey also reveals a widespread rejection of violence, as about 97 percent of respondents are against verbal and physical confrontations. In the same way, fights and protests at the Chambers of Deputies and Senators are positioned, with 28 percent, as the political behavior that most outrage provokes among citizens, followed by broken promises and corruption with 16 and 12 percent respectively. In addition, 52 percent of respondents stated that the country is at a standstill because politicians fail to achieve agreements.

Another important indicator of the value of concord in politics is that 73 percent of the sample considered it "very necessary" to de-

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5.   Conducted by Consultores en Investigación y Comunicación (cinco) and published by *Nexos* Magazine in December 2008. (In Spanish)

crease issues of violence and confrontations, and to solve the country's problems more public security and progress in law legislation is needed. The data collected from this survey show the high value that the Mexican population grants concord as the key to meet the challenges of the country and to make way for higher levels of welfare.

Although the results show that the public values concord as necessary and condemns certain attitudes of its political class, the survey also shows that a part of the population replicates behaviors and attitudes that divert society from a harmonious environment. According to the survey, 50 percent of respondents would not be willing to marry a person with political views different from their own, while 26 percent would not even talk to the other person. Similarly, about a third of the sample believes that when politicians are conciliatory, they lose leadership and betray their convictions.

These data indicate that, although concord is a desired value in the population, is not yet fully rooted among it. Mexicans yearn for an atmosphere of concord and harmony in society, which is why they disapprove of political confrontations and violations of the rule of law; however, at times, they would rather sacrifice this concord if in order to achieve it, it is necessary to sacrifice some of their interests.

This inability to reach agreements and thus solve the problems of the country is, among other things, due to discord and apathy that still prevail among the population. It is not enough to show the dissatisfaction with the present state of things if actions are not carried out in this regard; active participation and a positive attitude towards change and conciliation to consolidate development are required. Only when concord is strengthened among the population, democracy will have the opportunity to provide the necessary certainty to close the circle of development through a clear and transparent regulatory framework.

The universal value of democracy
The possibility of involving all members of society in the effort to build sustainable human development, and thus the actions taken in this direction are embodied in democracy. This government regime fulfills

its function of providing vitality and strength to the development process, by encouraging feedback and improvement of the conditions, means and ends of the model; it is therefore, one of the cornerstones of sustainable human development and essential in its understanding and implementation at all levels of government and social spheres.

Democracy is not only a government system, but its overall influence is much greater as it represents a universal value and plays an important role for the development of humanity. This section highlights some characteristics that comprise and outline it as an indisputable determinant of development. In this context, Schumpeter defines democracy as "that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote".[6] Meanwhile John Stuart Mill states that "It is by political discussion that the manual laborer [...], is taught that remote causes, and events which take place far off, have a most sensible effect even on his personal interests; and it is from political discussion and collective political action that one whose daily occupations concentrate his interests in a small circle round himself, learns to feel for and with his fellow-citizens, and becomes consciously a member of a great community."[7] These approaches indicate that democracy not only allows citizens to exercise power through vote, but also brings people together and allows them to acquire a sense of belonging and responsibility in society, which translates into greater participation in the pursuit of happiness.

Bobbio defines democracy as the choice of a group of individuals on a decision[8] while Sartori describes it as a form of choice opposite from aristocracy, since a larger number of individuals from different

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6.   Schumpeter, Joseph, *Capitalism, Socialism and Democracy*, Routledge, 1994, p. 269.
7.   Stuart Mill, John, "Considerations on Representative Government", in Kegan, Paul (comp.), *Collected Papers of John Stuart Mi*ll, University of Toronto Press, vol. XX, London, 1977, p. 406, quoted in Bobbio, Norberto, *El Futuro de la Democracia*, Fondo de Cultura Económica (fce), Mexico, 2005, p. 39.
8.   Bobbio, Norberto, 2005, op. cit., p. 24.

strata and with notable differences in their culture, education, past and condition can take part in elections.[9]

Finally, Rawls suggests that the principles on which social justice is structured are particularly compatible with the form of government known as constitutional democracy. The author emphasizes what he calls the principle of equal participation, which means that all citizens have the same right to participate and determine the outcome of the legal and political process; he specifies that this includes the provision of "one citizen, one vote", and the assurance that elections are free, fair and regular. Rawls also adds that the principle of equal participation includes the right of all citizens to run for public office.[10]

Democracy in this context refers not only to the possibility for citizens to freely exercise their vote or run for public office, it is on the contrary, a culture that embraces all aspects of life in society and brings together a number of behaviors, norms and attitudes that provide a framework for action. This means that a democratic system is consolidated when there are changes in at least three dimensions: 1) Behaviorally, when no significant groups seriously attempt to overthrow the democratic regime or secede from the state, 2) Attitudinally when even in the face of severe political and economic crises, the overwhelming majority of the people believe that any further political change must emerge from within the parameters of democratic formulas, and 3) Constitutionally, when all the actors in the polity become habituated to the fact that political conflict will be resolved according to the established norms and that violations of this norms are likely to be both ineffective and costly.[11] This notion means that society should adopt a democratic culture in all aspects of life, that is to say, for the individual to take responsibility as an agent of change

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9.   Sartori, Giovanni, ¿Qué es la democracia?, Taurus, Spain, 2003, pp. 351-353. (In Spanish)

10. Rawls, John, *Teoría de la Justicia*, Fondo de Cultura Económica (FCE), Mexico, 2006. (In Spanish)

11. Linz, Juan and Stepan, Alfred, *Problems of Democratic Transition and Consolidation. Southern Europe, South America, and Post-Communist Europe*, The Johns Hopkins University Press, United States, 1996, pp. 5-6.

and at the same time, respecting the decisions of the majority, thereby generating a climate of harmony.

In addition, a consolidated democracy should provide institutions able to give it a perennial validity and improve it at all times. In this sense, democracy Robert Dahl understands democracy as the possibility of having moral independence and responsibility, because:

> [...] Any human being is a better person for having the opportunity and ability to reflect the relative value, the desire or kindness of the options they face, to then act responsibly to do what they see fit. Some important choices -collective choices, particularly- are best made when consulting other persons involved and according to the principles of collective decision making. Democracy is the only political system that can completely solve this, although in practice it often fails.[12]

He also states that there are five institutions necessary for a country to be considered democratic:[13]
- Elected Officials. Control over government decisions about policy is constitutionally vested in officials elected by citizens. Thus modern, large-scale democratic governments are representative.
- Free, fair and frequent elections. Elected officials are chosen in frequent and fairly conducted elections in which coercion is comparatively uncommon.
- Freedom of expression. Citizens have a right to express themselves without danger of severe punishment on political matters broadly defined, including criticism of officials, the government, the regime, the socioeconomic order, and the prevailing ideology.
- Alternative sources of information. Citizens have a right to seek out alternative and independent sources of information.

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12. Dahl, Robert, "Justifying democracy", *Society*, vol. 35, n. 2, Academic Research Library, United States, 1998, p. 389.
13. Dahl, Robert, "What Political Institutions Does Large-Scale Democracy Require?", *Political Science Quarterly*, 120, n. 2, United States, 2005, pp. 187-188.

- Associational autonomy. To achieve their various rights, including those required for the effective operation of democratic political institutions, citizens also have a right to form relatively independent associations or organizations, including independent political parties and interest groups.

As noted, democracy is more than just a political system in which elections are conducted in an orderly manner and in which rulers are elected by the public, making it necessary to establish and strengthen the institutions to ensure permanence of democratic systems from society and government.[14]

Once this approach has been made the concept of democracy, it is necessary to justify its character as a universal value. According to Sen, a value is universal, not as long as there is a general consensus that it is, but as its universal application being positive for all people and therefore giving meaning to the social body. For Amartya Sen, "While democracy is not yet universally practiced, nor indeed uniformly accepted, in the general climate of world opinion, democratic governance has now achieved the status of being taken to be generally right."[15]

The conception of democracy as a universal value does not originate from a single merit, but from a series of virtues of democracy that bring it closer to that state of universal value. Democracy has an intrinsic value that is a fundamental part of human freedom, to guarantee civil and political rights of individuals, also has an important instrumental value to ensure the expressing of people and supporting their claims to political attention, and finally, democracy has constructive importance, gives citizens an opportunity to learn

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14. It is also important to note that some of these assumptions fail to materialize completely in Mexico, this does not imply that democracy does not exist in the country, it only suggests that democracy needs to be strengthened in the country.

15. Sen, Amartya, "La democracia como valor universal", *Istor Magazine*, year I, number 4, 2001, p. 13.

from one another, and helps society to form its values and priorities.[16] The universality of a value, in this case of democracy, requires a fundamental assumption clearly stated by Sen:

> Any claim that something is a universal value involves some counterfactual analysis--in particular, whether people might see some value in a claim that they have not yet considered adequately. All claims to universal value--not just that of democracy--have this implicit presumption.[17]

If the term counterfactual is attributed to any event that has not been detected by human research, although it may have happened, democracy effectively achieves universal value denomination because besides being a government system, it is also a protector of the most vulnerable population by providing them a political voice and the guarantee of respect for their civil freedoms. Through democracy, the population acquires the certainty and freedom to choose their rulers when the prevailing system does not meet their basic needs and expectations.

Amartya Sen asserts that the most important event of the twentieth century is the rise of democracy and its positioning as a universal value. Although Mexico has a democratic regime, there are still at least three major challenges with respect to the consolidation of democracy: 1) a process of adaptation and firm establishment of democratic structures and relations between the regime and civil society, which allow autonomy and democratic legitimacy,[18] 2) making democracy offer development opportunities to the less fortunate, and 3) ensuring that democracy is consolidated in society as a universal value, setting the democratic culture in each area.

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16.   Ibidem, pp. 19-20.
17.   Ibidem, p. 22.
18.   Cansino, César, "Consolidación democrática y reforma del Estado en América Latina", in Salinas, Darío (Coord.), *Problemas y perspectivas de la democracia en América Latina*, Triana editors, Mexico, 1997, p. 22. (In Spanish)

Only by its recognition as a universal value, it is clear that development and democracy are closely linked and mutually complementary. This link reflects the fact that development has no other purpose than to meet the needs of each person and there is no form of government that relates more closely to the full development of the people than democracy.

But is national concord and the universal value of democracy required to achieve sustainable human development in Mexico? The answer is yes, mainly because they are ideal elements of social cohesion, which promote pluralism, inhibit sectarianism and facilitate the identification of individual and collective needs. In short, concord and democracy are able to hold the people together and lay the foundation for their development in the short, medium and long term.

Throughout chapter I, the conditions, means and ends of sustainable human development are defined and described without an increased emphasis on the role of concord and democracy in the development process. For this reason, the following section details the existing relationship between the conditions, means and ends of sustainable human development with national concord and universal value of democracy, seen now as the environment conducive to the development of Mexico.

4.2. Concord and democracy for sustainable human development

The concept of development has been studied from different angles around the world, some of which have dispensed with democracy or concord to achieve higher levels of achievement. However, as noted previously, a comprehensive development must be based on the centrality of the person and the citizen consensus to establish itself as a viable and sustainable in the long term. Therefore, even though a state far from democracy can achieve certain levels of economic growth, this growth will be a distorted because the process is downplaying citizen opinion, which is ultimately the best indicator of the needs of society. Also, a climate of discord will inhibit the development process

by hindering the arrival of the necessary arrangements to consolidate higher levels of welfare.

By contrast, when national concord and the universal value of democracy are constituted as an atmosphere able to protect and secure the development process, the materialization of the conditions, means and ends, as well as the subsequent feedback of sustainable human development, will adequately come to be. This relationship is shown in Figure 4.1

Figure 4.1. Concord, democracy and sustainable human development
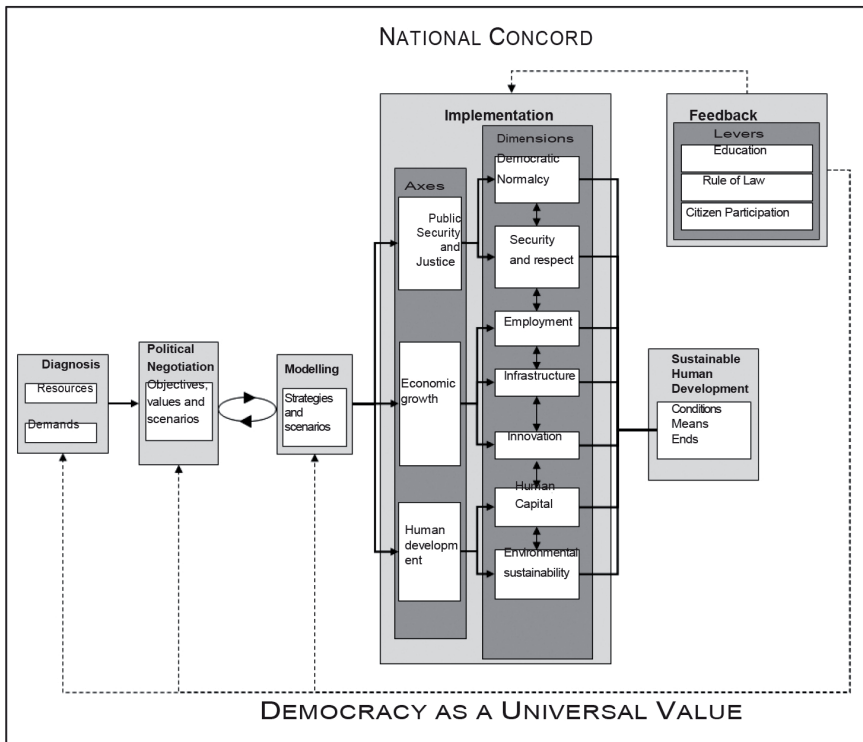
Source: Author's own

This atmosphere, composed of national concord and universal value of democracy, allows public policies to find a secure a suitable environment for developing higher levels of society from the beginning of their construction and throughout their implementation. Thus, development will come to be through the gradual and progressive improvement of the conditions, means and ends of SHD, hence the importance of analyzing their relationship to national concord and universal value of democracy.

Conditions

As previously mentioned, the conditions are the basis and the protection of means and ends of sustainable human development. These conditions, represented by equity, security, the recognition and protection of human rights, the recognition of the individual as an agent of change in the process of development and the eradication of discrimination, bear a unique relationship with concord and the universal value of democracy. This is because in a democratic environment in which society monitors the functioning of institutions and the behavior of public stakeholders, it is less likely for arbitrariness to occur in the use of public resources, in the treatment towards people and in the use of natural resources, among other things. This will ensure that the State gives society the conditions necessary to trigger the development process. Consequently, when people manage to meet their basic needs and enjoy an environment of equity, security and respect for their rights, they find it easier to relate amicably with other citizens and to spend a greater proportion of time to participate in political life and decision-making.

In order to expand the description of this codependent relationship between concord, democracy and sustainable human development conditions, we will now briefly analyze each of the conditions in this context.

Equity

Society requires an environment of inclusion and integration that allows finding higher levels of social fairness and mutual respect.

In this sense, national concord and the universal value of democracy nourish and strengthen equity levels that occur in society from different angles. Concord awakens among the public a concern for behaving in an empathic and respectful manner to their fellow men, recognizing in them their value as people and their ability to generate more development opportunities in a coordinated way. For its part, the universal value of democracy provides an institutional framework capable of ensuring that citizens adopt an equitable and supportive behavior towards other people.

This pursuit of equity is presented through public policies and law initiatives that promote, at an institutional level and among citizens, an atmosphere of greater concord and respect among people. Such policies should include different challenges such as gender equity, equality of opportunities, respect for ethnic and social minorities and intergenerational equity, among others.

When a part of society is excluded from the main development opportunities such as education, health, employment, recreation and financing, or when citizens lack the necessary institutional framework to ensure their basic rights, this invariably decreases the possibility for them become the main drivers of the development process and intervening, in turn, on the country's fate. By contrast, when concord and democracy prevail in society, these values ensure that the public directs its efforts in favor of equity and social equity to ensure the consolidation of sustainable human development.

Security
Security is a basic human need and a collective good that has an important place in the scale of values of the population. As described in the UNDP, human security is relevant for poor and rich countries, considering the many common threats to the population, such as unemployment, addiction, organized crime, pollution and human rights violations.[19]

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19.   United Nations Development Programme (undp), 1994, op. cit., p. 22.

Security also has a close connection to national concord and universal value of democracy, by virtue of these elements being the only ones capable of ensuring that people enjoy an increasingly secure life. Human security is easier to achieve if a culture of prevention is practiced.[20] For example, when a country is threatened by drug trafficking and there are no better ways to eradicate this phenomenon than prevention and reporting, which presuppose a democratic environment in which the population can freely express those aspects that concern them, allowing thereby to influence national public policy.

Similarly, human security provides important elements for people to develop and coexist in society, to raise the degree of freedom they have and decide on their alternatives, they will safely gain access to the opportunities offered by the social programs of government and thus an atmosphere of peace and harmony in the place in which they operate will prevail. The major challenges society faces are fought, in all cases, with the concord represented by the belief that all citizens seek the majority's wellbeing and that only through participation there will be a more appropriate for space for social cohesion.

In this discussion, the State plays a key role in the administration of public and social security, primary aspects in the exercise of a government seeking for sustainable human development. However, if society moves away from the debate on the government's concrete actions regarding safety or other conditions, there is a significant risk of allowing the presence of an excessive State or anarchy, and neither of these extremes is desirable. Any measure to achieve security is most successful when it involves the participation of citizens and a safe institutional environment, founded on the universal value of democracy.

Democracy provides autonomy, hierarchy, resources and skills to the authorities as well as the elements necessary for them to fully play their roles. It also prevents irregular procedures form being used to resolve legislative processes and for formal institutions of govern-

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20.   Idem.

ment from being underestimated, thereby ensuring that the elements of human security are tangible for citizens. Concord in turn, allows citizens to detect and demand higher levels of security from authorities, bringing with it a higher state of democracy and development, since security guarantees better living conditions.

Recognition and protection of human rights
According to the United Nations, democracy, development and respect for fundamental rights and freedoms of individuals, are interdependent and mutually reinforcing. Democracy is based on the will of the people, freely expressed, to determine their own political, economic, social and cultural systems and their full participation in all aspects of life. In this context, the promotion and protection of human rights and fundamental freedoms at the national and international levels should be universal and implemented unconditionally.[21]

Democracy facilitates the practice and respect for human rights, as it is the best system of government in terms of freedom and respect by offering at least some key improvements had not been detected as a contribution to the lives of people. This improvement is the assurance that, if necessary, society has the option to improve their social and economic conditions by freely electing leaders to better respond to their demands. When rights and freedoms are respected and promoted in the long run, concord occurs automatically in society. This occurs because when people do not perceive their fundamental freedoms being threatened, it is easier to achieve a shared vision of the needs and limitations of the population, and on the most appropriate solutions to existing problems. Therefore, concord, democracy and human rights make up a critical node for the functioning of society and to lay the foundations of coexistence and respect that will achieve the common good in the long run, without overlooking the needs of the present.

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21.   United Nations, World Conference on Human Rights: Declaration and Programme of Action, United Nations Vienna, 14 a 25 de junio de 1993.

Acknowledgment of the individual as an agent of change

The acknowledgment of the individual as an agent of change in the development process has a strong connection to the universal value of democracy and national harmony. María Zambrano states that democracy occurs in a society where it is not only allowed to be a person, it is a requirement.[22] The word individual is interpreted sometimes as an opposition to society, the notion of individualism has been considered as a position close to selfishness. Alternately, the word person brings to mind the notion of concord.

Democracy includes the notion of person, and the person require concord to be one; for its part, the term democracy is the "guide which are welcomed all regimes that seek to serve man. It is constituted as a body before which justify all those who want to serve human progress".[23] The person participates in it at all times for better standards of living.

Democracy is in a more advanced state than when it emerged as a definition, at that time distinction was made between citizens and slaves, and yet democracy was based on the decisions of the people. Currently, democracy makes no distinction between citizens and slaves, only considers people: friendly and participatory humans looking to secure a better life for themselves and their contemporaries, as well as for future generations. Zambrano refers to the great contribution of democracy to the person by considering it in its future meaning:

> [...] Certain words in force do not really tell that which is contained in its meaning, but much more. They are loaded with different meanings, whose explicitness depends on the time they have been used, how and even by whom. [...] precisely the privilege of some of those words is that they contain a future not yet updated and whose complete improvement is still impossible for us to envision. [...] A word

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22. Zambrano, María, *Persona y democracia*, Anthropos, Barcelona, 1988, pp. 133-136. (In Spanish)
23. Idem.

that has been part of another set of ideas is the word Person, man as a person, it is a reality that has been discovered throughout history. Being a person is proper to all men prior to their inclusion in a class, and even after it is governed by the people and for the people [...].[24]

With this clarity on the importance of the person in the field of democracy, it must also be understood that only the will to get a better life will effectively achieve that people consolidate development at each stage of history. With the simple fact that democracy begins to establish itself as a universal value and to spread as a common practice in all areas of society, people will have made significant progress in achieving better standards of living; only their organization and participation in their development process will remain. This is what sustainable human development proposes.

Eradication of discrimination
The last condition of the model is the eradication of discrimination. Concord and democracy play major roles in the commitment of the people to treat others with respect. The vision of sustainable human development takes on concord as the constant light that channels attention towards the centrality of the person, while democracy makes it a principle of life in society that fosters economic growth, the reduction of social gaps and the full exercise of the rights of citizenship.

Non-discrimination is, in this perspective, a point of articulation of demands that, from different fronts, points to equal opportunities and freedoms necessary for development.

Democracy plays a double role, as the essential target and as an instrument for development. As an essential objective, it seeks to consolidate a regime in which the demands of the people are heard and resolved properly, eliminating unfair or discriminatory treatment and guaranteeing the freedoms necessary to achieve an adequate standard of living. Democracy, on the other hand, is an instrument

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24.   Idem.

to facilitate freedom and accessibility to the benefits of development to allow everyone the same access to opportunities for fulfillment. No physical, mental, ideological or ethnic difference can justify improper treatment to people; in turn it should secure favorable treatment to equalize the opportunities of these people with the rest of society.

The government and the private sector are faced with the challenge of providing equitable treatment to those who have long suffered discrimination. Society for its part, must shape a more caring, human and sustainable, society recognizing that an indifference towards minorities and the most vulnerable persons in the country damages its social fabric and the possibility of benefiting from the capabilities of all citizens in building a better future for the next generations.

As noted in the first and third chapters, conditions facilitate progress in the consolidation of sustainable human development, and do so in large part through a state of concord and democracy that should prevail in society.

Means
Productivity, competitiveness and cooperation are the means for boosting a development process based on the person from the economic sphere; however, in order for them to offer the benefits alleged by development, it is necessary that these means take place in an atmosphere of concord and democracy that, within the productive sphere, allows to guide all relations between citizens and public and private organizations, so that they converge towards the common good.

Therefore, one of the challenges of Mexico consists not only on incorporating those citizen proposals related to national development, but also in strengthening a long-term collective vision able to provide greater certainty to the economic, social and political expectations of society. It is indisputable that a more productive and competitive economic sphere is required, that uses all market players to improve the standard of living of citizens. However, it is also necessary that this economic progress takes place within a friendly and ordered environment in which no member of society is excluded. The following

sections examine each of the means and their relationship to national concord and universal value of democracy.

Productivity
The relationship between productivity, concord and democracy is a key issue for sustainable human development. In the economic sphere, the consolidation of a democratic society involves not only the establishment of the institutional basis to ensure transparency in the exercise of public and private resources, respect for property and respect for the rule of law, but it also entails the potentiation of the capabilities of people, without neglecting their aspirations and full respect for their rights at the time of seeking higher levels of productivity. Therefore, the increase in productivity does not have to mean sacrificing guarantees of individuals, on the contrary, both companies and governments should ensure policies that protect the interests of workers and at the same time encourage their professional achievement. Thus, productivity is positively related to democratic consolidation, considering that transparency, accountability and participation, among other factors, allow citizens to engage in the production process with more freedom and confidence.

Moreover, democratic consolidation facilitates a balance of power between the public sector, businesses and society, in order to provide a more productive and competitive environment, allowing the better distribution of the benefits of development.

Productive economic activities create jobs, which in turn reduce social problems of the country, for this reason it is essential for an atmosphere of concord and democracy to prevail, in which each actor of society focuses their efforts on the pursuit of happiness. This balance of forces implies that each member of society who is immersed in economic processes conducts themself with strict adherence to the rule of law, in a context of concord and respecting the rights of their counterparts. In this sense, the task of the State is to ensure that the balance of power is achieved and maintained over time.

Competitiveness

Competitiveness is the ability of an economy to generate, in a continuous manner, high levels of income and employment in a competitive environment. Within this environment, democracy offers a number of aspects, such as ensuring that economic activities will not be affected by arbitrary decisions, free access to markets by any competitor able to offer an alternative to society and compliance with the rules that have been established for participation and competition in production processes.

Moreover, democracy allows people to take on the citizen commitment of demanding governments a proper deregulation that eliminates unnecessary administrative processes that raise the costs of companies, providing with this more national and international competitiveness. This responsibility of the government of generating greater competitiveness should also be shared by the efforts of other sectors that have the ability to drive technological innovation and provide people with the tools necessary to thrive in a highly competitive world, such as the financial and education sectors. The joint effort between the government and the private sector ultimately benefits the public, to contribute in generating a wider range of consumer options, by raising the aggregate value of domestic goods and services, increasing labor supply and benefitting the population through the price control that competition generates.

If competitiveness is an ability of nations to produce income, and nations, as it has been argued throughout this work, are systems based on information flows between their subsystems, it can be said that if there is an essential element that circulates within systems and permeates its elements with disposal, it is concord. Adam Smith argues in this regard that:

> When we sympathize with the motives of the people, we share the gratitude of those who we note that their conduct has been subject to the general rules by which those two sympathies usually act, and lastly, when we consider that such acts are part of a system of conduct which tends to promote the happiness of the individual or of society,

it seems that certain beauty derives from that utility, not unlike that which we attribute to any well designed machine.[25]

Thus, competitiveness cannot be regarded as an end in itself, but as a tool that provides access to a better quality of life, that is, as a means to achieve sustainable human development.

Cooperation

Cooperation refers to the set of actions within and among nations, by actors of various kinds, in order to seek economic, political, social, cultural and environmental development in a shared way and sustained over time.[26] Such cooperation requires concord to ensure that the actions taken together are directed towards achieving the common good. It also requires democracy in order to establish the rules that encourage an environment of equity, justice and transparency.

For this reason, the creation and implementation of policies in an environment of cooperation, concord and democracy allows citizens, businesses and governments to jointly harmonize their interests, monitor compliance with the law and detect and resolve the existing deficiencies within the system. Likewise, cooperation not only involves setting common objectives, it also requires the parties to responsibly pursue the agreed objectives at all times.

At the international level, cooperation is closely linked with the possibility for nations to refocus their agenda, involving new social actors in the development process and putting the individual at the center of public policies, as the person requires the cooperation between countries to take from them the elements that, from their point of view, contribute to their overall development and the strengthening of their capital over time.

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25.   Smith, Adam, *La teoría de los sentimientos morales*, Fondo de Cultura Económica (fce), Mexico, 2004. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

26.   Gómez Galán, Manuel and José Antonio Sanahuja, 1999, op. cit. (In Spanish)

This cooperation creates an environment of greater concord among nations because it is through it that channels of communication can be strengthened and new ones can be created, generating benefits for society in the process. Thus there is concord between the States "when it falls on general interests, when a part is taken in them and when the joint resolution is executed. Concord always applies to acts and between these acts, those which are important and can be equally useful to both parties and to all citizens."[27]

Thus, productivity, competitiveness and cooperation ensure access to the objectives of sustainable human development in outlining the path to access higher levels of welfare. Freedom and sustainability, as stated previously, not only represent the absolute goals of sustainable human development; but also the means that contribute to the feedback process of the endless virtuous cycle of development. Below the ends of the model are discussed and the how they relate to concord and democracy.

Ends
Freedom and sustainability represent the great aspirations of the new development paradigm, because through them society can materialize their life expectations. As mentioned in the first chapter, freedom not only refers to the ability of man to act according to his own will; it also entails the possibility of having access to a range of political, economic, social, cultural and transparency options, that bring the assurance that they can choose those opportunities they deem valuable for personal fulfillment. For this reason, by mentioning the quest for freedom, this work does not mean that people are not free, but rather, it shows that this freedom can reach higher levels that bring better quality of life. Similarly, sustainability is a goal of sustainable human development, considering that the benefits of development based on the centrality of the person and achieved through citizen

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27.   Aristotle, 2008, op. cit.

participation and systemic functioning of society should extend over time, favoring both the present and future generations.

As with conditions and means, the ends require national concord and the universal value of democracy for the consolidation and feedback for sustainable human development. Freedom, understood as the full exercise of the skills, qualities and abilities of the person, also entails respect for the rights and freedoms of all members of society. Sustainability on the other hand, refers to cooperative and philanthropic value under which human beings are concerned that their activities do not impede or hinder the welfare of future generations. Thus, freedom and sustainability presuppose an infinite concord and full of democratic accountability.

Freedom
Freedom and democracy are interdependent concepts that guarantee the full exercise of choice and decision capabilities, and ensure the satisfaction of human needs in a fair manner and without affecting others. Democracy entails a guarantee in favor of freedom, being the only form of government that allows citizens to choose the path to achieve their welfare, always adhering to pre-established rules. Therefore democracy does not only respect freedom, but rather promotes, encourages and guarantees it.

The advantages of democracy in terms of freedom are endless in respect to any other form of government, since in its most advanced state it guarantees freedom of association, expression and active participation through various channels, in the political, economic, social, cultural or environmental changes, which from the point of view of citizens, represent an access to higher levels of satisfaction and wellbeing. These freedoms, however, find a natural limit on the respect for the rights of other persons with whom they live in society, thereby contributing to the establishment of a state of harmony among the citizens.

Freedom allows people to determine who will govern them, thus endorsing the democratic character of the state, which in turn will establish the limits in which society must conduct itself in order to

tend to the common good and create a state of concord. Concord, in this sense, will allow people to seek new ways to achieve greater development in harmonious coexistence, exercising their freedoms. Thus, freedom, democracy and concord make up an upward spiral in the pursuit of sustainable human development.

Sustainability

As noted previously, the field of intervention of sustainability involves the ability of society to extend the welfare of people in the short, medium and long term through the preservation and improvement of resources and social, political, economic or any other type of condition which bear some conceptual or real relationship with development. Thus, the following describes some attributes that concord and democracy have, to promote and strengthen sustainability and thus achieve higher sustainable human development.

Democratic coexistence has the virtue of instilling in citizens the values and behaviors that will reinforce harmony and create a suitable environment for long-term coexistence. Under this scheme of concord and democracy, it is possible to ensure that agreements and decisions made in the present, and the ways in which society decides to seek their welfare, will respect the right of future generations to have the resources necessary to achieve development, at least the as the one current generations enjoy.

The task of developing a model that integrates and harmonizes the economic, political and social challenges and that projects them into the long term requires that the structures of government and citizens work together to address this complexity. In this sense, national concord and universal value of democracy are of great importance to facilitate the existence of an environment conducive for society to be able to reach agreements and generate public policies that effectively benefit society.

Sustainability is an issue concerning all sectors of society. The media, civil society organizations, businesses, political parties, government agencies and the general public should be concerned about consolidating a culture in which democracy is seen as a universal

value and in which concord facilitates social harmony and the arrival to consensus oriented towards development. Thus, the consolidation of an atmosphere of Concord and democracy is the best legacy that society can inherit to future generations.

As we have seen, national concord and the universal value of democracy provide the right environment for the model to be able to deliver higher levels of society development. This does not mean that the absence of a consolidated democracy or of an environment of full concord prevent the model from obtaining advances in the conditions, means and ends of sustainable human development; it merely indicates that these advances will be restricted in the long term and that the consolidation of sustainable human development will have a slower pace than that that which would allow a path of development in which concord and the universal value of democracy will prevail.

Ideally, the performance of the model for sustainable human development in Mexico will operate in a more appropriate manner and will provide more comprehensive results in an environment characterized by democratic normalcy and social concord. These elements are thus the optimal environment for society and governments to focus their efforts on finding a development characterized by the importance of the individual and the concern for their welfare to be projected toward the long-term; its presence as part of social atmosphere eliminates the possibility for entropic elements to obstruct the freedom of people in the individual or collective pursuit of a well-being consistent with their needs.

Once the fundamental characteristics of the systemic model for sustainable human development have been put in place, its operation and the suitable environment for such a model to rapidly and consistently achieve results is essential that this paradigm is socialized, understood and applied. This must be understood not only as a path that offers the possibility of higher levels of welfare for society through their full participation, but as a way of thinking and viewing life, through which it is possible to assess the importance for society to constitute the engine itself in the search for its welfare and development, recognizing the importance of all elements of the social

system. This opportunity is provided in the last section of the book, established as an open invitation to live and promote sustainable human development in Mexico.

4.3. Invitation, considerations for the future

Thinking the future of Mexico entails the participation of all political, economic and social parties, as well of as all Mexicans; this can only be implemented with a true reflection of the desired future, from criticism and from collaboration; from the home of each one of the people of this country, through a genuine concern and real commitment to the personal development and well-being of all. This participation and commitment of society will allow institutions to also be redefined from a democratic and cordial reflection. For this reason, this last section invites readers to reflect on the desired future for the country.

Higher levels of development for the Mexican society can only be achieved through systemic planning and organization on behalf of the citizens, the commitment and participation of each of the people within this system called Mexico, and from the implementation of actions framed in methods supported by the citizens in a democratic and pluralistic environment. This is the gradual and complex solution to progress as individuals and as a nation in obtaining higher levels of welfare.

An invitation to reflect is made, on the responsibility of persons the as protagonists of their own development and on the demonstration of genuine concerns and needs of the communities, so that they can be solved by society and the government in a coordinated manner. It is also necessary to call for reflection on the desired future and the need to socialize the integral concept of sustainable human development and therefore, the requirement of its results. This is the purpose of this section.

The conformation of a country reconciled with its millenary past, aware of the challenges of the present, but fundamentally committed to the hope of a better future can only materialize when every member of society, from their scope of action, listens the call of a Mexico

that today more than ever, requires their effort and commitment to make it a more free, human and sustainable place, where the genuine interest in the development of people predominates. For this reason, this last section takes up some of the most important insights of the book, which serve as propositional argument to invite the reader to join the effort for sustainable human development in Mexico through national concord and the universal value of democracy.

This invitation intends to promote the hope and vision of a fair, safe, prosperous and sustainable future among Mexicans for generations to come. Participation and criticism is encouraged in order to contribute to the creation of a country in which millions of children, youths, mothers, senior citizens, professionals, entrepreneurs, students, farmers and every member of society can achieve their dreams.

This invitation to reflect also proposes detonating a dialogue with those who share the vision of sustainable human development, but more importantly, with all those who think differently, it is a call to join the action and combined effort to think of the future of Mexico, avoiding isolated work. This section aims to share the responsibility of dreaming, generating ideas and making decisions in the present moment within a framework of social awareness that eliminates apathy and indifference that have so damaged the country. This section is thus, a proposed exchange of ideas that will lead to the strengthening of sustainable human development from self-criticism and comparison with the rest of the world, accepting and overcoming the weaknesses that we still have as a nation.

No one, especially those who suffer hardships, should be left out of the dialogue or the debate on how to achieve wellness; no one should be left out of the agreement concerning the joint liability in the development of Mexico. Sustainable human development must be an instrument of social inclusion that propels Mexico to a future that offers more benefits, more education, better jobs and more happiness for Mexicans in the twenty-first century.

For this reason, this section seeks to detonate solidarity of the reader in the task of promoting and strengthening the conditions, means and ends of sustainable human development. The call is for

reflection, dialogue and agreement for Mexico, regardless of the professional area in which the person is performs, their political or religious beliefs, geographic location or economic status; the task is to think ahead and promote wellness, foster concord and live the universal value of democracy in order to promote sustainable human development in Mexico.

In summary, this section is an invitation for society to reflect and act on and join in promoting sustainable human development, concord and democracy as a universal value.

What else can us to move to harmony and democracy other than the certainty of a prosperous, strong and sustainable Mexico? The country needs to once again focus public and private efforts in favor of persons and their development; thinking and talking about the future required, as well as a development able to offer benefits over time: this is sustainable human development.

The promotion of sustainable human development

In the last two centuries, Mexico has undergone a series of events that placed it on a path of modernity and progress and that built the foundations of the institutional structure that it currently has. However, throughout this period, the seeds of apathy, disinterest or fear of citizens to participate in political, economic and social transformations have also been sown. This is one of the biggest challenges in society, thinking Mexico's future without forgetting the past of this great country, enforcing the rights and ratifying the dignity and importance of the individual in the pursuit of development to achieve greater welfare.

The call to this generation thus consists in consolidating the vision of sustainable human development in Mexico, thereby ensuring that present and future generations have the opportunities they need to raise their standard of living. For this reason, this book calls on Mexicans to discuss and exchange ideas on the development of their localities and to infect each of the municipalities and states with this commitment to change and the hope for a better future.

It is necessary to focus on the long term, but with the full and absolute responsibility of the present. This is sustainability, an issue that should be a priority for everyone. The healthy and friendly coexistence proposed through sustainable human development is not a small matter, nor is it a simple task to achieve; it requires a deep conviction and determination of all. Thus it is necessary to make some changes and to initiate changes in the economic, political, cultural and social levels.

Channeling and strengthening the vision of sustainable human development in the country also requires the participation and commitment of political actors, as it is they who represent citizen interests through political parties, trade unions, local congresses, state governments, municipalities, and as the branches of government. This responsibility should be shared with other members of society, mainly with actors in positions of social, business, academic, artistic and sports leadership, among others.

Society has the privilege and duty of thinking the future and the changes that the country needs. Supported in concord and democracy as a universal value, it must take historical and generational responsibility to promote the changes that Mexico needs, changes that will channel sustainable human development. Ortega and Gasset make reference to this generational responsibility by indicating that:

> […] each generation represents a certain vital attitude, from which the existence feels a certain way. If we take the evolution of a group of people as a whole, each of their generations is presented as a moment of vitality, like a pulse of its historical power. And each pulse has a unique characteristic; it is an unchangeable beat in the series of the pulse, as is every note on the development of a melody.[28]

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28. Ortega and Gasset, José, *El tema de nuestro tiempo*, Editorial Porrúa, Mexico, 2005, pp. 7-8. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

The XXI century generation in Mexico is destined to be the generation of democracy and concord, to show a deep commitment to Mexico, to take on an unavoidable responsibility on the important role that each person must play in achieving sustainable human development and providing a felt commitment to the future of the country. It is necessary to silence the noise generated by the disorganization and apathy, and to consolidate the creation of sustainable human development, operating it with effort and conviction.

This generation must transcend the history of Mexico for their participation in strengthening the social balance and for receiving the previous ideas, values and institutions, and letting their own spontaneity flow to transform the country into a better place.[29] That is, the future is inextricably linked to the agreements and reforms achieved in the present to make the collective vision of sustainable human development possible, this is due to the importance of citizen participation.

The increasing democratic coexistence of Mexico offers the possibility for all Mexicans to participate from their homes, jobs and schools for a better future. The vision of sustainable human development links the local, state and federal governments to civil society and the private sector; this is its strength: uniting the entire society without distinction. The possibility for Mexico to progress and develop is in the hands and the daily tasks of society. Whatever the ideological, religious, professional or geographical stance of Mexicans, aspirations need to be set on a single goal: the welfare of present generations and an even better future. Sustainable human development provides the appropriate place to participate in reducing poverty, creating equality of opportunity, abating crime, promoting human rights, increasing competitiveness and productivity, protecting the environment and expanding the freedoms of society.

Work is just beginning and there is much more to do. The country needs unity to become stronger; it needs all the hearts that work day

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29.   Ibidem, p. 8.

to day for the Mexico of the future. This is the reason that encourages citizens to think of the future, to share and materialize this dream of a better country.

Invitation to national concord

This section is an invitation to promote concord in every area of the country: family, work, school and in public institutions at municipal, state and federal levels. Concord represents the spiritual element that gives cohesion to the intentions of individuals and families in the social environment. Through it, sustainable human development is strengthened and grows; it is nourished daily and generates more cohesive societies.

Concord is an aspect of everyday life that cannot be ignored at any time, rather, it should be fed constantly with understanding and peace. Therefore it is necessary that those who design and approve public policies of municipalities, states and the country, rescue the virtues and values of national concord. Through this trust, not only can complex and difficult problems be lucidly addressed at the present moment, but we can also direct our efforts boldly toward the future to contribute to sustainable human development in the country. The challenges a democratic state faces require of all men and women, regardless of their political stance, a supportive and generous cooperation in building the welfare of the nation, but this cooperation cannot do without the reference to fundamental ethical values of human nature.[30]

Concord is "[...] the favorable situation that is created in a society in times of peace and stability",[31] while discord and division form an entropy that leaves no room for the system to function properly, hinders information flows, deters cooperation, arbitrarily extinguishes hope, devours clarity of ideas, confuses and stupefies society.

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30.   Idem.
31.   Moreno, José Luis "Concordia y Paz en Aurelio Prudencio", *Anuario de historia de la Iglesia*, Núm. 3, 1994, p. 147. (In Spanish) (Translator's own translation of quote from the Spanish version, document does not exist in English)

Aurelio Prudencio warns about the importance of concord for social and public peace, as well as the damages of discord. In his work Psychomachia, he expresses how discord can be mixed in society and will try to blatantly destroy what has taken people years, decades or centuries to build.

> The time when Concord, amid its closed battalions and surrounded by its escort, puts its foot inside the safe walls, receives on its side a traitor stab that strikes a crouching service. [...] Thus, the troops beaten of sins, Discord had mixed with our battalions pretending the appearance of an ally. But hides the dagger under the tunic and against you, Supreme Virtue, against you alone among so many, heads with fatal treachery, but was unable to pierce the vital organs of your sacred body only injuring the epidermis, only on the surface drew a mild blood stream.[32]

When Aurelio Prudencio warns that discord has come from among the fallen, crouched with its robe and dagger, he clearly refers to no one seeing it enter, no one even expected it presence. This is normal, when humanity ceases to care, the vices of leisure burst in and attack fiercely, sometimes without even leaving time to react. A population ignored, lethargic and without information can be, as history shows, easily persuaded by discord.

This discord may be present in Mexican society without being perceived; attitudes such as apathy, indifference, discrimination, insecurity, violence and disinformation, among others, constitute a latent threat that may hurt the nation through their consequences: crime, poverty, illiteracy and other harmful aspects to society and its development.

Therefore, it is time for society as a whole to look for solutions to national problems and to reach an agreement between the political

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32.   Ibidem, p. 157. (Translator's own translation of quote from the Spanish version, document does not exist in English)

forces, entrepreneurs and workers, employers and unions, and for all Mexicans to participate as allies in building a better future. It is time for peace, harmony and unity to build a country like the one that all Mexicans want, it is time to think of the future of Mexico and it is time to change!

Concord is the value that will bring society to this, but not as an entity unrelated to the problem, but as a participant and beneficiary of this great task. In this regard, it is essential to prevent differences from stopping the country and disorganization from posing a barrier to the progress of Mexico, because "when there is harmony small things grow, but when there is discord, even the greatest things get ruined."[33]

Living democracy as a universal value
Democracy is a conviction and a value that should be continuously promoted in Mexico. Democracy has emerged from the idea that all men are equal in any respect, so it is necessary to strengthen this conviction and continue living democracy as a universal value.

Even if the problems faced by society are complex in solution democracy must still be practiced, since most social problems can be solved through it. Thus, with the spirit of democracy, society will face the challenges of the twenty-first century from the smallest communities of the country, from different levels of government and from any field of action involving citizens.

In this sense, the family is the fundamental core of society, and it is in its womb where the values of democracy, concord and citizen participation are learned and nurtured; the household is the first place where the person learns the importance of responsibility for their fate and that of their community. This is why democracy must be strengthened from the family, practiced from this niche so important for the development and reflection over the future of any country.

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33.   Caius Sallustius Crispus.

Young people should also continue to contagiously promote democracy among citizens with all their energy and love for Mexico. Young people have the power and ability to take the country's fate in their hands through the accusation of injustices and inequities, providing fresh ideas in the classroom and workplace, and taking advantage of the opportunities that Mexico offers. This is why it is essential that the millions of young Mexicans continue to prepare and contribute to building the country.

On their part, women are the most important pillar of the family for representing the figure that gives citizens, from an early age, the tools, training and values necessary to shape their own development and become good people. Their work is essential to further strengthen the social capital that elevates economic and human development of the country. Athletes, entrepreneurs, educators, professionals, housewives and all the women in the country should continue living democracy as a universal value, participating, contributing ideas and venturing in politics, thus consolidating themselves as the engine of the social, economic, politic and environmental transformations needed in Mexico.

Also, the invitation to live democracy as a universal value extends to teachers and trainers of the country to further promote, along with parents, such a praiseworthy and fundamental value. By their example and dedication, teachers sow the seed of democracy in future generations of Mexicans, as they not only educate children, but also parents, grandparents and siblings, as the good habits and skills they provide to children and young people of Mexico are reproduced by example in every family in the country. The teachers and academics in the country are those who, after parents, influence the lives of Mexicans to a great extent from an early age, transforming democracy into a universal value and concord into a way of life.

For their part, political, sports, religious, intellectual, economic and opinion leaders should also contribute with their example of harmony and democracy to achieve higher levels of development and prosperity. Therefore, political parties must reach agreements capable of strengthening the social fabric and the citizenship.

Competition in electoral times should be carried out in the space of ideas and proposals, so that all members of political parties should maintain a common belief: thinking the future of Mexico to consolidate the welfare of all, placing the person at the center of each action of politics.

Similarly, employers can and should promote concord and democracy from their areas of competence, promoting sustainable human development to overcome exclusion and inequity, using their abilities to form a front of solidarity and social responsibility and to outline educational and business strategies for the company. With productive and socially responsible business projects, it is possible to decrease the number of persons who have not reached the standards of living capable of ensuring social welfare.

Also, the media, press, radio and television should continue their work as carriers and promoters of democracy as a universal value, collaborating in denouncing the injustices that occur in the country and at the same time establishing the necessary guidelines to encourage citizen participation.

Perhaps this generation, like all others, will just be an instrument to ends that are superior to men. Still, it is necessary to carry out this reflection on the future and this work must be done conscientiously in order to open a door of hope for obtaining development.

This generation of Mexicans is called upon to consolidate the universal value of democracy and to ensure an environment of concord, since there is no greater value than the brotherhood of man, a brotherhood that goes beyond the present by embracing the commitment to the welfare of generations to come. Concord and democracy can be seeded among Mexicans through sustainable human development.

Let us unite in a greater effort, let us think our future and accept the responsibility of being part of the new generation, the generation that through peace, unity and hope, will achieve sustainable human development in Mexico.

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Thinking the future
the sustainable human development in Mexico

The new millennium came with high hopes and expectations, but with countless dilemmas and complexities as well. Past, present and future joined together to fill our souls with dreams and hopes, to unite our differences and inequities. The time we live today calls upon us to make a stop along the way to reflect and ask ourselves, where do we want go as a society in the XXI century? Which is the future we want for our children and for generations to come in the short, medium and long term? What are we doing as citizens to contribute to the development of this great country that is Mexico? How are we preparing to face the challenges and rapid changes that our society and the world are experiencing?

This context, and given the commitment and responsibility for proposing alternatives that will allow Mexicans to move towards a full, fair, solidary and sustainable development, is the situation in which this book arises. *Thinking the Future: the Sustainable Human Development in Mexico* is a book that describes the new paradigm of development, defined as sustainable human development.

This new perspective of development is based on the principles of the centrality of the person, common welfare as well as the solidary and self-regulatory capacity of society, in order to ensure in the short, medium and long term, the proper management of natural, human and financial resources in political, economic and social processes, so that present and future generations –in an environment of harmony and democracy– achieve their life projects over time.

Thinking the Future is necessary to have a better present and tomorrow.