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Municipal Management and Population Development: Case of Hidalgo, Mexico

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Abstract: The administration at the municipal level and its management are the first governmental instance that receives and attends to the needs of the citizens, so it provides elements that should allow people to have a better quality of life, the present research establishes the objective of determining if the management elements evaluated in the municipalities and selects those that can present an alignment with the development of the population based on the Human Development Index results, present a positive relationship, for which a concurrent mixed methodology is used, which involves quantitative information obtained from statistics of official sources, and is analyzed with Spearman's rho statistic using the SPSS statistical program and, complementarily, the qualitative aspects are approached based on semi-structured interviews with management personnel of municipal administrations, researchers and academics from institutions of higher education, as well as state level officials with activities in municipal aspects. The main findings indicate that although there are correlations with average levels between economic development and income and health indexes, they are not notable in the well-being and improvement of citizens' conditions. The contributions of the interviews show that although the processes related to municipal planning, the alignment of public policies and the establishment of mechanisms for citizen participation have improved, the municipalities present challenges in terms of improving the well-being of the population.

Keywords: municipal management, human development, evaluation.

市政管理和人口发展：墨西哥伊达尔戈案例

摘要：市级行政及其管理是接收和关注公民需求的第一个政府部门，因此它提供了应该让人们过上更好生活质量的要素，本研究确定的目标是确定是否根据人类发展指数结果，在城市中评估并选择能够与人口发展保持一致，呈现正相关关系的管理要素；为此，使用并发混合方法，其中涉及从官方来源的统计数据中获得的定量信息，并使用斯皮尔曼的 rho 统计分析，使用社会科学统计程序的统计包，作为补充，定性方面是基于半-与市政当局的管理人员、高等教育机构的研究人员和学者以及在市政方面开展活动的州级官员进行结构化访谈；获得的主要发现让我们认为，虽然经济发展与收入和健康指标之间的平均水平存在相关性，但它们在公民福祉和改善公民条件方面并不显著；访谈的贡献表明，尽管与市政规划、公共政策的协调和公民参与机制的建立有关的进程有所改善，但市政当局在改善人口福祉方面

仍面临挑战。

关键词：市政管理、人类发展、评价。

Introduction

In Mexico, there is a diversity of efforts to implement actions that have an impact on improving the conditions of municipal public administration focused on achieving the development of the population they serve. This research seeks to investigate in the state of Hidalgo the degree of relationship between municipal management, based on the conditions in which the administration of its municipalities is found, and the level of development achieved by the population, from a mechanism used internationally such as the Human Development Index (HDI). The municipal public administration is considered as the first governmental instance focused on meeting the needs of society, such as drinking water, lighting, cleaning services, markets and supply centers, cemeteries, public slaughterhouses, streets, parks and gardens and their equipment, and public safety, preventive police and traffic, referred to in Article 115, Section III of the Constitution [1], it is considered that a municipal management should be based on an efficient performance in collaboration with citizens, considering goals oriented to physical, social, human, economic and cultural well-being [2]; to determine the elements of municipal management, the conditions under which municipal administrations operate in Mexico and particularly in Hidalgo are considered, based on the Municipal Performance Advisory Guide (GCDM) 2020, which is an evaluation tool designed by the National Institute for Federalism and Municipal Development (INAFED), federal government agency, with the support of state agencies, which in the state of Hidalgo corresponds to the Hidalgo Institute for Municipal Development (INDEMUN) and institutions of higher education located geographically close to the municipalities, is implemented; and, the development of the population considered on the basis of the Human Development Index (HDI), established by the United Nations Development Program (UNDP), which considers that the development of people is a continuous, unfinished process that must be relevant throughout their lives, considering three fundamental areas for citizens, such as education, health and income [3].

The potential impact of the study focuses on analyzing whether the conditions of the municipalities in the areas of planning, education, health, and economic development can contribute positively to the well-being of the population. The need to measure the evolution of countries, subnational states and municipalities as basic units of public administration

with respect to elements and indicators of population development has led to the development of tools such as, in the case of Mexico, the Development Analysis Platform [4], which provides information and documents that support diagnoses and decision making; together with research such as those developed by the Universidad Veracruzana (UV) or the Centro de Investigación y Docencia Económica (CIDE) that seek to identify relationships between processes and elements of the municipality such as the municipal program and the political environment, performance measurement, using various indicators that involve municipal development and evaluation, all contributing to the identification of aspects that can lead to improvements, challenges, opportunities and areas of attention at the municipal level, which have an impact on the well-being of the population.

1. Literature Review

The main elements considered in the research are municipal management through the evaluable elements, which are highlighted in the results of their evaluation based on instruments applied at the national level in the GCDM, from which and considering the human development approach of the population from the base elements defined in internationally applied indicators, elements are combined to contrast the management of the municipalities and the development of the population.

1.1. Municipal Management

Although municipal management is a topic that has not been dealt with regularly in research, it has had a growing relevance due to the need to optimize public resources and its contribution in the long term in the localities with the greatest lags in aspects of economic and social development [5].

It is considered that the actions carried out by municipal governments, focused on the provision of services and projects aimed at achieving objectives and goals, with the municipal budget, using methodologies, tools and administrative systems oriented to govern and manage both material and non-material resources oriented in a population [6]. Another meaning of municipal management is that they are all those functions of the municipal entity that are carried out through the local authority and considers two aspects, the first related to the administrative part focused on services and regulations and the urban community, the second oriented to economic factors. Local development focuses on the environment, sustainability,

safety, and health of the population [7].

1.2. Municipal Evaluation

In Mexico, a variety of proposals for municipal evaluation and performance exists, such as the Development Indicators System implemented by the International City/County Management Association; the Municipal Management Indicators System of the Center for Economic Research and Teaching (Centro de Investigación y Docencia Económica); the Agenda from the Local of the National Institute for Federalism and Municipal Development; the Study of Government Performance in the Municipalities of the Instituto Tecnológico y de Estudios Superiores de Monterrey and the Citizens for Transparent Municipalities Program, designed by the organization Citizens for Transparent Municipalities among the most recent and relevant [8], the research considers the Municipal Performance Advisory Guide implemented by INAFED for the year 2020, considering the sections where the topics of Organization and Planning are addressed; urban Planning; as well as Social Development and the sections on Education and Health; with regard to Economic Development, the topics of Productive Vocation and Economic Development are considered; and it is complemented with the reference to Open Government by considering the aspects of Citizen Participation. It is worth mentioning that this evaluation considers three levels of evaluation, where the highest level is considered as optimal, which for evaluation purposes is indicated in the evaluation results in green, the second level defined as in process is identified in yellow and the third level called lagging, is identified in red, the guide establishes one or more indicators that are grouped by topic and are the basis for the evaluation of the municipalities [9].

1.3. Human Development

Human development, in its diversity of fields of study, includes those related to changes in people and their characteristics, and its evolution is relatively recent. For its study, we consider the so-called life cycle development, which considers the following elements:

- Development is lifelong because each stage is conditioned by the previous phase and presents special characteristics.
- Development depends on both history and context; circumstances and conditions such as time and place affect the development of individuals.
- Development is multidimensional and multidirectional, elements such as growth and deterioration are part of a balance, in phases such as childhood there can be upward growth in both capacities and height.
- Development is flexible; it refers to the fact that various capabilities of people can be improved through

training or practice; however, this flexibility has limits in each person [10].

Human development is made up of various variables, and not all of them can be quantifiable. In this sense, the Human Development Index (IDH) is a composite measure that summarizes the achievements of countries, states, municipalities or individuals in three dimensions, which are educational achievement, wealth and health [11]; in the case of Mexico, the HDI was adopted in 1990 through the United Nations Development Program (UNDP) and is made up of the Educational Index (IE), the Index of Income (II) and the Health Index (IS).

2. Method and Materials

2.1. Methodology Applied

The methodology used corresponds to the mixed approach [12], the quantitative component is a cross-sectional and correlational design, which makes it possible to measure the association of variables between municipal development based on the elements of human development and the elements considered in the municipal evaluation, as referring to the issues of planning, health, education and income, it is of a non-experimental type, since variables are not manipulated and it is carried out in the natural context, using Spearman's correlation analysis, in the quantitative approach the technique used was the collection of statistical data from official sources in Mexico such as the National Institute of Statistics and Geography (INEGI) and the National Institute for Federalism and Municipal Development (INAFED); the qualitative approach is carried out under the particularist ethnography, considering as instruments the semi-structured interviews, which seek to gather information from the actors in the municipal sphere such as the management and operational personnel of the municipalities and people with a professional function or academic activity focused on public administration, mainly in the municipal sphere.

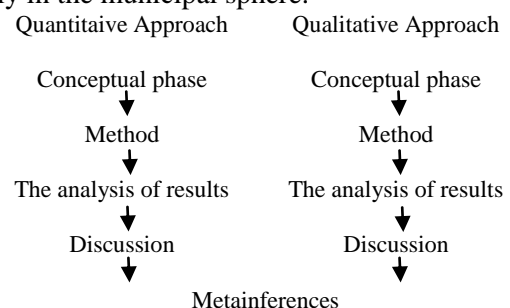


Fig. 1 The mixed research design process [12]

2.2. Population and Sample

To define the population, Mexico is defined as the population, and being a country with a federalist organization with three levels of government (federal, state and municipal), a political and territorial division

is established consisting of states and municipalities, there are 32 states and Mexico City and 2,471 municipalities (considering 16 territorial districts of Mexico City, in the country [13]; the population considered in the quantitative approach is the total number of municipalities that make up the country and the sample focuses on the 84 municipalities that make up the state of Hidalgo, so it corresponds to the type of convenience sampling, since the sample is limited to the municipalities that make up a federal entity from which the data to be analyzed are obtained. The reliability of the quantitative data collection instrument using Cronbach's alpha was 0.830, as shown in Table 1, which represents an acceptable reliability.

Table 1 Cronbach's alpha (The authors' elaboration with SPSS® v. 21)

Cronbach alpha	N of items
0.830	11

Considering the 84 municipalities that make up the state of Hidalgo, which are shown in Table 2, exclusions are not considered because all municipalities have a similar system of government and organization.

Table 2 Summary of case processing (The authors' elaboration with SPSS® v. 21)

Cases	N	%
Valid	84	100
Excluded	0	0
Total	84	100

The qualitative sample is integrated in a similar way, being a convenience sample due to the ease of access to interviews with four municipal administration officials in the municipalities of the entity, three academics, and three state level officials in charge of actions or programs focused on the municipalities.

3. Results

3.1. Quantitative Results

The elements considered in the municipal management variable are those referred to in the Municipal Development Advisory Guide (GCDM) in its 2020 version, which has four possible levels of evaluation and correspond to: Optimal, indicated in the municipal evaluation document in green, which for statistical analysis purposes, is assigned a value of 3, the next level identified as In Process, indicated in yellow, with a value of 2, the next level called Lagging, in red, with a value of 1 and Not available, which refers to the fact that the evaluation committee does not identify information to evaluate and therefore is assigned a value of 0 (zero), which indicates that the municipality does not present a value in the evaluation carried out; although the guide considers eight modules

with 96 management indicators and 36 performance indicators, the research is limited to those that are considered to have a direct alignment with the HDI and its elements, the first element considered corresponds to the one indicated in Module I. Organization, considers Topic 1.2 Planning, composed of the management indicators: 1.2.1 Planning Guidelines, 1.2.2 Planning Committee or collegiate body, 1.2.3 Municipal Development Plan and the performance indicator 1.2.4 Municipal Planning Index; The second element is presented in Module 3. Land Management, in Topic 3.1 Urban Planning, with the following management indicators: 3.1.1 Regulations for urban planning, 3.1.2 Urban Development Plan or Program, 3.1.3 Issuance of construction licenses, 3.1.4 Unit responsible for urban planning and performance indicator 3.1.5 Urban Planning Index; the third element is considered in Module 6 Social Development, in topic 6.1 Education and management indicators 6.1.1 Municipal body responsible for education, 6.1.2 Diagnosis of basic education, 6.1.3 Actions to support basic education and 6.1.4 Coordination to promote education basic in the municipality, in the same module the topic 6.2 Health is considered, with the management indicators 6.2.1 Municipal authority to promote health, 6.2.2 Diagnosis in health matters, 6.2.3 Health promotion and care actions and 6.2.4 Coordination in health matters; a fourth element is the one established in Module 7. Economic Development in its topics 7.2 Productive vocation and 7.3 Economic promotion in the management indicators: 7.2.1 Sector responsible body, 7.2.2 Sector diagnosis, 7.2.3 Sector promotion program and performance indicator 7.2.4 Attraction and retention of investment in the sector; management indicators 7.3.1 Economic Development Regulations, 7.3.2 Program for training and promotion of employment, 7.3.3 Investment attraction strategy and 7.3.4 Linkage for economic promotion and lastly in Module 8. Open Government in topic 8.2 Citizen Participation in its indicators 8.2.1 Mechanisms to address citizen proposals and 8.2.2 Follow-up and attention to citizen proposals, which together allow considering 20.45% of the indicators defined in the instrument [14]. In relation to the municipal development variable, it is considered from the Human Development Index (IDH) with its Educational (IE), Income (II) and Health (IS) elements, based on the United Nations Program methodology. for Development (UNDP) that synthesizes the progress of the municipalities, states or nations considering three basic dimensions for the development of people, where health measures the life expectancy that can be achieved throughout life in a healthy way, the educational element considers access to quality education, based on from the expected years of schooling and the average schooling and the income that people obtain to have a dignified life through gross

Continuation of Table 4												
IE	C. C.	.032	153	.073	.117	.184	.265*	.104	.973**	1.000	.900**	.891**
	Sig.	.771	.165	.508	.291	.095	.019	.346	.000	.	.000	.000
	N	84	84	84	84	84	84	84	84	84	84	84
II	C. C.	-.018	.125	.001	.046	.135	.224*	.079	.952**	.900**	1.000	.891**
	Sig.	.868	.256	.993	.677	.222	.040	.476	.000	.000	.	.000
	N	84	84	84	84	84	84	84	84	84	84	84
IS	C. C.	.049	.129	.010	.039	.131	.201	.110	.954**	.891**	.891**	1.000
	Sig.	.656	.244	.928	.727	.234	.067	.321	.000	.000	.000	.
	N	84	84	84	84	84	84	84	84	84	84	84

Notes: C.C. stands for correlation coefficient; significance represents two-tailed significance; * Correlation is significant at the 0.01 level (bilateral); ** Correlation is significant at the 0.05 level (bilateral); Pln_Mun - municipal planning; Des_Urb - urban development; Edu - education; Sal - health; Voc_Pdt - productive vocation; Fom_Eco - economic promotion; Par_Ciu - citizen participation; IDH - human development index; IE - education index; II - income index; IS - health index

3.2. Qualitative Results

The short and medium term municipal planning, according to the people interviewed, has improved the formulation of Municipal Development Plans by favoring the establishment of an alignment with state and national public policies, defined in instruments such as the National Development Plan and the State Development Plan of the entity, which is relevant in municipal management, by establishing objectives and goals that guide efforts and resources in the municipalities, Table 5 shows, with the municipality of Acatlán, how the other municipalities of the entity have aligned public policies, where it can be seen that, for each development axis established at the national level, at least one axis is considered at the state and municipal level; additionally, transversal axes are considered at the federal and state levels that support relevant elements for the governmental instances; the existence of mechanisms and actions focused on planning in the municipalities derived from the needs of regulatory compliance and that are required for the management

of extraordinary resources from federal and state sources is also mentioned. Additionally, they identify that planning and evaluation processes with mechanisms such as the Agenda Desde lo Local and the Municipal Development Advisory Guide (GDM) have made it possible to identify areas of opportunity that the municipalities were omitting or addressing incipiently, and these mechanisms, by setting minimum parameters that must be met, make visible the gaps between what is done and what should be done at the municipal level. They consider that the main priorities of the municipalities have focused on the attention to services and public works, focused on issues such as drinking water, drainage, roads, electrification, solid waste management, among the most relevant, as well as the main needs expressed by the population to the municipal government, where one of the management mechanisms has been the organized groups that raise their needs, whether focused on a sector of the population, a community or locality or even a specific work.

Table 5 Alienation of development axes at the three levels of government

National Development Plan (PND)	State Development Plan	Municipal Development Plan (PMD)
Mexico in Peace	Hidalgo Safe and with Justice	Acatlán Safe and with Justice
Inclusive Mexico	Human and egalitarian Hidalgo	Acatlán Human and Egalitarian
Mexico with Quality Education	Hidalgo with Sustainable Development	Acatlan with Sustainable Development
Prosperous Mexico	Prosperous and Dynamic Hidalgo	Prosperous and Dynamic Acatlan
Mexico with Global Responsibility	Honest, Close and Modern Government	Honest, Close and Modern Government
National transversal axes	State transversal axes	
Democratizing productivity	Gender Perspective	
Close and Modern Government	Development and Protection of Children and Adolescents	
Gender Perspective	Incorporation of Science, Technology and Innovation	

In the areas of health and education, they consider that the state and national authorities have the greatest responsibility, since the municipalities have more limited resources in terms of economic, technical and human resources; and they consider that the priority is focused on attending to the basic services set out in Article 115 of the Constitution, they believe that in Mexico the main actions in education and health are carried out by the federal and state authorities, since they are the ones who operate the national and state systems.

Regarding economic development, the people

interviewed state that the context of each municipality has an impact on the productive vocations, and this in turn determines to a large extent the main economic activities that are developed. They state that municipalities are increasingly immersed in supporting the generation of conditions, such as having more infrastructure to facilitate the establishment of organizations that generate jobs and allow the economically active population to be hired; however, economic development is oriented toward traditional sectors, without addressing other productive areas that could be poles of development.

They establish the need to professionalize the personnel that collaborate in the municipalities, as well as to establish a professional career service that allows the continuity of the personnel and a constant training and education in public service that enables the improvement of municipal performance and strengthens management, as well as personnel evaluation by the citizens to support the personnel that makes decisions. The resources available to the municipality are limited and the municipalities as well as the states and the federation should try to pool a larger budget to support actions focused on the well-being of the population.

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3.3. Integration of Results

From the results obtained, it is identified that the aspect of economic development presents an average positive correlation with the educational and income indexes, which when contrasted with the contributions of the people interviewed is related to the actions that the municipalities have undertaken to promote the infrastructure conditions to be attractive spaces for investment and employment generation, which favor economic growth, while the educational aspect contributes to offer qualified personnel according to the requirements of the organizations already established and those interested. The health element does not present aspects that allow us to consider that municipal management based on the aspects considered in the research could have a positive impact.

Although the planning elements considered in the evaluation of the municipalities show moderate values, the opinions of the people interviewed reflect that the municipalities show greater interest and commitment with respect to their short and medium-term planning mechanisms, which is supported by the alignment of public policies at the three levels of government, which in the medium and long term may have benefits for the population and result in better conditions of well-being for the people.

4. Discussion

From the perspective of the theoretical elements and the qualitative and quantitative results obtained, it is considered that although there is a direct relationship between the evaluated elements of municipal management selected for the research with respect to the educational and income components that make up the HDI, it is medium and cannot be considered significant.

The qualitative aspects show that the work carried out by the municipalities in the areas of planning, alignment of public policies, provision of services and execution of public works have improved municipal management, but they consider that greater professionalization of the personnel who collaborate in the municipal bodies is required as well as establishing mechanisms to attenuate personnel turnover and make more resources available for efficient use to meet the needs of the population.

The use of the Human Development Index as an indicator of social welfare has been used on a regular basis, and when contrasted with indicators of the use of focused resources, it allows to identify the effectiveness with which they have been used, and it can be identified that not necessarily having a greater amount of resources makes possible a greater development of the population, and that there may also be an improvement in the HDI, despite not having the best use of the resources that the municipalities receive, although the trends indicate that this is desirable [17].

There are factors such as the reduction of poverty and extreme poverty, which together with economic growth substantially provide elements that contribute to the improvement of the HDI, as is evident in developed countries, where a constant and stable economic growth is identified, which together with decreasing poverty rates improve income, facilitating elements of the environment that favor higher educational levels and better health conditions [18].

Among the main limitations of the research, it is considered that when using the evaluation of municipal aspects through the instruments used by INIFED, and due to changes in the methodology of municipal evaluation in previous and subsequent years, it is not possible to make a contrast with this information to enrich the analysis of the information. Another

limitation arises at the time of conducting the research, since there were mobility restrictions due to the COVID-19 pandemic, which restricted interviews to digital media such as platforms, videoconferences or phone calls, which generates a narrative outside of their normality of people [19], which may allow some variation in the answers, because the making of the recordings may affect the employment aspect of the people interviewed, although they were informed about confidentiality and they were asked if they wanted their name or position to appear in the documents where the investigation will be reported. Another limitation focuses on the use of certain elements and indicators of the Municipal Performance Advisory Guide, which are those that, according to the researchers' criteria, may have a direct relationship between municipal management and the aspects that make up the human development index, these being the points that are considered the most significant limitations in the development of the research.

5. Conclusions

The results obtained indicate an average correlation between municipal management based on the topic of economic development with the human development components of income and education; however, they are not considered to be significant, so the elements evaluated in the Municipal Performance Advisory Guide 2020 do not have the direct impact that could be considered in the welfare of the population of the municipalities of the state of Hidalgo, the qualitative aspects collected allow identifying that processes such as planning, public policy alignment and citizen participation have been improved, which according to municipal management theorists can provide positive results in the medium and long term [20].

Study carried out in Latin American countries and the results of the United Nations Development Program [21] refer to elements such as investment and economic development that contribute to the improvement of HDI as well as innovation issues to establish capacities that may not currently exist.

The contributions of the present research allow us to consider that it is important to inquire into the aspects of the municipal level that favor the well-being of the population and the need to evaluate public policies and their implementation in the topics of education, health and income of the population.

In Table 5, to be able to compare the different axes, the available documents are used since the State Development Plan of the Government of Hidalgo is currently under development and the National Development Plan 2013–2018 and the Municipal Development Plan 2016–2020 are consulted

The mainstreaming of actions at the three levels of government in Mexico, considering as guidelines the Sustainable Development Goals of the United Nations

[22] to reduce or improve among others literacy rates, improve and expand educational coverage, improve health services, expand the capacity of health services, expand job opportunities, promote the generation of more and better paying jobs, and improve and consolidate municipal infrastructure to generate development poles.

In comparison with other studies, this one presents an analysis that seeks to identify if there is a positive relationship between municipal capacities, in the topics that were considered those elements with a possible direct emphasis on human development, identifying those with low or moderate incidence, while other studies have inquired about the influence of economic growth, economic development and social development as independent variables of human development, This implies an alternative way of searching for elements that contribute to the improvement of people's living conditions, based on institutional efforts to improve development, performance and results in municipalities, particularly in the state of Hidalgo, which can serve as a basis for establishing studies in other states or countries that have municipal evaluation instruments and results.

The present research provides a glimpse of future research regarding municipal capacities that can have an impact on better municipal management and the development of the population; the aspects of decision-making that affect the improvement of the conditions of municipalities and the well-being of citizens; and the aspects of innovation aimed at improving the conditions of municipal administration and management, the impact of investment in educational and health infrastructure, and to promote employment.

References

- [1] CHAMBER OF DEPUTIES. *Political Constitution of the United Mexican States. Last reform published November 18, 2022*. Cámara de Diputados, 2022. <https://diputados.gob.mx/LeyesBiblio/pdf/CPEUM.pdf>
- [2] LÓPEZ H., AQUIJE M., GARAY L., VÁZQUEZ J., and MAVILLA J. Municipal management and its impact on governance in local governments in Peru, 2021. *Ciencia Latina*, 2021, 5(5): 1-24. https://doi.org/10.37811/cl_rcm.v5i5.845_p.7278
- [3] ROSALES M. Human Development: A proposal for its measurement. *World Village*, 2017, 22(43): 65-75. <https://redalyc.org/articulo.oa?id=54353312007>
- [4] UNITED NATIONS DEVELOPMENT PROGRAM. *Development Analysis Platform*. UNDP, 2022. <http://pad.undp.org.mx/#/home>
- [5] SARMIENTO-RAMÍREZ Y., AGUILERA-MOLINA J., CLARKE-BLOOMFIELD M., and FORTEZA-ROJAS S. Taxonomy of territorial development in municipalities of the Holguín province, Cuba. *Economy and Development*, 2020, 163(1): 1-20. <https://www.redalyc.org/articulo.oa?id=425565062011>
- [6] TAPIA J., CALLA-CHUMÑISUCA Y., AVENDAÑO C., ESPINOZA J., COACALLA-CASTILLO C., and

- VERA-MALDONADO P. *Municipal management and local development*. INUDI Peru, Puno, 2022. <https://doi.org/10.35622/inudi.b.049>
- [7] ARAIZA E. *Municipal Management Manual*. Konrad Adenauer Stiftung, Buenos Aires, 2019. https://www.kas.de/c/document_library/get_file?uuid=ca6339ee-acec-5a87-7b2c-a4bf43d21f8b&groupId=287460
- [8] OLIVERA G. D. H., & CANO F. M. *Performance evaluation at the Municipal level*. Administrative Science, 2012. <https://cienciaadministrativa.uv.mx./index.php/cadmiva/article/view/1701>
- [9] NATIONAL INSTITUTE FOR FEDERALISM AND MUNICIPAL DEVELOPMENT. *Municipal Performance Advisory Guide*. Government of Mexico, 2020. <https://www.gob.mx/inafed/acciones-y-programas/guia-consultiva-de-desempeno-municipal-198105>
- [10] PAPALIA D., & MARTORELL G. *Human development*. McGraw Hill, México, 2016.
- [11] ROSENBERG H. The Human Development Index. *Pan American Journal of Public Health*, 1994, 117(2): 175-184. https://iris.paho.org/bitstream/handle/10665.2/15672/v117n2_p175.pdf?sequence=1&isAllowed=y
- [12] HERNÁNDEZ R., & MENDOZA C. *Research methodology. The quantitative, qualitative and mixed routes*. Mc Graw Hill, Mexico, 2018.
- [13] INSTITUTO NACIONAL DE ESTADÍSTICA Y GEOGRAFÍA. *Territorial division of Mexico*. Cuéntame de México, 2023. <https://cuentame.inegi.org.mx/territorio/division/default.aspx?tema=T>
- [14] SECRETARIAT OF THE INTERIOR. Workbook of the Municipal Performance Advisory Guide. *Instituto municipal de planeación de Valle de Santiago*, 2020. <http://implan.valledesantiago.gob.mx/guia-consultiva-de-desempeno-municipal-2020.html>
- [15] ÍNDICE DE DESARROLLO HUMANO MUNICIPAL. *Municipal Human Development Index*, 2020. <https://www.idhmunicipalmexico.org/>
- [16] MENDENHALL W., BEAVER R., and BREWER W. *Introduction to Probability and Statistics*. Cengage Learning, México, 2015.
- [17] NAVARRO J. C., AYVAR F. J., and GIMENEZ V. M. Generation of social welfare in Mexico: a DEA study based on the HDI. *Economy, Society and Development*, 2016, XVI(52): 591-621. <https://www.redalyc.org/articulo.oa?id=11146910002>
- [18] HURTADO A. Economic growth, poverty and human development in Peru. *Pakamuros Scientific Journal*, 2019, 7(1): 68-79. <https://doi.org/10.37787/pakamuros-unj.v7i1.77>
- [19] ARDEVOL E., BERTRÁN M., CALLÉN B., and PÉREZ C. Virtualized ethnography: participant observation and semi-structured online interview. *Digital Athena. Journal of Thought and Social Research*, 2003, 3(1): 72-92. <https://www.redalyc.org/articulo.oa?id=53700305>
- [20] QUIROZ J. R. The management level of the Provincial Municipality of Chota: A methodology for local governments. *Industrial Data*, 2022, 25(1): 79-102. <https://doi.org/10.15381/idata.v25i1.20870>
- [21] UNITED NATIONS DEVELOPMENT PROGRAM. *Human Development Report 2020*. Human Development Reports, 2020. <https://hdr.undp.org/content/human-development-report-2020>
- [22] UNITED NATIONS. Sustainable Development Goals. 2023. <https://www.un.org/sustainabledevelopment/es/>

参考文献:

- [1] 众议院. 墨西哥合众国的政治宪法。上次改革公布于 2022 年 11 月 18 日。众议院, 2022. <https://diputados.gob.mx/LeyesBiblio/pdf/CPEUM.pdf>
- [2] LÓPEZ H., AQUIJE M., GARAY L., VÁZQUEZ J., 和 MAVILLA J. 市政管理及其对秘鲁地方政府治理的影响, 2021 年。拉丁科学, 2021, 5(5): 1-24. https://doi.org/10.37811/cl_rcm.v5i5.845_p.7278
- [3] ROSALES M. 人类发展：对其衡量的建议。世界村, 2017, 22(43): 65-75. <https://redalyc.org/articulo.oa?id=54353312007>
- [4] 联合国开发计划署. 发展分析平台。联合国开发计划署, 2022. <http://pad.undp.org.mx/#/home>
- [5] SARMIENTO-RAMÍREZ Y., AGUILERA-MOLINA J., CLARKE-BLOOMFIELD M., 和 FORTEZA-ROJAS S. 古巴奥尔金省各市领土发展分类学。经济与发展, 2020, 163(1): 1-20. <https://www.redalyc.org/articulo.oa?id=425565062011>
- [6] TAPIA J., CALLA-CHUMÑISUCA Y., AVENDAÑO C., ESPINOZA J., COACALLA-CASTILLO C., 和 VERA-MALDONADO P. 市政管理和地方发展。秘鲁普诺创新科技大学研究所, 2022. <https://doi.org/10.35622/inudi.b.049>
- [7] ARAIZA E. 市政管理手册。康拉德·阿登纳基金会, 布宜诺斯艾利斯, 2019. https://www.kas.de/c/document_library/get_file?uuid=ca6339ee-acec-5a87-7b2c-a4bf43d21f8b&groupId=287460
- [8] OLIVERA G. D. H., 和 CANO F. M. 市级绩效考核。行政学, 2012. <https://cienciaadministrativa.uv.mx./index.php/cadmiva/article/view/1701>
- [9] 国家联邦制和市政发展研究所. 市政绩效咨询指南。墨西哥政府, 2020. <https://www.gob.mx/inafed/acciones-y-programas/guia-consultiva-de-desempeno-municipal-198105>
- [10] PAPALIA D., 和 MARTORELL G. 人类发展。墨西哥麦格劳希尔, 2016.
- [11] ROSENBERG H. 人类发展指数。泛美公共卫生杂志, 1994, 117(2): 175-184. https://iris.paho.org/bitstream/handle/10665.2/15672/v117n2_p175.pdf?sequence=1&isAllowed=y
- [12] HERNÁNDEZ R., 和 MENDOZA C. 研究方法论。定量、定性和混合路线。墨西哥麦格劳希尔, 2018.
- [13] 国家地理研究所. 墨西哥的领土划分。说说墨西哥, 2023. <https://cuentame.inegi.org.mx/territorio/division/default.aspx?tema=T>

- [14] 内务秘书处. 市政绩效咨询指南工作手册. 圣地亚哥谷市政规划研究所, 2020. <http://implan.valledesantiago.gob.mx/guia-consultiva-de-desempeno-municipal-2020.html>
- [15] 市级人类发展指数. 城市人类发展指数, 2020. <https://www.idhmunicipalmexico.org/>
- [16] MENDENHALL W., BEAVER R., 和 BREAVER W. 概率统计导论. 圣智学习, 墨西哥, 2015.
- [17] NAVARRO J. C., AYVAR F. J., 和 GIMENEZ V. M. 墨西哥社会福利的产生: 基于人类发展指数的数据包络分析研究. 经济、社会与发展, 2016, XVI(52): 591-621. <https://www.redalyc.org/articulo.oa?id=11146910002>
- [18] HURTADO A. 秘鲁的经济增长、贫困和人类发展. 帕卡穆罗斯科学杂志, 2019, 7(1): 68-79. <https://doi.org/10.37787/pakamuros-unj.v7i1.77>
- [19] ARDÉVOL E., BERTRÁN M., CALLÉN B., 和 PÉREZ C. 虚拟民族志: 参与观察和半结构化在线访谈. 数字雅典娜. 思想与社会研究杂志, 2003, 3(1): 72-92. <https://www.redalyc.org/articulo.oa?id=53700305>
- [20] QUIROZ J. R. 长田省市的管理水平: 地方政府的方法论. 工业数据, 2022, 25(1): 79-102. <https://doi.org/10.15381/idata.v25i1.20870>
- [21] 联合国开发计划署. 2020年人类发展报告. 人类发展报告, 2020. <https://hdr.undp.org/content/human-development-report-2020>
- [22] 联合国. 可持续发展目标. 2023. <https://www.un.org/sustainabledevelopment/es/>