THE DYNAMICS OF COMMON GOOD IN THE RURAL MUNICIPALITY OF ATLIXCO, PUEBLA

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ABSTRACT

Studying common good dynamics at the municipal level in Mexico provides a direct understanding of the social, economic and political life in Mexico. Using the common good metric developed by the Institute for the Promotion of the Common Good (IPBC) for this purpose, we apply 450 surveys to evaluate the common good dynamics in the municipality of Atlixco, Puebla. With the use of a stratified sample, we show that social dynamics in the municipality are fragile in five dimensions (collective agency freedom, governance, justice, stability, and humanity), meaning that social order is fragile as well. We also show that collective life outside the municipal seat presents more healthy levels of social dynamics despite their lower performance in other indicators of development.

1. INTRODUCTION

Studying common good dynamics at the municipal level in Mexico provides a direct understanding of the social, economic and political life in Mexico. At the political level, the municipality is the most basic administrative unit, the local manifestation of the State. It is the first level of government led by a municipal president elected every three years, with the possibility of re-election once. Municipalities have administrative and economic autonomy and are mainly in charge of providing public services to the population such as public infrastructure and access to services, and thus they have a critical impact in determining people's realities. In

addition, municipalities are also constituted by smaller localities situated outside of the municipal seat. These localities do not have political autonomy; instead, they are merely responsible of deploying the development projects chosen in the municipal seat. Therefore, the levels of development, access to health care, education, markets and employment can be significantly different between the municipal seat and the rest of the localities. Hence, the quality and the extent to which these social goods benefit all and opportunities to live well are equally distributed, i.e. how *just* municipal life is, greatly depends on the capacity of the government to respond to people's demands. As such, municipal governments are an important form of *governance* in Mexican society because they have immediate and a more direct way to respond to citizens' needs.

At the sociocultural level, municipal life constitutes a microcosm of the syncretic cultural and traditional values in Mexican society. The local is a sphere where daily social and economic life happens, where people routinely interact with one another, where people assembly, join groups, share ideas, values, objectives, and identify common concerns. Indeed, in Mexico, many of the decision-making processes at the municipal level – especially in rural and semi-rural municipalities – are done in close consultation and participation of the population through citizen assemblies. In other words, municipal life is an important source of *collective agency* as it is where people experience social problems most directly, express their needs and demand solutions to their authorities.

Finally, it is also through municipal life that social and cultural practices are transmitted through time, connecting the past with the present and the future. Thus, within municipalities, people develop their basic forms of cultural and social belonging, reinforcing the *stability* of an acceptable way of life in conjunction with others. For instance, in the conservation and enactment of festivities, social values, practices of respect, and the way people treat each other in order to promote the *humanity* of social life.

In short, municipalities constitute people's main experience of life, and for some people, their only experience. Yet, few studies inform us about these socio-institutional realities in Mexico. More importantly, existing indicators do not inform us about how social institutions and social practices interconnect to understand the actual social dynamics in each of the previously mentioned dimensions (collective agency freedom, governance, justice, stability, humanity) that shape people's collective life at the local level.

By applying the common good metric developed by the IPBC, this article explores the common good dynamics of the case of Atlixco, a municipality located 30 kilometers from the capital city of Puebla, within the Popocatepetl National Park. The purpose of this article is to offer an analysis of the social dynamics in the municipality, especially the collective aspects that constitute quality of life, including interpersonal relationships, social and cultural identity, and the established social and government institutions. Based on 450 surveys, we show, firstly, that social dynamics in all dimensions are problematic in Atlixco, depicting a fragile social order in which social practices are not valued or held in common. Secondly,

by comparing the municipal seat with surrounding localities, we observe that the latter is mainly a problem of the municipal seat, though life is not necessarily better in other localities.

To do so, this article is structured as follows. First, it situates the analysis in the context of Atlixco by giving a historical outlook of the municipality, including some of the key economic, social and political developments of its population. Second, it briefly describes the methodological approach used to measure common good dynamics and the process of data collection in Atlixco. Third, the article presents the results by first giving a panoramic view of the current state of the dimensions and basic common goods in the municipality, to then focus on the differences between the municipal seat and the surrounding localities in both dimensions and basic common goods. The article ends with some concluding remarks and potential recommendations.

2. THE CONTEXT: ATLIXCO

Atlixco is one of the most important of the 217 municipalities of the state of Puebla. It is the fifth most populated with 134,364 people in 2015. Given its size, Atlixco is considered an urban center, although located in a predominantly rural area. The municipal seat holds 68.2% of the total population (86,690) and only few of the 131 localities in the municipality hold more than 2,500 inhabitants. The rest are rural localities and most have 499 or less inhabitants (Sedesol, 2014). Today, agriculture is the second main sector of the economy, right after the services sector which is fueled by tourism that reaches the area in search of the so-called ''eternal spring'' type of weather, restaurants and greenhouses that are offered. This is the third municipality with the highest levels of tourism in the state after Puebla and Tehuacán (INEGI, 2017a). Despite having a history of indigenous settlers during prehispanic times and being located in a state with significant presence of indigenous groups, Atlixco's population is predominantly non-indigenous. According to the Municipal Development Plan of Atlixco (MDP, 2018), whereas 39% of the localities have indigenous population, only 10,242 people identify as indigenous and 4.57% report speaking an indigenous language.

Despite the uncanny beauty of Atlixco, its history and development process is full of paradoxes. The region has gone through cyclical periods of prosperity and decline since colonial times. The first settlers of Atlixco where Olmecas, Xicalancas and Teochimecas, primarily dedicated to agriculture. In fact, the name of the municipality is Aztec and is formed by three elements: *Atlx* (water); *ixtla* (valley); *tla* (abundance), which together mean ''abundance of water in the valley''. Despite the favourable weather and fertile lands that made it a prosperous agricultural site, a few times in its history it transformed into a buoyant textile centre. According to Levy de López (1975), the artisanship of the local people helped it become a centre of textile industry in the XVI century. Yet, the mercantilist ideas of the time and the reticence of Spain to allow industries in the colonies to develop stopped

the expansion of the cotton textile industry[1]. The region went back to being a pre-dominantly agricultural land until 1940s when independent Mexico restarted investments in textile factories in the area. This brought another period of prosperity in the region until the competition from the modern factories newly established in the city of Puebla slowly contributed to the virtual disappearance of this industry in Atlixco in the 1960s. With this, the migration of the population to the city of Puebla in the search for better jobs started to increase.

Puebla, however, remains the fourth state with the largest levels of poverty in the country, with 61% of its population living in poverty (Coneval, 2015) and in 2014 it was the most unequal state in the country with a noticeably high GINI coefficient of 0.572 (Coneval, 2010). Similarly, despite being one of the most prosperous municipalities of the state of Puebla, Atlixco ranks above the national average with 59.4% of the population living in poverty (see Table 1), of which 49.3% lives in moderate poverty and 10.1% in extreme poverty. At the same time, it is one of the most unequal municipalities of the state with a GINI coefficient of

TABLE 1 – *Poverty and inequality in Atlixco*

	2010	2015	Difference (2015 - 2010)
Gini coefficient	0.482		
Moderate Poverty (percentage)	43.3%	49.3%	6.0%
Moderate Poverty (number)	57,550	66,456	8,906
Average deprivations for the moderate poor	2.3	2.0	-0.3
Extreme poverty (percentage)	12.8%	10.1%	-2.7%
Extreme poverty (number)	17,028	13,593	-3,435
Average deprivations for the extreme poor	3.8	3.5	-0.3
Vulnerable by social deprivations	23.9%	21.7%	-2.2%
Vulnerable by income	7.0%	8.0%	1.0%
Income lower than the wellbeing line	63.0%	67.4%	4.4%
Not poor not vulnerable	13.1%	11.0%	-2.1%
Education Lag	23.4%	21.7%	-1.7%
Health care Lag	41.1%	24.2%	-16.9%
Access to Social Security Lag	71.7%	70.2%	-1.5%
Housing conditions Lag	12.8%	10.7%	-2.1%
Access to basic dwelling services Lag	29.7%	28.0%	-1.7%
Food security Lag	21.8%	24.1%	2.3%

Source: Authors' elaboration with data from the National Council for the Evaluation of Social Development Policy (Coneval).

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[1] The cotton industry in Mexico has a long history that started since before colonial times (López Lobato 1959). According to official data, Mexico ranks 13 in the world in the production of cotton. Atlixco had an important part to play in the evolution of this industry in the country, but it has gradually lost grounds with the creation of new factories in cities such as Puebla, Guadalajara and others.

0.482 with only 11% of the population being not poor nor vulnerable (Coneval, 2015).

The official data suggests that in recent years the municipality has had some successes particularly in increasing access to health care and reducing extreme poverty (Table 1). Nonetheless, these successes are fragile for two reasons. First, while the number of people living in extreme poverty saw some reductions (−2.7%), moderate poverty increased almost 3 times this amount (+6%). In addition, the percentage of people vulnerable by income (+1%), with income lower than the wellbeing line (+4.4%), and in a situation of food insecurity (2.3%) also increased.

Second, the current global pandemic could represent a significant setback, especially if we consider the impact that COVID-19 has had over mobility in a municipality with high rates of informal employment. According to the latest data of the National Institute of Statistics and Geography (INEGI), in the first trimester of 2020, 71.6% of people in the state of Puebla are informally employed (INEGI, 2020). Although the latter information cannot be disaggregated by municipality, a proxy of informal employment in Atlixco could be accessed through social security. In 2015, 70.2% of the population of Atlixco did not have access to social security (Coneval, 2015). These numbers show the potential threat of the global pandemic over the majority of the population in the municipality, especially because they are highly vulnerable to lose their jobs, might have difficulties finding new employment, or simply will not be receiving social security during these difficult times (ILO, 2020).

The latter suggests that Atlixco remains a location with high challenges and deep entrenched social concerns. Moreover, if we zoom in to the development process and quality of life of the localities in Atlixco, we can observe that inequalities between localities persist. According to Soloaga et al. (2016), territorial inequalities in Mexico are associated to population density, type of employment and access to resources. Localities with a larger population density, greater dependence on agricultural employment and less access to services tend to have lower levels of income. Atlixco is no exception. The peripheral localities of Atlixco have a strong relationship of dependency with the municipal seat as it offers better access to public services, employment opportunities, markets and roads that are unavailable to them (Huerta, 2016). In terms of commerce, Atlixco offers a market for cheap local agricultural products to which merchants from different regions of the country travel to obtain and resell. This probably was boosted by the creation of new roads that connect Atlixco with the states of Morelos, Oaxaca and Guerrero, and cities like Mexico City and Puebla. It is also customary for local producers to travel to the municipal seat to sell their produce in these local markets (Huerta 2016). The improved road connectivity within the municipality in recent years also potentially provides easier access to the inhabitants of the peripheral localities to the services and markets of the municipal seat. Although, according to Huerta (2016) for those in the farthest localities traveling to the municipal seat remains costly and time consuming.

Still, Atlixco has a substantial proportion of its population migrating to Puebla (INEGI. 2005) and the United States (CONAPO, 2010). Although more up-to-date data is needed, in the year 2000, Atlixco was one of the municipalities that – together with Cholula, Tehuacán and Teziutlán – contributed to more than 25% of the migrants that arrived to the city of Puebla (INEGI, 2005). Similarly, CONAPO (2014) classified the degree of migration density to the United States in Atlixco as high in 2000 and medium in 2010[2]. In 2010, 10.63% of households in Atlixco were receiving remittances, 5.5% had family members settled in the United States, and 2.05% had family members involved in circular migration (CONAPO 2010). However, in recent years inhabitants of Atlixco are facing greater difficulties to migrate to the United States, now reporting higher rates of return migration (5.75%) compared to the percentage of local people currently in the United States (5.5%).

For people that stays within the municipality, contact with the city of Puebla remains scarce because of the costs of travel and distance. For instance, a round trip from Atlixco to Puebla costs 70 pesos, 57% of the minimum daily wage today (3.5 USD approx.). These costs are potentially inaccessible to the majority of the population considering that 67.4% of the population has an income lower than the wellbeing line defined by Coneval. That is, they do not have the resources needed to acquire the goods and services to satisfy their (food and nonfood) needs. And when people from the municipality do travel to the city in search for better health-care and access to other services, people of the municipality have reported feeling discriminated and mistreated (Huerta, 2016).

This brief overview of the history and development processes of the municipality of Atlixco can suggest three things for the analysis of the common good dynamics of the area. First, the various transitions that Atlixco has gone through historically from a flourishing industrial center back to an agricultural area have led to periods of prosperity and of stagnation. This in turn has led to increase patterns of migration, which destabilizes social and communal life in the municipality. Second, in addition to these fluctuant historical stages, Atlixco is characterized by an uneven distribution of the small development successes it has attained. Indeed, some localities have benefited more from processes of urbanization, industrialization, connectivity and access to markets. Yet, many other localities remain left out, trapped in poverty, subsistence agriculture and high levels of migration. These ambivalent and exclusionary processes potentially curtail any positive dynamics in the common good of the municipality. Third, none of the latter information actually tell us anything about the social processes of social and collective life in the municipality. Understanding these social dynamics, we are convinced, provide a more useful guide to inform social policy to improve life in Atlixco. This is particularly relevant for Atlixco since the political slogan of the current municipal government is, precisely, ''Atlixco: committed to the common good''.

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[2] This was calculated based on the average of the amount of remittances, migrants residing in the USA, circular migration and return migration in the municipality (CONAPO, 2014).

3. METHODOLOGY: THE METRIC OF COMMON GOOD AND THE DATA COLLECTION PROCESS IN ATLIXCO

As explained in Nebel and Arbesu-Verduzco (in this issue), the common good metric aims at capturing the social process and structures through which common goods are held together in a society. It identifies five normative dimensions as drivers: collective agency freedom, governance, justice, stability, and humanity. These dimensions measure institutional features and common practices that structure social life.

The structure of the survey and the wording of the questions follow the same characteristics as reported by Garza-Vázquez and Ramírez (in this issue) and Ávila-Valdez and Castro-Manzano (in this issue). To recapitulate, the survey commences with 14 questions measuring socioeconomic aspects such as locality, sex, age, education, type employment, if the person or her parents spoke an indigenous language, and six variables used to construct a proxy of income (e.g. number of rooms and bathrooms in the household, ownership of cars or vans, internet connection). The scale used to assess common good was comprised of the five dimensions previously mentioned within which five basic common goods (BCG) are measured (rule of law, work, education, culture and solidarity). This model is meant to be interconnected and thus the questions that compose each dimension assess the interaction between the dimension and each basic common good (e.g. Justice and the BCG of rule of law), as well as the interaction between the dimension and the other dimensions (e.g. Justice and Stability).

As explained elsewhere (in this issue), the questions are designed as statements that determine the level of agreement-disagreement of the respondents regarding each item. For the interpretation of the questionnaires, the responses were transformed to a scale of 10 to 1 using the methodology proposed by Tipping Point Theories (see Nebel and Arbesu-Verduzco, in this issue). This scale informs us about both the direction (positive or negative) and the strength of the prevalent social order (from positively dominant, 10, to negatively dominant, 1).

The data gathering process took place between January and February 2020. In agreement with the municipal government, a local College ''Tecnológico de Atlixco'' and a polling agency were in charge of applying the surveys. A total of 450 questionnaires were collected in Atlixco. Participants were included to the sample using a method that consisted of interviewers beginning at the northeast corner of the upper block of the locality and applying the survey to the fourth household on that road. The interviewer would then walk clockwise around the block and select the fourth household at the next road. This meant that four interviews would be conducted per block and then the interviewer would move to the next block of the locality and follow the same procedure. The person interviewed was the head of household (female or male) that was at home at the time. This person needed to be adults over 18 years old and the selection of the gender of the interviewee also followed the quota established in the stratified sample described next.

The stratified sampling method used was based on the proportions of the po-

pulation in the municipality in certain key variables, specifically sex, age, education and locality. A stratified sample involves selecting the study participants by controlling for the sizes and types of certain subgroups of the population. This can be in the interest of having homogeneous subgroups or subgroups that represent their actual size in the population. In this study, the intention was the latter, to include participants of all subgroups based on their shares to the total population (see also Ávila-Valdez and Castro-Manzano, in this issue). In doing so, stratified questionnaires are more representative of the characteristics of the population as they ensure that different parts of the municipality are taken into account and estimates of the common good dynamics of the municipality are done with greater accuracy. Hence, this sample is representative only at the municipal level.

4. RESULTS: MEASURING COMMON GOOD DYNAMICS IN ATLIXCO

4.1. *The characteristics of the sample*

The participants of the study in Atlixco have the following socioeconomic characteristics that mimic the distribution of the population (see Table A1 in Appendix). In terms of sex, this sample is composed of 53% men and 47% women. Most of the sample is non-indigenous as only 13% reported that they or one of their parents spoke an indigenous language. The localities with greater presence of indigenous-speaking participants are the municipal seat (Atlixco), San Pedro Benito Juárez, and San Jerónimo Coyula.

Most participants live in the municipal seat (69.3%). Yet, in the interest of covering a diversity of localities, the study also included 12 localities that vary in size and position in relation to the municipal seat. In terms of education, most of the population reported having secondary schooling or less (63.8%), followed by high school studies (21.1%) and then, a considerable proportion reported having a university degree or higher (22.2%). This could be because of the increasing number of universities, especially private, that have stablished in the region in recent years. Finally, following AMAI's (2018) socioeconomic classification for Mexico (Ávila-Valdez and Castro-Manzano, in this issue), the socioeconomic level of the sample is primarily low middle class (C- with 26.2%) or lower (D+ with 23.3% and D with 23.1%).

In Atlixco, having a higher level of education is associated with higher levels of income (Figure A1 in Appendix). That is, as education increases, the distribution moves from the lower levels of income to higher levels of income. For example, when only 17.7% of the population with secondary school or less reaches a middle class classification or higher (level C, C+, A/B), this proportion increases to 52.1% when people have a university degree or higher.

4.2. *The common good dynamics in Atlixco*

First, we provide a rather brief global analysis of the common good dynamics in the municipality. After this global analysis we concentrate on the differences between the life in the municipal seat and the rest of the localities (e.g. Huerta, 2016). Particularly, in the last part of the section, we look at the differences in basic common goods within different groups of localities inside the municipality.

4.2.1. A panoramic view: dimensions and questions

A panoramic view shows a gloomy picture for the social dynamics in Atlixco (Table 2) as all dimensions are in a social dynamic (SD) of positive transition or worse (i.e. values of 7 or below). The two best dimensions are in a SD of positive transition (humanity, collective agency), one is at mild anomy/positive transition (stability), one is at mild anomy (justice), and the worst is at deep/mild anomy (governance). This indicates a municipality in which collective habits, practices of solidarity and community in the population (i.e. humanity), as well as their interest to organize and coordinate actions in search of a common objective (i.e. collective agency) are present but in deterioration. A municipality where common goods are not perceived as being equally shared (i.e. justice), and where the transmission of cultural and social belonging is very feeble thus threatening its stability. All this, in a context in which the inhabitants of Atlixco perceive an absence of government institutions that are reliable and at the service of the population as a whole.

TABLE 2 – *Geometric means by dimension*

Dimension	Total	Men	Women
Justice	6.04	6.06	6.15
Stability	6.85	7.01	6.77
Governance	4.59	4.51	4.83
Agency	7.33	7.33	7.13
Humanity	7.34	7.53	7.23

Source: Authors' calculations using the common good dynamic's instrument.

As Figure A2 in Appendix depicts, there are many items on negative social dynamic (i.e. a value of 4 or less) and very few items with dominant or stable positive social dynamic. Below we provide an overview of the results for each dimension, before moving on to analyzing differences between the municipal seat and other localities.

Collective agency freedom

We start from the dimension of collective agency because it captures the freedom to act together that exists in the municipality and, therefore, under this approach is considered the engine of the construction of the common good. In Atlixco, this is one of the dimensions that shows the highest average levels of all (7.33), yet it is in a social dynamic in transition (positive). On the one hand, the aspects that sustain this dimension are the capacity that people report to solve problems as a community (A44), cooperate (A53), and reach agreements (A46). However, despite this, they report not knowing how to organize themselves (A47) or how to associate with the government (A54) or other institutions (A50) when trying to solve problems. The aspect that emerges as most problematic is the legal capacity of the community to organize (A48).

Justice

The justice dimension captures the social practices and institutions that help distribute the commons equally in a community. In general, Atlixco shows levels of justice in what we call mild anomy. It is also the dimension where there is greater variability in the values of the indicators, with some in a dominant positive social dynamic, and several indicators showing a social dynamic in a negative transition or vulnerable. The strongest aspects of the dimension of justice in the municipality is people's perceptions of their access to education and the social value that education has for the population (J6, J7). However, justice is curtailed by the high levels of corruption of public officials (J3), and people's distrust of the police (J2). The ability of certain groups to have privileged access to power (J15) while others have no access to it (J14). As well as low access to certain basic goods such as employment (J5), which lead to high incentives to migrate out of the municipality to seek better living standards (J12).

Stability

The stability dimension measures the levels at which social institutions and citizens act together to preserve the levels of common good in the municipality in the long term. In Atlixco, the levels of stability on average are in mild anomy, with some indicators supporting the common good, while there are others with negative social dynamics that destabilize the dimension. These indicators suggest that the contribution of citizens to the stability of the nexus is relatively positive through people's pride in their culture (S21) and the perceived stability of civil associations (S26). However, according to people's reports, the actor that attempts against the stability of the common good is the government, primarily through the incorrect actions of the police (S18) and the inability of the municipal government to implement actions that bring long-term benefits to the population (S24).

Humanity

The humanity dimension in this proposal captures the quality of the interactions between the members of the municipality and the degree of achievement of certain

shared social assets. This dimension, in Atlixco, reports the highest average levels of all dimensions. Still, it is in a social dynamic in transition (positive) (7.34). The aspects that keep the dimension afloat are related to the expected social behaviors in the municipality, including being cordial, respectful and caring (H57, H58, H59). However, according to people's perceptions, the weakest aspect of humanity in Atlixco is the levels of insecurity (H61), dishonesty (H60) and the inability to reconcile and resolve conflicts peacefully in the municipality (H62).

Governance

The governance dimension is the most affected in the municipality. This dimension captures the ability to resolve conflicts and achieve better levels of common good through stronger organization and administration by local authorities and the civil society. With a value of 4.59, it is in a social dynamic that is in a negative transition, consistently showing low levels in most indicators.

We can say that in this dimension there are four questions that measure citizen governance and twelve that measure state governance. On the one hand, citizen governance captures the extent to which the population promotes adequate governance in their municipality through respecting the authority of the government (G35), paying of taxes (G29), caring for public spaces (G32) and participating in municipal decisions (G43). On the other hand, state governance measures the municipal government's ability to act in the service of the majority of the population (G28), promote education (G34), work (G30) and culture (G31), as well as its capacity to resolve conflicts (G39), generate agreements (G38) and distribute social benefits (G37, G40). What we see here is that, overall, participants evaluate citizen participation in local governance more positively than the performance of the local government.

Once again, in Atlixco people identify the government as the main actor behind low levels of governance. According to the sample, the weakest aspect of state governance, is its inability to fulfil its promises since they consider that it generally does not accomplish the plan proposed at the beginning of its administration (G37). Furthermore, although the population does not contribute sufficiently to strengthening the dimension governance in the municipality, the participants indicated that in Atlixco, the population is in a process where the government's authority is still respected, people perceive that taxes are generally paid, and they feel they can participate in the decision-making processes of the municipality.

4.2.2. Municipal seat versus localities

The previous examination of the common good dynamics shows a municipality in which collective life and social practices are in a worrisome situation of deterioration, despite the modest social achievements in other dimensions pre-COVID-19 (e.g. health, education, etc.) reported above (Table 1). The latter may be partially explained by high levels of mobility between localities and the municipal seat, and between the municipal seat and the city of Puebla or other national and international places. Still, due to the sociodemographic discrepancies between the

municipal seat and the rest of the localities, one should be wary of these aggregate results. As mentioned above, whereas the population of the municipal seat is around 93,000, the second largest population in a municipality's locality is of around 7,000 (San Jéronimo Coyula)[3].

In this sample, the two groups differ in sex proportions, education level and the presence of indigenous language (Table A2)[4]. The group of localities has a larger proportion of women (59.4%) compared to men (40.6%), while the municipal seat has a more balanced distribution. In terms of education, a greater proportion of the sample in the municipal seat has a high school degree (25.3%) or graduate degree or more (15.4%), compared to the surrounding localities (with 10.9% and 15.22% respectively). Similarly, 7.4% of participants in the municipal seat and 24.6% in the surrounding localities reported speaking an indigenous language themselves or one of their parents. Therefore, in conjunction with their disparity in population size, one could expect social dynamics to differ between localities and the municipal seat. In this section, we present this analysis.

An overview of the differences between the localities and the municipal seat shows that there are differences in all dimensions. The municipal seat is doing slightly better than the localities in the dimension of justice, but is doing visibly worse in the dimensions of stability, governance, collective agency and humanity (Table 3). According to Pearson's Chi-squared test, apart from the dimension of justice, these differences are significant for the remaining dimensions at 5% confidence level and at 10% for the dimension of stability

Moreover, further analysis in all items composing each of the five dimensions in Table 3 unveil rather interesting findings. Only in eight out of 71 items, the group of surrounding localities and the municipal seat present scores with values that show the same type of social dynamics. In three of those items we measure dominant or stable positive social dynamics in both realities (municipal seat and other localities): social value and access to education (J6, J7) and freedom from humiliation (J16). Yet, it is to be noted that even though the latter item shows a positive social dynamics, a considerable percentage of people report feeling humiliated in their daily activities (18.1% of participants in the municipal seat and 10.3% of participants in the rest of the localities), or is undecided (13.8% and 20.8% respectively neither agree nor disagree with the statement). This means that at least 31.9% of the population in the municipal seat and 31.1% in the localities do not feel free from humiliation and we believe this should also be of concern. Similarly, both areas report SDs in transition or vulnerable (negative) in the remaining five items for which values are in the same bracket of SD. These are related to the government's capacity to equalize opportunities (G34, A41), keeping

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[3] The population of the rest of the localities ranges from 5900 (Metepec) to 940 (San Jéronimo Caleras)

[4] As mentioned, our sample is representative at the municipal level and thus the findings at the level of localities are a case study.

promises of government plan (G37) and listen to people's voice (A42), and in police treatment (S18).

From the remaining 63 items, only in eight the municipal seat outperforms the group of localities, most of which are in the dimension of justice (although, as mentioned above, the dimension of justice shows non-significant differences in the means of the two groups) and only five have a difference of two points or more (see Table 4). Those indicators are related to migration (J12), the perceived benefits of municipal programs (J13, S24), as well as the distribution of power among social groups (J14, J15).

TABLE 3 – *Social dynamics by dimension [using the scale 1 to 10]*
Municipal seat versus localities

Dimension	Municipal seat	Localities	Pearson Chi-squared (χ2) SD p-value
Justice	6.10	5.89	8.133
			2
			0.321
Stability	6.77	7.53	11.143
			2
			0.084
Governance	4.24	5.94	11.905
			2
			0.036
Agency	6.31	8.84	22.000
			2
			0.001
Humanity	6.54	8.98	24.300
			2
			0.000

Source: Authors' calculations using the common good dynamic's instrument.

A brief review of the historical relationship between the municipal seat and the localities in Atlixco above provides possible grounds for these results. The review suggested that migration and poverty are higher for the surrounding localities, connectivity is lower and the availability of employment poorer with respect to that of the municipal seat. Therefore, it is natural that the population in the localities might perceive a higher need to migrate to Atlixco (municipal seat), Puebla, and

the United States looking for better sources of income and employment. In addition, according to the people living in the localities, the benefits of the municipal programs are less likely to reach the majority of the population (J13) or bring benefits in the long term (S24).

TABLE 4 – *Indicators where localities have the highest negative difference with the municipal seat*

Dimension	Indicator	Municipal seat (Ms)	Localities (L)	Difference (L - Ms)
Justice	J12	6	3	-3
Justice	J13	6	4	-2
Justice	J14	4	2	-2
Justice	J15	4	2	-2
Stability	S24	6	3	-3

Source: Authors' calculations using the common good dynamic's instrument.

However, in most indicators (55), the localities report better levels of common good dynamics compared to the municipal seat, hence their better aggregate value in the remaining dimensions.

As we can see from Figure A3 (Appendix), all remaining dimensions show a clear superiority of the SDs of localities outside the municipal seat. For this group of localities (bars in light gray in Figure A3), the aggregate values of these dimensions fall within stable SD for humanity (8.98) and collective agency (8.84), vulnerable/in transition (positive) SD for stability (7.53), and a SD of mild anomy for governance (5.94). Accordingly, we see that half of the items for the dimension of stability, and the large majority of items for collective agency (9/11) and humanity (14/17) report dominant and stable social dynamics. Interestingly, these items refer to people's practices. For instance, in stability, these are related to people's respect for the rule of law (S17), the dignity they feel regarding their jobs (S19) and their culture (S21), and their stable practices of collective agency (S26, S27). Whereas most items in the dimension of collective agency report positive scores, the two items showing lower values are related to legal obstacles (A48; in transition (negative) SD) and cooperating with government (A54; vulnerable (positive) SD). In the case of humanity, we see a similar pattern of positive scores, with only three relatively low scores referring to people's honesty (H60; in transition (positive) SD), fear of insecurity (H61; mild anomy), and resolving conflicts pacifically (H62; vulnerable (positive) SD).

These results suggest that, for our sample, people's perception about their collective life and social practices is better in localities outside the municipal seat. Therefore, it is not surprising that the five indicators, in which these localities show greater differences with the municipal seat, are associated to community cohesion and cooperation in different spheres. In these items, the group of localities

perform four or five points above the municipal seat. These include caring for the public spaces in their localities (G32) and their capacity to organize to solve a common problem (A47), to achieve a common objective (A49) and to obtain support from other institutions (A50) (see Table 5).

TABLE 5 – *Indicators where localities have the highest positive difference with the municipal seat*

Dimension	Indicator	Municipal seat (Ms)	Localities (L)	Difference (L - Ms)
Governance	G32	3	8	5
Agency	A47	6	10	4
Agency	A49	6	10	4
Agency	A50	5	9	4
Humanity	H67	5	9	4

Source: Authors' calculations using the common good dynamic's instrument.

4.3. *Basic common goods*

In this section, we take a deeper look to our results to explore the situation of basic common goods as a separate unit of analysis. We first provide a general overview regarding their collective status to then explore the differences between the municipal seat and the rest of the localities in this respect. The metric measures five basic common goods (BCG) in the municipality: rule of law, work, education, culture and solidarity. Following the theoretical framework behind this metric, these represent a minimal set of common goods that are basic for procuring and sustaining a shared collective human life. As such, the list of basic common goods we adopt is not exhaustive, but it includes goods that are ''considered as a minimal threshold of humanity'' (Nebel and Arbesu-Verduzco, in this issue). The collective status of these five BCG are assessed in terms of justice, stability, and governance. That is, we measure for each BCG if they exist, are collectively valued, preserved and fairly distributed across the population (Table A3 in the Appendix shows the items for each BCG). This analysis thus provides another take on how a society is doing in institutionalizing a minimally human coexistence.

4.3.1. Basic common goods in the municipality

Taking the municipality as a whole, we can see that the situation of BCGs is in an alarming state as all of these, with the exception of education, are within the limits of mild to severe anomy (Table 6). The BCG with the highest mean is education, although it shows a positive but vulnerable/in transition (positive) SD (7.27). Education as a basic common good captures the extent to which people in

the municipality value education not only as an individual right, but as a good that is worth caring for and pursue its achievement as a collective and for the benefit of the society as a whole. In Atlixco, people perceive that everybody has the possibility to study (J6) and that education is a valued social good in the municipality (J7) (see Figure A4 in Appendix). Yet, they perceive that the government does not make enough efforts to encourage everybody to finish their high school education (G34). These perceptions are supported by official data on education (MDP, 2018). Indeed, 6% of the population of Atlixco older than 15 years of age is illiterate and, although the average years of education in the municipality (8.60) is slightly above the state's average (8.49), it is smaller than those of other municipalities including San Andrés Cholula (11.25) and the city of Puebla (10.73). Similarly, access to education is unequal within the municipality, since 65.3% of schools are located in the municipal seat.

TABLE 6 – *Basic common goods*

	Geometric mean
Rule of Law	4.70
Work	5.90
Education	7.27
Culture	6.60
Solidarity	6.48

Source: Authors' calculations using the common good dynamic's instrument.

In contrast, the BCG with the lowest mean is rule of law, with four questions out of six in a negative social dynamic (Figure A4 in Appendix). Rule of law captures the degree to which government institutions and the law fulfill their role in procuring security, public welfare and transparency in the municipality. Particularly, it captures the way the government enacts these through their daily actions such as the conduct of public officials and public administration. In Atlixco, the most disrupted aspects of the dynamics of rule of law are the capacity of the police to protect citizens (J2) and the possibility to corrupt government officials (J3).

Work, culture and solidarity are in a social dynamic of anomy (Table 6). This means that in Atlixco, the dynamics of work, culture and solidarity are in an unstable state. That is, people are in a state in which people is unsure about the collective value of these goods and about the socially accepted standards or norms regarding these. The strongest aspects of these BCGs lie in culture and solidarity with a stable SD (J8, S21, J11, Figure A4 in Appendix). These capture the pride (S21) and respect (J8) that people have for their culture and traditions, as well as the sense that people can find institutions in the municipality that offer support when needed (J11).

From this review, it becomes visible that the social goods with the worst beha-

vior are those associated with government actions or inactions. For instance, the item that ranks lowest is the perception of the population that public officials can engage in illicit actions or corruption (J3). Similarly, people perceive that the government's efforts to improve working conditions (G30), promote education until high school (G34), keep and create public spaces (G31), generate the conditions for solidarity among citizens (G33), and make people feel protected (J2) are in a negative social dynamic.

4.3.2. Differences in Basic Common Goods within the municipality

Once more, in aggregate terms, localities outperform the values of the municipal seat practically in all dimensions but education (Table 7). Aside from education, which is in a state of vulnerable/in transition (positive) SD in both areas, in the municipal seat up to three BCGs are in mild anomy SD (work, culture, solidarity) and rule of law in deep anomy/in transition (negative) SD (4.70). In contrast, localities have two BCGs in vulnerable SD (culture and solidarity), two in vulnerable/in transition (positive) (work and education), and the worst-performing in deep/mild anomy (rule of law)[5].

TABLE 7 – *Geometric means of BCGs by location*

Basic common goods	Municipal seat	Localities
Rule of law	4.7	5.38
Work	6.07	7.66
Education	7.27	7.52
Culture	6.02	8.38
Solidarity	5.83	7.9

Source: Authors' calculations using the common good dynamic's instrument.

Looking more closely, we can identify where the differences lie. For instance, in Figure A5 (Appendix) we can observe that in five out of 25 indicators, both locations are within a positive SD (dominant, stable, vulnerable (positive)) with a maximum of only one point of difference between the two. Both locations expressed respecting detainees' rights (S17), valuating and having the opportunity to study (J6, J7), feeling proud and respect their cultural traditions (S21, J8), and finding support in public institutions when needed (J11).

Yet, localities outperform for two points or more the SDs of the municipal seat

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[5] These differences, however, are not statistically significant following a Pearson's Chi-squared test. These results could be due to the small number of observations for each BCG.

in 9 indicators. Three of these are in the BCG of work, with two in a dominant SD (value of work and obtaining pride from their work; J4, S19)). Three in the BCG of culture, with one in a stable SD (inclusiveness of culture, measuring its stability; J9) and one in a vulnerable (positive) SD (people's care for public spaces). Three in BCG of solidarity, with one in stable SD (organizing to help others; J10) and one in vulnerable SD (institutions treat people with respect; S23)[6]. In contrast, only in two indicators the municipal seat reports higher SDs and none of these has a difference of more than one in comparison to SDs in localities.

In line with the overall comparison between the municipal seat and the group of surrounding localities, this exploratory analysis continues to suggest that the latter group has a better collective performance in these BCGs[7]. That is, we can say that these localities have a greater appreciation of these aspects as BCGs and this is supported by their common valuation of these goods and their social practices. However, the fact that this metric depicts a better common good dynamic of localities in comparison to the municipal seat in both globally and in BCGs, does not indicate that life is better in those localities. First, common good dynamics in localities are also deterioration. Second, localities outside the municipal seat fare worst in the provision of social services (MDP, 2018; Huerta, 2016). These unequal opportunities are in part reflected in the mild anomy/in transition (positive) SD in the dimensions of governance and justice. Possible explanations for these positive results of community life within these localities may be related to the size of their populations, or to a less demanding population or lower levels of perceived inequalities within these in comparison to people in the municipal seat, or to a more absent government, which force people to look after themselves. Although our survey does not allow us to be sure about any of these explanations, the fact that the distributions of socioeconomic levels and the proportion of highly educated people (undergraduate studies or more) in both areas are similar, might discard explanations regarding differences in the characteristics of the population.

Still, what our results suggest is that there is a notable difference between these localities and the municipal seat regarding social and political life in community. To the extent that these results are illuminating, they suggest a difficult reality for the population of the municipality as a whole. It shows that Atlixco is a municipality that offers an unfortunate choice between better opportunities for human development (municipal seat) and better social ties and community coexistence (periph-

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[6] Note, the remaining three items in which localities score at least two points above the municipal seat, not mentioned in the text, are all in a mild anomy SD in localities and worse in municipal seat. These are government efforts to improve work conditions (G30), to promote public spaces (G31), to promote solidarity (G32).

[7] We conducted a similar exercise to assess differences between three different regions based on ease of communication with the municipal seat. The three regions: Municipal seat, neighbouring localities (Metepec, La Magdalena Axocopan, San Diego Acapulco, La Trinidad Tepango), the rest of localities farther away from the municipal seat. Results maintained. While there are no visible differences between localities outside the municipal seat, both groups perform better than the municipal seat.

eral localities). By illuminating these tensions, we believe that a common good approach to development provides necessary information to align these two valuable goals.

5. FINAL REFLECTIONS AND CONCLUDING REMARKS

There is growing recognition that territorialities, culture, and social interactions are non-negligible factors in understanding people's realities. This article aimed at assessing collective life in the municipality of Atlixco in the light of the common good metric designed by the IPBC team. Through this exercise and the use of this new metric, we wish to reveal a novel take on the local life of the municipality that go beyond, and thus, can complement existing data on individual-based indicators.

Given the historical cyclical periods of prosperity and stagnation in Atlixco reported in the literature, our results are indicative that these have had a toll in the common good dynamics of the municipality today. Using cross-sectional data about the common good of Atlixco, this article shows that this is a municipality that is fragilely supported by some social practices of solidarity and community in the population (i.e. humanity), as well as by their interest to organize and coordinate actions in search of a common objective (i.e. collective agency freedom). However, potentially, these practices cannot be sustained over time due to the low levels of stability and the unequal distribution of justice among its inhabitants (i.e. justice). The most fragile dimension is, nevertheless, governance. Following our data, the inhabitants of Atlixco perceive that the government does not work for the benefit of the population as a whole.

In addition to this broad view, the persistent inequalities between the municipal seat and the localities in terms of access to employment, commerce and public services are reflected in the contrasting common good dynamics of these areas. Participants in the surrounding localities assess worse the levels of justice in terms of access to the benefits from government programs and the need to migrate in search for better opportunities. In turn, an interesting finding is that the surrounding localities fair better in all other collective dimensions compared to the municipal seat, especially in the dimensions and indicators relating to the social practices of cohesion, cooperation and participation, as well as the humanity and dignity of social interactions.

For a municipal plan oriented towards the promotion of the common good, as the current government of Atlixco declares to be, these findings serve the purpose of both offering a diagnostic of current social dynamics in the municipality and offering a benchmark to guide social policies in this direction. By assessing the common good dynamics in Atlixco in five dimensions, this study contributes to pointing out those areas that policy makers must attend in order to promote a more human development. For a notion of development for the common good requires the alignment of institutions, collective values and social practices, towards a shared goal.

Therefore, a first policy recommendation would be to attend the huge social inequalities within the municipal seat itself and between the latter and surrounding localities in order to create the conditions for a shared reality. Second, since the dimension of governance presents the worst social dynamics, the municipal government must concentrate on regaining people's trust in order to govern more successfully. Specifically, the results of this study suggest that the municipal government must urgently invest in three areas. First, in reducing the levels of corruption of public officials and increasing the population's trust on the police. Second, implement programs that increase access to employment and reduce levels of insecurity. Third, communicate more successfully the degree of achievement of the official plans proposed at the start of each administration and how widely distributed are the benefits of those achievements across the population and across time.

The common good is an ever-expanding horizon that we can only achieve collectively. The common good approach and metric used in this study might be a first step to understand this complex reality more deeply. By shedding light to people's social reality, we hope that this study contributes to understanding Atlixco's social life and indicates some ways forward to improving the development of the municipality as a whole and of each of its inhabitants.

A P P E N D I X

TABLES

TABLE A1 – *Socioeconomic characteristics of the sample*

Categories	Sample		Municipality (official data)	
	Number	Percentage	Number	Percentage
Male	213	47.0%	63723	47.3%
Female	237	53.0%	70997	52.7%
Yes	57	13.0%	6,248	4.6%
No	393	87.0%	128,116	95.4%
Municipal seat (Atlixco)	312	69.3%	86,690	69.3%
San Pedro Benito Juárez	15	3.3%	4,340	3.5%
Santo Domingo Atoyatempan	5	1.1%	1,400	1.1%
San Jerónimo Coyula	24	5.3%	6,622	5.3%
La Trinidad Tepango	14	3.1%	3,800	3.0%
La Magdalena Axocopan	15	3.3%	4,200	3.4%
San Miguel Ayala	16	3.6%	4,500	3.6%
San Jerónimo Caleras	3	0.7%	706	0.6%
San Diego Acapulco	5	1.1%	1,350	1.1%
Santa Lucia Cosamaloapan	6	1.3%	1,595	1.3%
Metepec	20	4.4%	5,600	4.5%
Santa Cruz Tehuixpango	12	2.7%	3,394	2.7%
San Juan Ocotepec	3	0.7%	825	0.7%
Up to secondary school	255	56.7%	86,665	64.5%
High school	95	21.1%	24,320	18.1%
University degree or more	100	22.2%	23,245	17.3%
A/B	10	2.2%		
C+	29	6.4%		
C	77	17.1%		
C-	118	26.2%		
D+	105	23.3%		
D	104	23.1%		
E	7	1.6%		

Source: The sample data was constructed based on the authors' calculations using the common good dynamic's instrument. The municipal data was obtained and calculated based on the official indicators of the National Institute of Statistics and Geography (INEGI) for 2015.

TABLE A2 – *Sociodemographic characteristics. Localities and Municipal seat*

Indicator	Categories	Localities (Number)	Localities (Percentage)	Municipal seat (Number)	Municipal seat (Percentage)
Sex	Men	56	40.6%	157	50.3%
	Women	82	59.4%	155	49.7%
Education Level	Secondary School (or less)	102	73.9%	185	59.3%
	High School degree or technical career	15	10.9%	79	25.3%
	Graduate degree (or more)	21	15.2%	48	15.4%
Indigenous Language	Yes	34	24.6%	23	7.4%
	No	104	75.4%	289	92.6%
Socioeconomic Level	A/B	2	1.4%	8	2.6%
	C+	3	2.2%	26	8.3%
	C	25	18.1%	52	16.7%
	C-	40	29.0%	78	25.0%
	D+	28	20.3%	77	24.7%
	D	38	27.5%	66	21.2%
	E	2	1.4%	5	1.6%
Locality	San Pedro Benito Juárez	15	10.9%	0	0.0%
	Santo Domingo Atoyatempan	5	3.6%	0	0.0%
	San Jerónimo Coyula	24	17.4%	0	0.0%
	La Trinidad Tepango	14	10.1%	0	0.0%
	La Magdalena Ayocopan	15	10.9%	0	0.0%
	San Miguel Ayala	16	11.6%	0	0.0%
	San Jerónimo Caleras	3	2.2%	0	0.0%
	San Diego Acapulco	5	3.6%	0	0.0%
	Santa Lucia Cosamaloapan	6	4.3%	0	0.0%
	Metepec	20	14.5%	0	0.0%
	Santa Cruz Tehuixpango	12	8.7%	0	0.0%
	San Juan Ocotepec	3	2.2%	0	0.0%
	Cabecera Municipal	0	0.0%	312	100.0%
	Total	138	100.0%	312	100.0%

Source: Authors' calculations using the common good dynamic's instrument.

TABLE A3 – *Basic common goods (BCGs). Questions*

Basic common goods	Code	Question
Rule of Law	J1	In my locality, the rights of each person are respected.
	J2	In my locality, the police serve to protect me.
	J3	In my locality, public officials can be corrupted.
	S17	In my locality when a thief is caught we hand it over to the police.
	S18	In my locality when someone is arrested, the police treats him/her with respect.
	G28	I consider that in this locality the municipal administration is at the service of the majority.
Work	J4	In my locality, work is valued.
	J5	In my locality, most have work.
	S19	I am proud to talk about my work with others.
	G29	In the locality, most people pay taxes.
	G30	The government strives for workers to have better working conditions.
Education	J6	In my community it is important that everyone has the possibility to study.
	J7	In my locality, anyone can study if they choose.
	S20	It is important to attend school to participate in the locality's social life.
	G34	In my locality, the government makes an effort for everyone to finish high school.
Culture	J8	The cultural traditions of my locality are respected by the majority.
	J9	In my locality, the sayings are understood by the majority.
	S21	I feel proud of the culture in my community.
	S22	The younger generations participate in the traditions, customs and festivities of my locality.
	G31	The government of my locality actively promotes the maintenance and creation of public spaces such as parks, squares and streets.
	G32	In my locality, most people take care of public spaces such as parks, squares and streets.
Solidarity	J10	In my community, if someone has a hard time we organize to help.
	J11	In my locality, there are places where people can go to get help (DIF, Red Cross, Church, etc.).
	S23	When a family member or I seek help in a local institution, we are treated with respect.
	G33	The government creates the necessary conditions for an effective solidarity amongst the citizens in my locality

Source: Common good dynamic's instrument.

FIGURES

FIGURE A1 – *Education and Socioeconomic level*
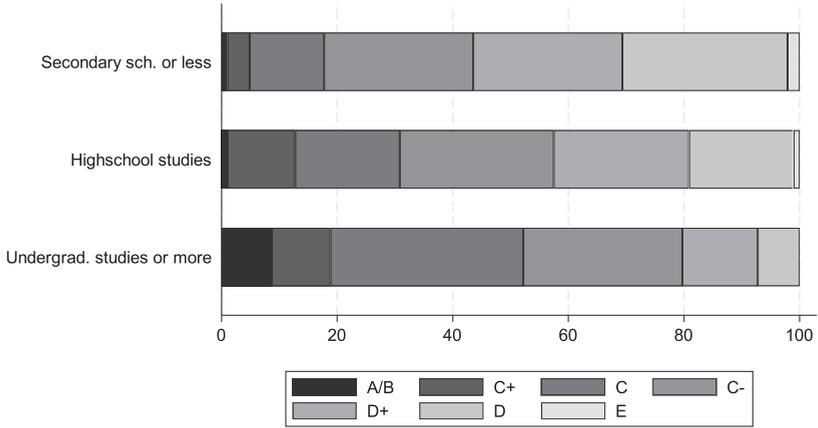
Source: Authors' calculations using the common good dynamic's instrument.

FIGURE A2 – *The common good dynamics in Atlixco*
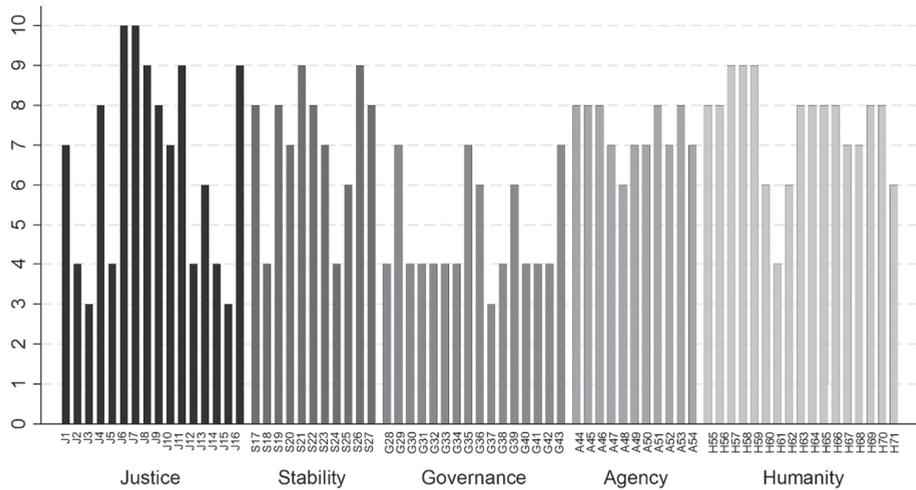
Source: Authors' calculations using the common good dynamic's instrument.

FIGURE A3 – *Common good dimensions. Municipal seat versus localities*
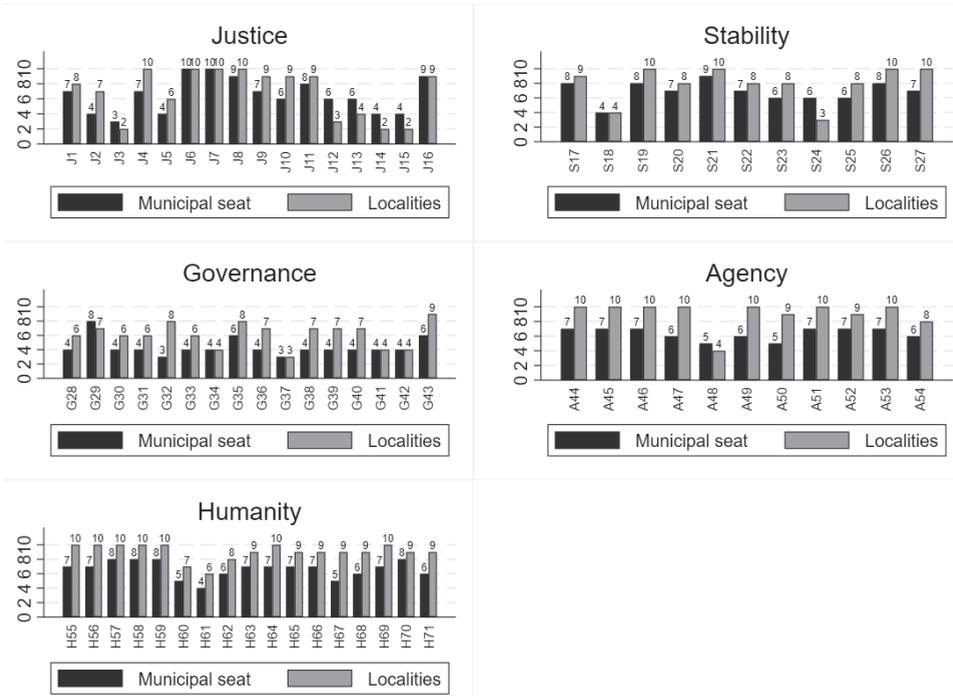
Source: Authors' calculations using the common good dynamic's instrument.

FIGURE A4 – *Basic common goods (by item)*
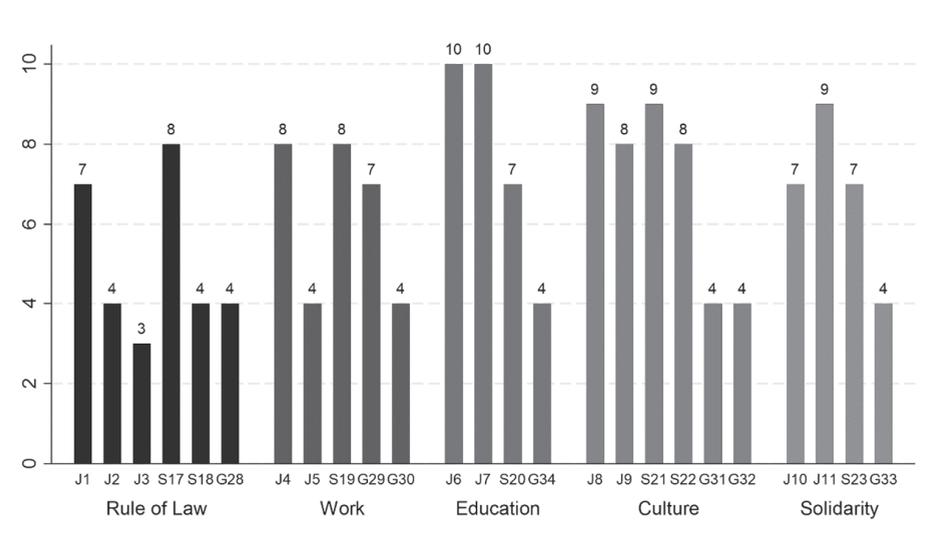
Source: Authors' calculations using the common good dynamic's instrument.

FIGURE A5 – *Basic Common Goods (BCGs) by location*
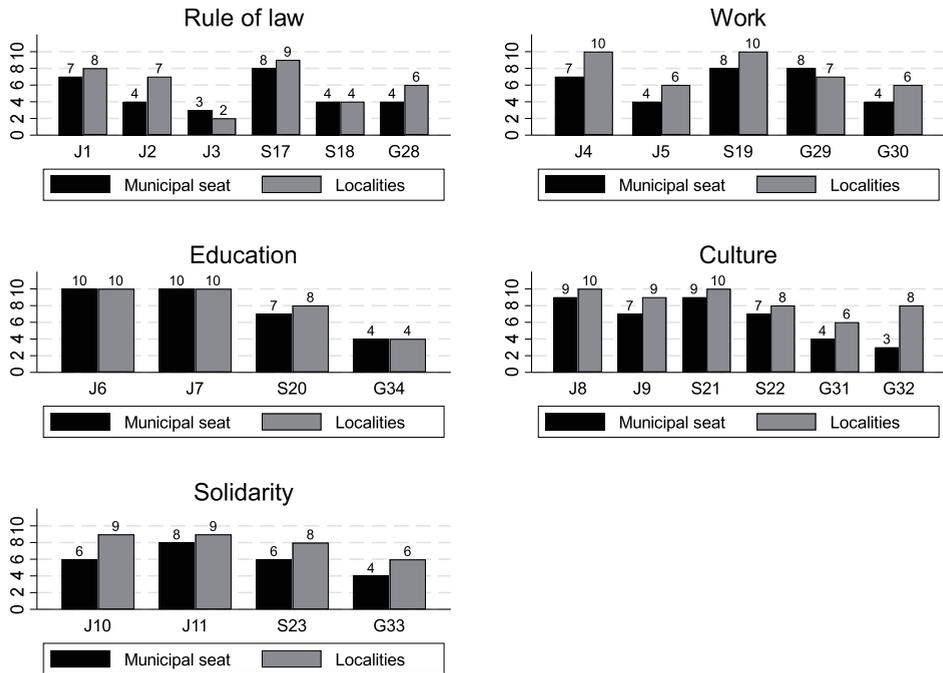
Source: Authors' calculations using the common good dynamic's instrument.

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