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AND
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Sustainable Development in Región Media through the “Zona Media Extension and Investigation Center” of the Autonomous University of San Luis Potosí

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Arender a ser el invitado de los demás y a dejar la casa a la que uno ha sido invitado un poco más rica, más humana, más justa, más bella de lo que uno la encontró.

Creo que esa es nuestra misión, nuestra tarea.

Learning to be the guest of others and to leave the house to which one has been invited a little wealthier, more human, more just, more beautiful than one found it.

I think that is our mission, our task.

-Jorge Riechmann

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1 Abstract

The present thesis analyzes and studies the existing risks and opportunities for regional development and sustainability in Región Media, located in the Mexican state of San Luis Potosí; and the tools and capabilities of the Autonomous University of San Luis Potosí in Mexico; on the same subject.

The main objective is the creation of a linking model for regional development and sustainability taking in consideration the mentioned analysis for a linkage proposal between the region and the university, through the university's "Zona Media Extension and Investigation Center", while emphasizing the chance for the active participation of the inhabitants in the proposed activities and while contributing to the United Nations Sustainable Development Goals, that are also implemented as a guide for the linking model's foreseen targets.

The linking model provides a methodological and conceptual proposal for an active collaboration between the region and the university; this, based on the field research in which interviews and work with focus groups were carried out to understand the needs of the region through the people's concerns and understandings towards development. Interviews with university actors on the same topic were also held to integrate both perceptions in the analysis and final proposal.

With simultaneous participation and contribution according to capabilities and tools available, which are extensive, this thesis proposes a first contemporary approach for regional development and sustainability in Región Media, focusing in the found key social and environmental issues and in the opportunity to reflect towards the creation of an endogenous development comprehension.

Key words: University Region Development Collaboration SDG's

2 Resumen

La presente tesis analiza y estudia los riesgos y oportunidades existentes para el desarrollo regional y la sostenibilidad en la Región Media, ubicada en el estado mexicano de San Luis Potosí; y las herramientas y capacidades de la Universidad Autónoma de San Luis Potosí en México; sobre el mismo tema.

El objetivo principal es crear un modelo de vinculación para el desarrollo regional y la sostenibilidad teniendo en cuenta el análisis mencionado para el desarrollo de una propuesta de que vincule a la región y a la universidad, a través del "Centro de Investigación y de Extensión Zona Media" de la universidad, enfatizando la posibilidad de participación activa de los habitantes en las actividades propuestas y contribuyendo a los Objetivos del Desarrollo Sostenible de las Naciones Unidas, que también se implementan como una guía para los propósitos previstos del modelo de vinculación.

El modelo de vinculación proporciona una propuesta metodológica y conceptual para una colaboración activa entre la región y la universidad; esto, basado en la investigación de campo en la que se llevaron a cabo entrevistas y trabajo con grupos focales para comprender las necesidades de la región a través de la impresión y entendimiento que tienen las personas sobre el desarrollo. También se realizaron entrevistas con actores universitarios sobre el mismo tema para integrar ambas percepciones en el análisis y la propuesta final.

Con la participación y la contribución simultánea, de acuerdo a las capacidades y herramientas disponibles, las cuales son extensas, esta tesis propone un primer enfoque contemporáneo para el desarrollo regional y la sostenibilidad en Región Media, enfocándose en las cuestiones sociales y ambientales clave que fueron encontradas, y en la oportunidad de reflexionar hacia la creación de una comprensión endógena del desarrollo.

Palabras clave: Universidad Región Desarrollo Colaboración Objetivos del Desarrollo Sustentable

3 Introduction

To write, devise, imagine, reason and model a proposal for the sustainable development of the link between an academic entity and a population sector, it is necessary to think and reflect on what sustainability means, analyze how this concept is recognized through history and in the present, in theory, in the academy itself and among the population itself. Sustainability has become an important worldwide task; a constant desire that has encouraged humanity to reflect on the present to live better in the future.

The elements that integrate sustainability are diverse, mixed, complex, simultaneous, near and far, they grow every time; it is complicated to cover this panorama when only analytical and linear skills are available. Latin American history and context, in the past and in the present, are composed of obtuse, enigmatic, surrealist and polychromatic elements that are far to be understood from a linear approach, for that reason, to march towards sustainability in this territoriality, there must be an exclusive understanding and approach, that fits the territory and its society, that can make them feel identified and therefore, committed to.

Even though an effort has been made to standardize and uniform the social reality of Latin America, of Mexico, specifically, the elements of Mesoamerican cosmovision still float, defend themselves, endure, prolong themselves, even when they are avoided and ignored, these elements still pervade in this social reality, mixed with the constant apparition of the longing modernity. These ignored and avoided elements create ways of being, create *modus vivendi*, that when they are observed from a “first world” conception, they can be unusual, because they are far from the prevailing reasoning concerns on human welfare; many times, these prevalent elements, when are not understood and recognized, they can be mistaken with barriers that won't allow to accomplish an expected specific future outcome.

In Región Media we find a diverse and complex manifestation of ways of being and of living, people live in different conditions, from extreme poverty to wealthy lifestyles, in the middle of an environmental richness, that is being destroyed and polluted at

the same time, these are just some major features of the prevalent Región Media picture, that along the next chapters will be specified.

Our linking model proposal has been carried out through a clear intention: to ask the people of Región Media what they consider that is needed to improve their social and environmental situation; but also, to ask the UASLP about its capabilities around sustainability. Then, we found that both entities have the necessary resources to support each other to achieve through time, the same goals, but they just need to be advised and identified with their possibilities of contribution, but most significant, with commitment.

Thanks to this intention, the answers were naturally found and located with which a model was constructed to trace a path that links Región Media and the UASLP in a common walk towards sustainability; however, this model is a proposal, perhaps a first and subtle approach to this task. Due to our understanding of the scope of sustainability, it is not a straight path, nor a linear path, it is not a secure floor for a secure confined future, but it is a proposal that, as the Colombian philosopher Patricia Noguera states: in which *environmental* is recognized as an emerging enigma of the world, and as an open enigma to the possibilities of being deconstructed and re-interpreted. Therefore, it is suggested that this model should be identified as one more tool, of the many that exist; our contribution is to create this model that can be used for the construction of a shared responsibility between UASLP actors and Región Media people.

The scope of this thesis was mainly delimited by the time, that was just a certain range and by the materials and tools of the UASLP, especially its annual reports, for the construction of the model of linkage, besides the interviews, focus groups and visits to the conurbation zone of Región Media. The proposed linking model contains an approximation to the multiple tools and capacities that the UASLP has in terms of Regional Sustainable Development, the exposed tools were searched and selected guided by the present social and environmental key issues of the region in a counterpart exercise. Nevertheless, UASLP has a visible potential to develop and endure more tools and capacities directed to community participation and support

for endogenous and capacities development, that nowadays are crucial for the resolution of Regional Sustainable Development.

3.1 Objectives

This thesis objective is to construct a link between the Autonomous University of San Luis Potosí and Región Media, in which through a portfolio of projects, plans and strategies, the UASLP can be able to contribute to the regional sustainable development of Región Media through the “Zona Media Extension and Investigation Center” (CINVEXT), that is located in the ejido “el Refugio” in the municipality of Ciudad Fernández in San Luis Potosí.

In order to reach the thesis purpose, the objectives, that will conform the portfolio were formulated through the identification of the next features:

- a) Región Media’s opportunities and vulnerabilities.
- b) Capacities of the UASLP as a skilled entity with experience in the educational and research field.
- c) United Nations’ Sustainable Development Goals (SDG’s) as a guide for sustainable development.

Description:

- a) Región Media’s opportunities and vulnerabilities have been identified by literature revision, direct observation in the conurbation zone, interviews and focus groups.

Some of the major vulnerabilities in Región Media are multidimensional poverty and migration¹, this based in INEGI and CONEVAL reports; but some of its major opportunities are agriculture, communication channels, institutions and workforce.

- b) UALSPP capacities developed from its commitment to be an institution devoted to the training of professionals, research and the extension of knowledge and culture.

¹ Consult “Región Media Portrayal” chapter.

CINVEXT as an investigation center, is committed to contribute to solve the most important problems that the state faces while supporting the individual and collective development of society in which bridges are created between the institution, the government sector, private sector, non-governmental organizations and societies in general, where the university has an intervention capacity to promote the solutions of social problems.

- c) United Nations' Sustainable Development Goals "are a universal call to action to end poverty, protect the planet and ensure, that all people enjoy peace and prosperity" (UNDP, 2018), they are 17 goals, from which we take 5² as a guide to support the core of the action strategies and plans, and 5³ more as the consequences we envisage, to come after as part of the region's transformation thanks to the link formation and implementation.

For this reason, the action plan strategies are built on the 5 mentioned goals, because we distinguish those as the ones who have the potential to reflect RM's reality.

In other hand, we enhance this investigation through our choice to contribute to the world's welfare, therefore, SDG's are the guide we follow to support regional sustainable development in RM, the world's development and climate change action as well.

² These are: (2) Zero Hunger, (4) Quality Education, (5) Gender Quality, (12) Responsible consumption and production, (15) Life on land.

³ These are: (1) No poverty, (6) Clean water and sanitation, (9) Industry innovation and infrastructure, (11) Sustainable cities and communities, (16) Peace, justice, strong institutions.



Diagram 1 Región Media's risks and opportunities can be transformed through the support of UASLP while contributing to the UN's Sustainable Development Goals. Source: Own creation based on UN website.

It is important to mention that, we recognize the futility of reality, for that reason, the portfolio that is our objective and the result of this thesis, stand as a proposal of suggestions that is open to the possibility to be changed or modified according with the regions' factuality, which is constantly and interdependently changing.

4 Theories of development: Does the ideal development theory suits for everyone?

Development has become a worldwide ideal that leads many political and social intentions, which take the form of projects, policies, speeches, plans and even the *modus vivendi* of whole communities, regions and countries. In present days such term is the emblem in which, the goals of a globalized world are typified; example of this, is the United Nations organization, that for decades has been working driving debates and dialogues among countries to pronounce and carry out their development (UN, 2015).

Nonetheless, to reflect about what development is and what it means today, is important to take in consideration the history and the diversity of implications that this concept has comprehend during different periods of time.

After the sixties, a group of scientists came out with resolutions for the recent foreseen environmental problems, but most of these were based only in technical and scientific knowledge as well as in a juridical and in an economic prospective, that could protect the inversions and revert the consequences of human actions lead by an economic rationality (Leff, 2001, 2004).

Nonetheless, the resolutions proposed became very narrow while confronting the problem: the mechanisms and devices invented to revert the environmental consequences of an industrialized society, had a very high cost and the policies to sanction the polluting industry become another income resource whereby the most contaminants could afford the fines while the small ones could not (Leff, 2001, 2004).

The origin of these attenuated and partial resolutions arose from a basic dilemma: the environmental crisis and problem was new in its type and a segmented resolution was not the way to find a resolute procedure, but rethink the relationships between nature and mankind, and acknowledge the limits of nature.

For this reason, technological and scientific sectors had to open the problem to wider perspectives for solutions, in which social sciences had the chance to get involved

and contribute through ethics, education, philosophy, culture and other ways to approach reality (Morin, 2013).

4.1 The Economy Development theory

Gutiérrez (2007), mentions that the economy development theory emerged after the end of the World War II, as an economy branch. Economists perceived it as a medium and long-term goal transformation for the social structures of the so-called world powers, while Asia's and Africa's colonized countries were looking for emancipation, and Latin America pursuing its economic and political autonomy.

Under the economy's optic, development in a country assumed its economic stabilization through massive production and the accumulation of richness to support people's social wellness. The United States and the western Europe countries figured as the model of this conviction when they were positioned as industrialized nations, meaning that they had the capacity to renounce to the basic and traditional forms of work, i.e. the agrarian *modus vivendi*, because of the use of machines and technology that conformed the basic production infrastructure, helping to raise its economy and living standard (Jenkins, 2000).

Another relevant concept that is substantial to approach the meaning of development conceived during his time, is the "Third World" a name given to the low-economic or economically deprived countries during the same post war period. Sachs (1996), indicates that this concept became significant when the president of the United States at the time, Harry S. Truman, presented it as its own political discourse insignia, in which Third World embodied an undesirable life standard or an unworthy condition of the, after called, least developed countries; therefore, the third world countries' task was to escape of such condition in order to reach development, while following the acquired model of the industrialized countries.

It is important to point out that the main drive for development usually is the perspective that people who live in society needs to surpass determined structural conditions in the area where they reside.

Gutiérrez (2007) list a number of economic trends wherein represents a qualitative change in the significance of economic growth, social equity and ecological conservation.

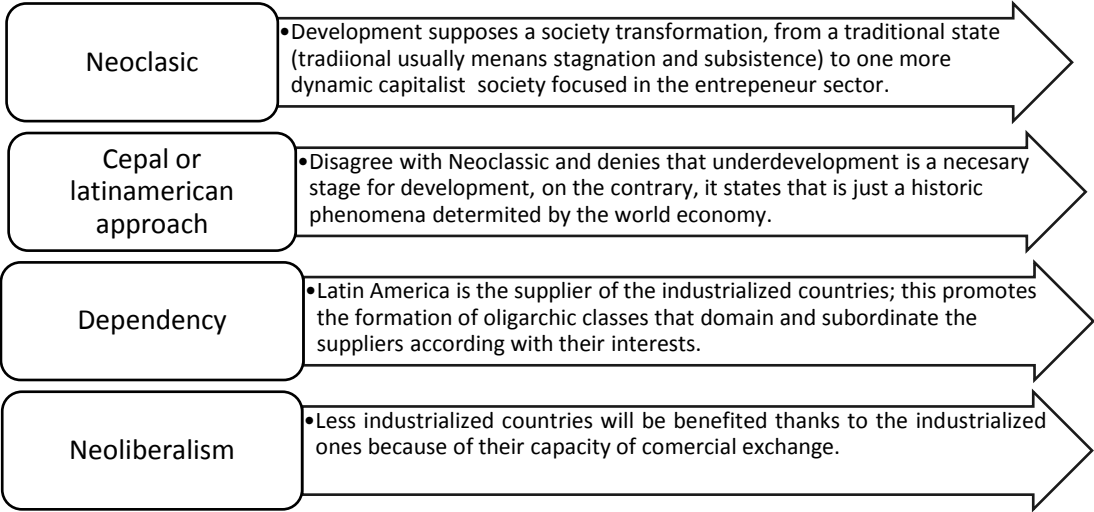


Diagram 2 Economic development trends. Own elaboration based on Gutiérrez 2007.

From here, we can appreciate that development does not rely in just one theory or approach, but depending on the circumstances of the territory, the perspective of development can be lined differently, therefore, there is not a unique path for the economic development of the world.

4.1.1 Sustainable Development Theory

The human concern about the environment has been registered since centuries, mostly presented by the history in a linear form, nonetheless, the concern about the interaction between humans and nature⁴ has evolved and changed in a no-linear correlation through the time that mostly depends on the historical accidents and events that occurred in different regions of the globe (Ángel, 1995).

⁴ The concepts of *Nature* and *Environment* lack of a precise definition due to their polysemic character. For this thesis purposes the first, naturally, will be taken in the sense of Nature as the biosphere, as the ecosystems organized system; while the second is taken in its practical sense, this means it refers to the association between society and nature, a definition stablished in the Founex Inform 1971.

Consequently, the concept and meaning of sustainable development in present times is formed by a number of aspects, however they do not concur all the time, as we will be able to see in the next lines.

In decades of 1960 and 1970, after the diminishing of the World War II and the momentum that the theory of economic development had, another topic emerged, in which a reformulation of the development conception was demanded because of the initiative of some researchers that, during this period, questioned the physical consequences of the scopes of the economic and industrialized development (Brennan, A. & Lo, Y. 2016). This reformulation, also led to question about human beings' relationship with the biosphere, as a result of a series of problems that humankind started to face: the over population of the world and an environmental crisis.

These outcomes were facts that escorted the interest and the attention on the human activity and its interactions with the biosphere and its elements, which implied a change of perspective in the way that nature was morally conceived, e.g. in the western world, it was perceived mainly as *something* that should be managed, used and controlled by the humans, subject of their necessities (White, 1967).

Paradoxically, the countries that focused their attention to these problems and started to pose questions about the development systems and trends, were the same that embraced the economic development.

The United States and western Europe exhibited the first reports from which the environmental crisis became a worldwide issue (Brennan, A. & Lo, Y., 2016), as well, as the first authors that gave voice to the mentioned problems, one of them was Aldo Leopold who was a nature scientist, forester and one of the first environmentalists that during the year of 1949, in the post-war period published "*A Sand County Almanac*", his work influenced the recent need to approach nature from another perspective; his premise "A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise" (Leopold, 2005), influenced the social compulsion for a novel approach towards nature.

Other important and posterior publications that traced the beginning of the environmental rationality, were *The Population Bomb* (1968) from the Stanford University ecologist Paul Ehrlich, in which he stated that the population growth threatened the availability of the vital support systems, therefore it would be urgently needed to limit the population growing (Ehrlich, 1968).

Even though his solicitude was criticized for its alarmist tone, in his writings we can find some of the first statements that gave sustainability its character because he proposed a progression towards a more “settled society” that could indefinitely be “sustained in order to offer an optimum satisfaction to its members while minimally disrupting the ecological process” (Ehrlich, 1968).

In 1972, Dennis Meadows, a leader scientist of the Massachusetts Institute of Technology, delivered the Roma Club, a European organization, report named “*The Limits to Growth*” a first study that talks about the earth’s vulnerability while being contemplated from outer space.

The study intends to achieve a planetary equilibrium through a change of individual, national and world values and goals. The Meadows team put forward a series of policies, economic and ecological action plans to achieve an ecological stability, also referred as sustainability (Meadows et al., 1972). Still, nowadays the text who is also related to gas emissions and the use of resources, have a noticeable influence on the history of development during the twenty and twenty-one centuries.

The formulation of the environmental crisis during the post-war period was mainly approached by biologist and ecologist whose opinion was determined by an eco-centrist perspective; according to them, the origin of the problem was just the population growing against the limited resources present in the world, without pointing out other crucial factors like the differences between develop and underdeveloped countries, their economies, politics, ethics, culture, traditions, cosmovision and education.

The mentioned texts performed an extensive concern in many countries, eliciting more informs as well as world conferences to discuss the state of the world, like the 1972 Stockholm conference during which 119 countries were brought together to

dialogue about the importance of international environmental policy; because of this conference a statement was signed in which a plan and principles on environment and development.

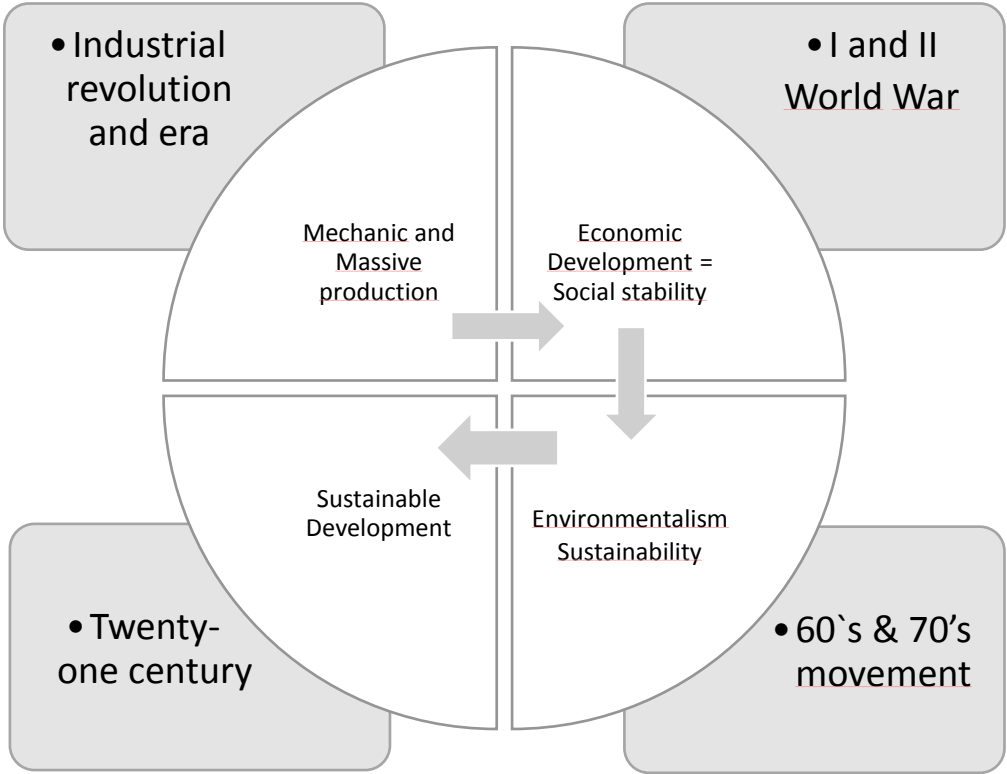


Diagram 3 How sustainable development emerged from the industrial era to the concern for the environment.

Since then sustainable development has been of the interest of important global organizations, such as the United Nations who currently and since past decades emphasizes it as a worldwide goal, in which every country should achieve it by the half of the current century (UN, 2015); nonetheless the UN has been a platform in which the global debates have the chance to position postures between countries to identify the main issues in a country of a region that provokes the environmental depletion, as well as the main opportunities and support that the area contains.

In other hand, it has been vastly discussed and criticized that development predominantly means *economic growth* (Leff, 2001, 2004) we can understand this fact when we look at the history and the background in which this concept came out, when we see the postures of the countries that gave it consistency and that not

necessarily shared the same point of view with other nations, understanding that basically the world was divided in two regions: the global north, representing the developed/rich countries, and the global south where supposedly the least developed countries are located (Leff, 2004).

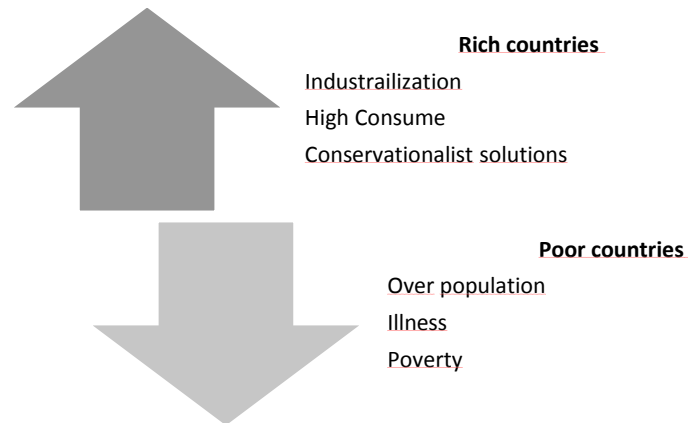


Diagram 4 General perspective of the main rich and poor countries' environmental problems

One of the most common critiques says that this a pure simplistic perspective (Jenkins, 2000), that actually doesn't support and recognize the amazing number of ethnics that exist in the world, as well as idiosyncrasies and even cosmovision that are implicitly related with other forms to approach nature, ethics, politics, gender perspective and education; therefore, a mere basic top-down linear social structure (e.g. rich and poor, north and south) hardly can expand the development of the people who belong or live in a scenario, where the social stability is not necessarily built on an economic growth perspective.

This is notable in the rural zones, when their main activities, traditionally, are based in agriculture and animal husbandry and are in the countryside, where services such as transportation and other connectivity services are scarce, and where governmental decisions are taken on traditional practices, habits and rituals. This type of communities significantly stresses because of the pression to achieve the same urban life standards (Morales, M., Gutiérrez, F. 2009).

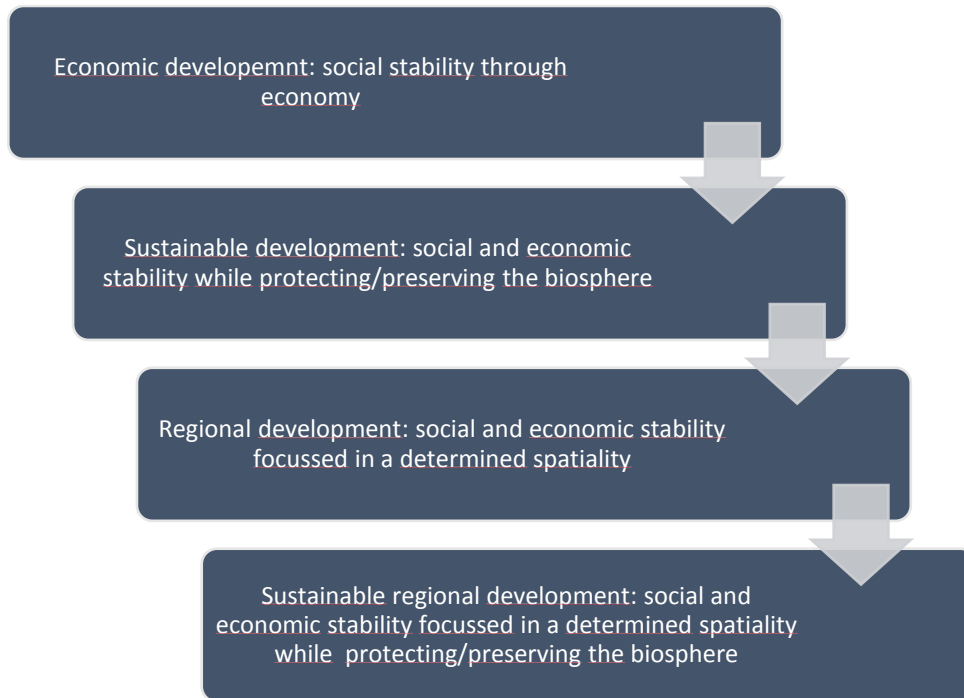


Diagram 5 Process of conceptual evolution to Sustainable Regional Development

Certainly, development is a dynamic and multidimensional concept, in which changes and factors are implicitly referred, those changes are based in the economic, politic, environmental, technological and territorial levels. Therefore, it is linked to different processes such as the power and income distribution, growing production and population, individual and collective choices and opportunities, environmental use and preservation, and territorial organization. (Boisier, 1987).

4.1.2 Capabilities Approach

Contrasting the theory of economy development, which is based on the economic growth of a society to achieve welfare, we expose the capabilities approach theory of development, which holds a focus on people's abilities and skills to achieve a desirable state of life even though; this theory in particular is suggested as valuable for its international transcendence, it has been implemented in diverse countries thanks to its content that seeks to achieve a global understanding and a global perspective, considered for its flexibility, it has been applied in communities, regions and whole nations (Robeyns, 2016).

Amartya Sen, Indian economist-philosopher pioneered the genesis of the capabilities approach, that has driven the economic and the development policies exerted by the United Nations Development Program and the World Bank. Sen states that the development of freedom⁵, is an essential factor for the abatement of current problems confined to the lack of opportunities, social deprivation, poverty, tyranny, violence, repression and intolerance, some of these problems, among others, are akin to RM; but that also contributes towards the flourishing of human capabilities, which can act as "tools", for the attainment of the cultivation of freedom and the decay of the mentioned problems (Sen, 2002).

Capabilities are linked to goods, that can be economic wealth or income, which lies in the affordability of being able to do certain things or achieve certain attributes, e.g. a low budget can be a cause of illiteracy and lack of health, hunger and malnutrition; but a high budget can contribute to the improvement of education and health, in which the latter two are taken as basic capacities (Sen, 2000).

Freedoms and capabilities are concepts that claim to each other, since Sen states, that the maximum freedom would be to live as one wants; whereas the greatest capacity would include the fact of being able to live long and well and not live a life deprived of freedom. Here, freedoms are linked to the expansion of capabilities, which according to Sen, will lead people to find and have reasons to value life and live this kind of life they do value (Robeyns, 2016).

Capabilities are what provides a person with real freedom and opportunities, the value of these depend on each person's context, every time that, through them, one can realize their own achievements or goals (live life as it is value), nonetheless those are not limited to the individual arena, but they are able to be included in the social sphere. Capabilities are the "effectively possible", while freedoms and opportunities are the paths needed to realize the achievement of a particular desire or need (individual or collective) (Robeyns, 2016).

⁵ Sen refer to *freedom* and *freedoms* as many kinds of freedom and freedoms that can mean different things for each person.

Sen states that the importance of basic capabilities is “not so much in ranking living standards, but in deciding on a cut-off point for the purpose of assessing poverty and deprivation” (Sen, 2000), ergo, basic capacities do not depend only on the monetary factor, since social values, current customs, cultural practices and / or shared norms are also considered as features that have the power to influence certain social aspects, such as the trust of economic, social relations or policies; the care of children, the treatment of the environment, equity, fertility, and even in the presence or absence of corruption for the achievement of well fare; while the lack of basic capabilities, can transfer, an individual or a society, into malnutrition, premature mortality, morbidity, illiteracy, in short: in the decrease of survival.

However, the author believes that, although it is usual to focus our attention on the lack of money, and that, even when we think that the lack of income cancels basic capabilities, we could focus our attention as well, on the lack of global capabilities, in order to really understand the poverty of human life and freedom, from a different viewpoint.

Examples of valuable options or alternatives that lead to welfare	
Opportunities	Capabilities
Clean water, sanitation, access to doctors, protection from infections and diseases, basic knowledge on health issues	Health
Enough food supplies and food entitlements,	Nourishment
Sufficient income, school access, transportation to school, valuable knowledge	High quality education systems

Shared norms, traditions, social values, equity, collectiveness, democracy	Political participation
Water management, forestall resources, conservation, waste management, renewable energy, environmental education	Sustainable environment
cope with struggles, foster caring and warm friendships	Influence in life

Table 1 Examples of opportunities and capabilities according to the Capabilities Approach Source: Own elaboration

Participation emerges as a primordial element for the expansion of human capacities and freedoms. Participation and public measures form a binomial, because they allow individuals to participate and this, influences the measures themselves, but also in the direction of the life that one wants to live, and, therefore, in mutual aid, in growth of freedom, and in the influence of the world, which is fundamental for the process of development of societies (Robeyns, 2016).

As a result, the capability approach suggests that, freedom, justice, and development, as ends of well-being, should be assumed in terms of individual and collective capabilities, this means that the members of Región Media can be oriented in this terms, so they can determine what development intrinsically signifies for them, according to the existent freedoms and capabilities among them, the richness of this possibility is that many of them, referred to UASLP as a reliable entity, in terms of education, sustainability, investigation and values, and they declared to find it as valuable for their individual and collective wellbeing.

Here we propose the theory of capabilities approach as a theoretical frame from which the sustainable development of Región Media can be approached and guided, Therefore, UASLP is identified as one capability of the region from which the opportunity for RM wellbeing can be enhanced, oriented and discussed, in terms of opportunities, that are open to the people or the combinations of these that open

other potential opportunities; this could be deliberated by decision-making or through evaluation processes everywhen altogether provide an arena for the formulation of shared values and preferences, and instruments for pursuing them (Robeyns, 2016).

Fixing our attention on the identification of the capabilities of RM people, allows us to know if they satisfy their basic capabilities or not, this can enhance and possibly confirm this proposed development framework, either for the achievement of fundamental and major freedoms and for the impulse of participation, which ultimately influences making possible their development, as well as living long and living well.

4.1.3 Endogenous Development

As it was continually suggested by the capabilities approach, the identification of capabilities of oneself and of the society in which one takes part is necessary, in order to achieve valuable, and not merely levied, development goals. Parallel to the capacities approach, endogenous development (ED) is about trying to rise the capacities of the members of a community to reach the own endogenous development objectives but in a mutual work accordance with the state, in which the last one is not supposed to oppress the first one (Jenkins, 2000).

Since the 80's ED emerged, as a *reaction*, of the communities that were not part of the macroeconomic changes of the industrial and globalized world (Jerkins, 2000), it arose as an "alternative", to the current main lifestyle-model based on the dominant global market, that integrates all the elements contained in a society itself. In economic terms, it is basically a model focused in the development from within, this means that members of a community have the capability to develop their own economic proposals, through the defense of their culture and traditions, as part of a social and economic transformation.

Therefore, ED is a process, carried out to strength a society and its economy from within to the exterior, through tradition, habits and social customs, this process is not just about achieving economic growth, but also, the integral, individual and collective development in the moral, cultural, political and technological senses (Ochoa, 2006);

for this reason, it recaptures traditions, values in the form of equative economic relations that seek respect for the nature.

Economic proposals in ED must be based on the capabilities, abilities and general skills and resources among the community members, and the products and services must be local and then can be sold in the world market.

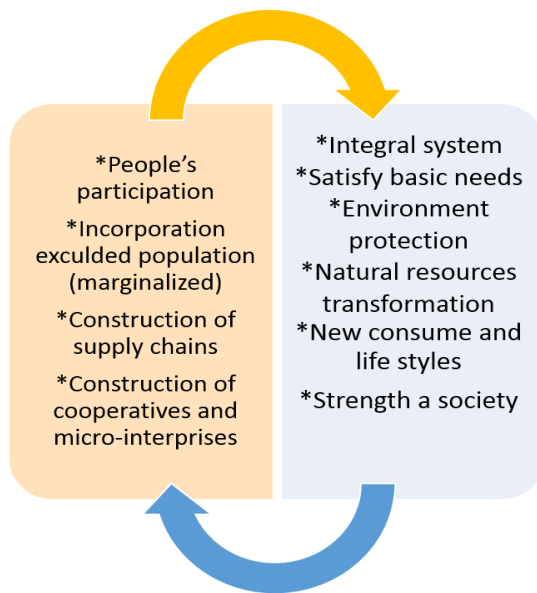


Diagram 6 Endogenous development targets and features
 Source: Own elaboration based on Ochoa, 2011,
 Vásquez Barquero 2007

According to Ochoa (2006), ED revalues the role of the social, political and cultural, as well as a local economy, based on the local capacities of the targeted population.

Seen as an alternative to the imposition of the North-Western model of modernization, encouraged by this vision, the Venezuelan government implemented ED as a nationwide goal, to achieve national autonomy in different strategical stages e.g. energy, technology and nutrition. (Ochoa, 2006). Therefore, the

Venezuelan approach goes beyond the original objectives of endogenous development, in which it is not only an endogenous production, but has as a goal also endogenous distribution, to construct a socialist economic system. The Venezuelan case on ED, resonates hardly in the search for ED theory and understanding, especially when trying to understand the Latin American perspective; many institutions in other countries, look carefully to the Venezuelan situation on ED after discussing the theory.

<p style="text-align: center;">ENDOGENOUS DEVELOPMENT IN LATIN AMERICA</p>	<p style="text-align: center;">ENDOGENOUS DEVELOPMENT IN EUROPE</p>
<p style="text-align: center;">ED is seen in Latin America as a methodology or a system, that can lead to the autonomy of rural communities, through the development of their competencies and capabilities, as a result we could have: “auto-sostenibilidad” (auto-sustainability).</p>	<p>Economic activity associated with tradition, heritage and culture.</p> <p>Services and products can be part of the consumer’s choice while also seen as <i>authentic</i>.</p> <p>Create more employment than modernist development forms.</p> <p>Environmental conservation.</p> <p>Product quality.</p> <p><i>Cultural diversity increases the probability that human societies</i></p>

Table 2 Differences between ED conceived in Latin America and in Europe. Source: Own elaboration, based on Ochoa 2006, Jerkins, 2000

About ED, there exist a large debate around its meaning and justification. Besides the economic target, ED is deliberately also political, this because its approach is about society, nonetheless, in the last years ED has shown a number of points in its significance and procedure, we stand that the “imprecision” of this theory is owing to its own nature, where *endogenous* means the *own thing*, and the property of each region or community is different and diverse, for that reason ED does not seek to obtain the same results as a neighboring country or region, but it proposes that the nucleus of the development arises from the particularities that each entity poses in time and space.

In this thesis we state our recommendation towards the implicit implementation of the capabilities approach and endogenous development, when carrying out the activities of the linking model; this, simply because, both theories seek to improve the capacities and skills of the members of a region or community, a need that today

is an essential ideal to contrast the imperative inequity existent in all the corners of the world.

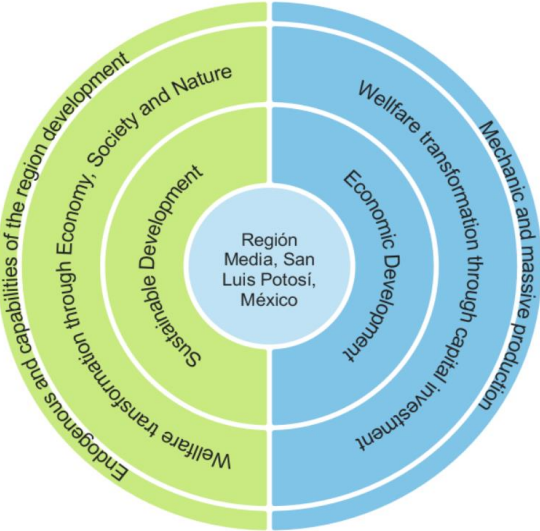
4.1.4 United Nations Sustainable Development Goals

Development is understood as change, and a transformative worldwide change is what the United Nations in recent years has been looking for, trying to attract every nation to commit with a complex and ambitious list of goals. The Sustainable Development Goals are part of the UN's 2030 Agenda; these goals emerged in 2015 and it is planned that in 2030 there will be high-quality knowledge products that will be revised during that year, to know the scopes of such goals (UN, 2015).

Meanwhile, countries, regions, institutions, communities, academies, NGO's and industries commit with the scope of these goals, while they stick to its more practical, than theoretical, nature. The referred entities have tried to adopt a certain number of goals, depending on their ecological and social surroundings, on the critical needs that are being faced and their vision of progress. In the aim to collaborate with the world's recent mission to build a new paradigm through sustainability, we adhere this thesis objectives to the SDG's proposition, that completely narrate the current situation of Región Media in terms of the problems that the region is tackling, but not just this one, but with many others, this region encounters a critical condition, that further will be described.

The SDG's are broad and interdependent, yet each has a separate list of targets to achieve, according with the UN "achieving all 169 targets would signal accomplishing all 17 goals", the SDGs cope with social and economic development problems, such as poverty, hunger, health, education, global warming, gender equality, water, sanitation, energy, urbanization, environment and social justice (UN, 2014), that are extensively present in today's world. As mentioned, part of the thesis' objectives is to contribute to the SDG's this means, our interest is being part of such agenda, for that reason, the targets for sustainable regional development will be aligned with some of the SDG's that we consider, fit with the region (consult Appendix to find the list of goals).

The desire to achieve development through a certain proposed or given model, has affected the reality of many regions and communities of different countries; the history that arose in one continent has affected the history of another, like the one given in Europe affected the American continent, the question is if the European shape, where the discourse of sustainability emerged and from where it prevails, really fits in all those social frames.



Radial 1 Graphic conceptual explanation of how RM can be guided by two predominant theories and how, when followed, they can conduct the region to other ideals. Source: own elaboration.

While agricultural and rural regions in Mexico struggle because, as societies, they try to follow dominant economic development models; nonetheless, other models, like capabilities and endogenous development affirm that development is not based only in economic growth but in a framework of qualities given in society.

How much and for how long a country can follow the model of the first world countries is a question that nowadays affects Mexico, a country considered as an emergent economy (WESP, 2014), where our study case is situated. Región Media is currently going through severe social and environmental difficulties while it also faces the pressure to achieve development standards; the questions we will try to solve in this thesis are an intent to answer which standards fits for them and what are better or accurate decisions for their development, how Región Media can be benefitted

through the sustainable development theory and discussion, that simultaneously is carried as one of the commitments of Autonomous University of San Luis Potosí.

4.2 Regional Development

4.2.1 Defining a region

Defining what *Region* is, can become an ambiguous assignment by virtue of the existence of abundant definitions, that, through different referential perspectives vary; therefore, finding a precise definition is hardly possible. This condition has a conceivable link with the continuous changes that regions experiment.

Nevertheless, a definition can be valuable for its conciseness and pragmatism; in this case Rodríguez mention that *Region* refers to a: “*Territorial space delimited by one or more characteristics that confer internal unity and diversity in respect to the rest of the surface. The regions can be homogeneous, nodal or for planning purposes*” (Rodríguez, 2015).

However, according with the Planning Law of the State of Mexico and Municipalities (Ley de Planeación del Estado de México y Municipios), a region is “*a portion of the state territory that is integrated by diverse municipalities and that are identified by geographical, socioeconomic or politic administrative similarities*”. (Gobierno del Estado de México, 2001).

In other perspectives a region is described as a continuous and contiguous space, it is a portion or a unit of a major wholeness, meaning that in a socio-spatial area, a region is minor than a country (Boisier, 1987); its main characteristic is that it contains specific features that provides it of unity. These features can vary and be positioned depending on geographical, economic, politic or idiosyncratic properties of physical spaces and communities.

Two relevant aspects in which regions can be identified and, therefore, delimited, are the natural and social aspects that compose them. A natural region is defined as the result of the weather, natural resources and ecology interaction; while social regions are complex systems with political, economic, social, environmental and cultural aspects that interact with each other (Miguel et al., 2011).

Interactions in the natural field are given in an intrinsic biological and also complex manner that is constantly changing, while interactions in the social field are meant to facilitate self-organization and adaptation among themselves and to the natural aspects, even though humans through self-organization will look for stability, this is always under the effect of a constant change, difficult to identify and to control as well (Miguel A. et al., 2013).

Any region suffers changes, these can be unpredictable, implicit, or guided and manipulated, when this situation happens, it can become a real challenge for researchers and leaders when trying to explain and track the causes of those changes, this can result unexplainable, however, the aim is to not to avoid change, but to understand its causes and consequences, especially when this affect human and environmental wellness (Miguel et al., 2013).

The interaction between natural and social regions, develops another degree of complexity. The social aspects of human interaction, radically affects the integral interaction of nature, even though, nature with its elements are always changing and affecting the social field, humans had found the way to adapt themselves to this changes that can be predictable sometimes, nonetheless, natural aspects of a region have been radically affected by human interests and interaction, this has developed tremendous changes to the nature field, resulting in climate change and affections to both dimensions (Miguel A. et al., 2013).

4.2.2 Regional Development paradigms

Regionalization has become an important worldwide category; in current days, many countries and associations are implementing action plans for the development (economic, social, educational, political or sustainable) of their regions. Even though, this topic is quite relevant especially in political terms, it has evolved through various decades, since the end of the Second World War and the creation of the United Nations Organization, through the different periods of time in which other wars and political controversies, indigenous movements and intellectual's perspectives, contributed to the formation and defense for the implementation of regional and rural

development paradigms that were suitable for their prosperity (Boisier, 1987; Kay, 2001; Moreno, 2008, Ramírez, 2008).

Naturally, a classification of paradigms, is underlined by historic events or milestones that contour a decade, nonetheless Social Scientifics (Kay, 2001; Ellis et al., 2001) point out that in a classification certain events or details that can help to analyze, can be missed or deliberately discarded, which means that in a classification certain propositions become popular, while others that are relevant as well, are not taken in consideration; for this reason a classification of this type serves to impel a general, but factual, approach through the complexity of social transitions in a lapse of time.

Regional and rural development paradigms						
Decade	1950	1960	1970	1980	1990	2000
Historical context	Post-War era Cold war Liberation struggle	Decolonization Vietnam war Militarization in Latin America	Debt crisis Fordism crisis Student activism	“Lost Decade” in Latin America Cold war fades	TLCAN begins Indigenous movements Rio Earth Summit	Postmodernity Globalization extends Development Millennium Goals
Paradigm (Ellis et al.)	<i>Community Development</i>	<i>Small-farm growth</i>	<i>Integrated rural development</i>	<i>Market liberalization</i>	<i>Participation</i>	<i>Participation and empowerment</i>
Features	Modernization dual economy model 'backward' agriculture community development lazy peasants	Transformation approach technology transfer mechanization agricultural extension growth role of agriculture green revolution rational peasants	Redistribution with growth basic needs integrated rural development state agriculture policies state-led credit urban bias induced innovation green revolution (cont.) rural growth linkages.	Structural adjustment free markets 'getting prices right' retreat of the state rise of NGOs rapid rural appraisal (RRA) farming systems research (FSR) food security & famine analysis	Microcredit participatory rural appraisal (PRA) actor-oriented RD stakeholder analysis rural safety nets gender & devt. (GAD) environment & sustainability poverty reduction	Sustainable livelihoods good governance decentralization critique of participation sector-wide approaches social protection poverty eradication

				RD as process not product women in devt. (WID) poverty alleviation		
Paradigm (Kay)	<i>Modernization in rural development</i>	<i>Structuralism</i>	<i>Dependence</i>	<i>Neoliberalism towards rural development</i>	<i>Neo- structuralism</i>	<i>New rurality</i>
Features	Modern countries play as paragon for underdeveloped countries through knowledge, capacities, technology, organization and investment Dualistic transformation: from traditional to modern	Established by CEPAL who states orthodox economies are not suitable for peripheric economies Critique to capitalistic neoliberalism The state must actively interfere in the economy and the market	Communist Marxism Capitalism is responsible of world poverty and underdevelopment Transitory revolution to socialism as a policy capable of driving rural development	Based on neoliberalism Opposition to sectorial policies A macroeconomic scenario provides stability and uniformity for all sectors Open market	Productive transformation with fairness Endogenous dialectics for local development through heterogeneous regional policies	Gender and equity dynamics Grassroots Livelihoods Culture Identity Indigenous and other social movements

Chart 1 Regional and rural development paradigms Source: Own elaboration based on Kay, 2001; Ellis et al., 2001 and Kedogo J., Hamhaber, J. (2012)

It is important to mention, that the content of the table presented is currently based on two papers (Kay, 2001; Ellis et al., 2001), in which each author hold a diverse but at the same time concrete point of view, this can be understood while explaining that Kay's paradigms are contextualized in Latin America, while Ellis., context their paradigms from a global approach, a study that, after its publication served as the base of the UN's rural development discourse.

4.3 Universities engagement in sustainable regional development

It is known that universities are conceived as places for experts and knowledge, where the new science and social advancements are being shaped, to come out and "spread the light" of knowledge to the outside entities, that play a role of "recipients" of knowledge (Moore, 2014). Here universities seem to have a higher and different range in the social scale of institutions, a hierarchy that in front of society, stands

with certain superiority, but this position can vary, especially when universities take action in the social struggles that are rather held in the streets or in the inner circles of communities.

In recent years, universities became contemporary drivers for regional sustainable development, they play an important role in the implementation of programs and strategies for the achievement of sustainable goals in regions and communities (Sachs, J. & Clark, L. 2016); even though their main functions are the transmission of knowledge in teaching, investigation and research, they also motivate different social entities, such as enterprises, non-governmental organizations, governmental organizations and other civil formal or informal associations to commit with the social construction of a dignified world.

For these, among other reasons, universities have had a significant capacity to contribute to regional sustainable development, as they are common to be entities with a grounded and well-defined interest in contributing to the needs of society (Sachs, J. & Clark, L. 2016), through diverse tools that can be ideological, i.e. commitments with visions, values and humanist goals, also with material tools such as infrastructure, apparatus, devices, machinery, publications, reports generated by the work of students and academics.

Therefore, even when universities count with the necessary tools for the support of development of communities and regions, there is a key factor that according to some authors (Moore, 2014; Sachs, J. & Clark, L. 2016), should be seriously considered, because besides the materialistic tools, techniques, strategies and knowledge itself, there are human factors that are relevant for the accomplishment of social transformation; in this case we speak about engagement.

Engagement is a key factor that plays a very important function for change; when universities and communities or regions work together, universities should seek for the chances and the engagement ways of the people they work with (Moore, 2014).

In other words, universities and communities, in the search for development, should engage in a process in which university actors, first, can be able to identify community leaders or possible engagement partners while taking into consideration,

the educational attainment, socioeconomic class, gender, race or ethnicity, and cultural capital of specific individuals (Moore, 2014), this to avoid that individuals in groups that are prone to be lessened, keep being underrepresented and instead form part of the engagement initiative.

While working together with a community, university members must ask themselves how important is that community members know or be aware and convinced of the relevance of their own and external values, to engage with the support of the institution; what are the possible scenarios if they ignore these values, how this could affect the process of the plan; university members can also wonder what kind of ideals or expectations community members are committed to, and what is their level of involvement authors (Moore, 2014; Sachs, J. & Clark, L. 2016).

University leaders must come to understand that the current approach to engagement as outcome has made firm boundaries between universities and communities unworkable, thereby threatening the university's ability to achieve its desired goals. Universities may have missions that are compatible with engagement and simultaneously exhibit cultural values and norms that present barriers to engagement (Moore, 2014).

UASLP not just counts with the infrastructure, the documents for commitment with the challenges of society, but it also counts with the workforce, academics, students and functionaries that learn to be or are willing to cooperate with the people *outside*, this aptitude gives the university's actor the strength to work together with community members, to engage in their issues, because, so far, are the same issues that academics face.

Therefore, besides the tools and capabilities that UASLP holds, and the "work force" (academics) it counts with; it would be important, for this entity, to revise its engagement skills with communities and civilians. The UASLP's revised documents for this thesis, implicitly demonstrate how the university continuously performs its tasks imperatively based on its commitment with society; nonetheless, when talking about regional development and sustainability, *engagement* has a subtle, different, meaning than just *commitment*. While engagement here supposes a social re-

construction based on mutuality, between academics and civilians; and commitment, here refers to the university faculty to solve, help and contribute, to society, with regards of no necessary exchange or “reciprocity”.

Engagement supposes that there must be an open gate for debate, to construct a democratic engagement (university-society), between leaders of both entities, in which community members can actively participate in a research project, rather than “objects of study” or just “recipients of knowledge”, this because, as Moore stands: *“University leaders must come to understand that the current approach to engagement as outcome has made firm boundaries between universities and communities unworkable, thereby threatening the university’s ability to achieve its desired goals. Universities may have missions that are compatible with engagement and simultaneously exhibit cultural values and norms that present barriers to engagement”* (Moore, 2014).

In other words, when it is about regional development and sustainability, UASLP has the chance to find identify its own behavior and commitment towards engagement, because clearly, this concept appears as a key concept, that helps universities and communities to achieve their common or specific goals.

5 Methodology

Research mixed methods were considered at the beginning of this century a novelty because in the past centuries, science made quantitative methods more popular, nevertheless, among social and human sciences mixed methods become useful (Creswel, 2009); they basically combine quantitative and qualitative approaches, which is considered accurate for the case of interdisciplinary research, and for the case of researches with different and diverse interests and approaches, by virtue of this combination an expanded understanding of the problems can be accomplished, this means, a problem can be solved from a combination of different perspectives for example, social, human, chemical, mathematical, political, medical, altogether.

The purpose for the implementation of mixed methods was to first state what are the basis for the sustainable development in terms of main worldwide discourses and predominant ideology, for which our aim is to answer and propose what were the reasons and circumstances (problematic) from which sustainability emerged as an alternative for human and environmental welfare achievement.

The second phase consisted in the analysis and review of general and specific data about the region, such as its geography, population, environment, economy, education, and commerce situation, among other specific aspects derived from these such as marginalization, migration, poverty, pollution, health, among others.

As part of the second phase, the main documents of the Autonomous University of San Luis Potosí were also reviewed and analyzed, the aim in this case was to find the actual commitments of the Autonomous University of San Luis Potosi with society, and analyze how they are postulated, specifically in terms of sustainable development, this allowed us to locate its capacities (activities, academics, students, university agencies and mixed groups) to encompass sustainability in Región Media.

The third phase was the field research, this phase basically consisted in visiting and staying in the conurbation zone of Región Media (Rioverde, Ciudad Fernández and Ejido El Refugio) to observe and experience its present situation. It is important to

highlight that the conurbation zone in this thesis, worked as a reference for the whole Región Media, this because in order to access other municipalities of the region, multiple and crucial implications were present (Creswel, 2009).

To achieve a better and a clearer understanding about the capacities of the UASLP and capacities and needs in Región Media, individual and group interviews were held in the San Luis Potosí capital city, in Rioverde and in Ejido el Refugio. The interview's purpose was to recollect qualitative information in a dynamic of communication exchange in which inhabitants of Región Media and representatives of UASLP, such as academics, faculties members, principals, and actors especially the ones involved in sustainability activities participated as members of focal groups in which they were asked to take part in a concise and open dialogue in which their perception served to track and match the capabilities of both: Región Media and UASLP, while dispelling pre-conceived conceptions and making tangible their positions, capacities and needs, in the case of RM, through a qualitative research methodology.

In this case, the interview functioned as a method for data collection, here it was designed to inquire through simple and basic questions (Corbetta, 2007), this, because the aim of this task is not focused in classifying the interviewed in socio-economic paradigms or in grading their technical or theoretical knowledge about regional and/or sustainable development, but, as mentioned, in recognizing their perceptions on the same subjects.

The modality of the individual interview research methodology was a face-to-face semi-structured interview, here “[the researcher] *strives to find out the whole variety of answers people hold about the researched topic and, for that reason, the sample size depends on the complexity of the researched topic*” (Torkar et al., 2011). The role that the interviewer played in this modality, is crucial since the interview depended a lot on the interviewer performance (Corbetta, 2007), so the way how the questions were framed and conducted, and the way how the interviewer related with the interviewee was through a serious and formal performance to approach to the topic, but also trying to make the interviewed comfortable was important, to be able

to access the details about his or her experiences as UASLP representative or Región Media inhabitant. For a successful outcome towards this task a hermeneutic stand was held to reach a position of comprehensiveness while facing and analyzing the interviewee responses understanding that "...comprehension is never a subjective behavior with respect to a given 'object', but belongs to the actual history, that is, to the being of what is understood" Gadamer (1997).

Data acquisition methods	
Literature Review	Theory about sustainability Región Media portrayal Autonomous University of San Luis Potosí academic documents
Singular case: individual interviews RM and UASLP	Región Media and UASLP academics were individually interviewed
Generalization: RM focus group	Región Media people, with diverse occupations, were invited to participate in a focus group
Generalization specific: UASLP focus group	UASLP academics exclusively, participated in this focus group

Table 3 Methods used for the acquisition of data

With these interviews we hope to contribute to the sustainable regional development of region media, and we hope to generate an approach to the general understanding about how people in region media perceive their own capabilities and limits for sustainable development.

Finally, based on the literature analysis, on the identification of university capabilities and the capabilities and limits of the region, the develop of a portfolio that serves as an instrument to support the RM sustainable development was created, for this portfolio, UASLP informs, from 2014 until 2018, were reviewed in order to search for activities that the university carried out towards sustainability and that simultaneously, could cooperate and match with the risks and opportunities of RM. Among the large list of actions that UASLP held, some activities where selected to match the key issues of the region, this because a major list of activities could be

pointed out, nonetheless, through each report, many of the tasks have no specific data about the activities carried out, neither are detailed, naturally, because that is not the report's aim. For this reason, getting detailed information about each of the activities, would have required interviews with academics and students who oversaw or oversee them; unfortunately, due to time and current geographical position, this duty figured as one of this thesis limits.

6 Case Study Región Media

6.1 Regional Development in México

There exist diverse regions in Mexico, all conglomerated by geographical, economical, historical, touristic, industrial, artisanal, scientific and educational activities, among others. However, even if the purpose of the consolidation of a region can differ, its aim to growth in its economic and life quality attributes is usual.

Mexico is still considered as an under-developed country, even though its number of citizens is major or equal to some of the most developed countries in the world, nonetheless in qualitative terms, on the rural and urban zones, the country is still lacking a complete formal and regulated economy (Velasco, 2007); the situation is similar in some housing cases, in which there's a lack of infrastructure, especially in zones where the housing norms are not regulated; additionally, urban services are lacking in these cases (CONEVAL, 2015; INEGI, 2015)

Garza and Schteingart (2010), state that in the country, the national and political efforts for development have tried to solve these deficiencies; in this case, what the national development programs have aimed to cover what is considered, that a population requires to solve basic requirements such as employment, housing, services and the rest of the social and physical infrastructure. Nonetheless, other possible regional development indicators (Kay, 2001; Ellis et al., 2001), like gender equality, quality of education, or other subjective but serious human aspects, are still not taken in consideration in the national efforts, but only quantifiable aspects, that from this point of view, represent quality of life.

The industry nowadays represents for many Mexicans, a moving incentive; this has created new population zones in the surroundings where the industries are located (Garza, Schteingart, 2010). Many rural community's members have felt the motivation to move to live closer to one of these industrial clusters, showing that people of rural zones or other regions feel attracted to places where economic activities are located, but this situation has represented an infrastructure risk because, lack of infrastructure become present in the urban zones in which basic

services, transportation and employment are lacking as well, generating slums (Moreno, 2008).

A state of inequality and imbalance is notable in Mexico when comparing economy, human wellness and environment in the different regions (Miguel et al., 2011), like in the case of comparing rural and urban communities. The main activities in rural communities are based in agriculture and animal husbandry, usually held in traditional ways; services such as transportation and other connectivity services are scarce, and governmental decisions are likely to be taken based on traditional practices, habits and rituals; nevertheless, this type of communities significantly stress because of the ideology of modernity press them to achieve urban life standards.

Marginalization is an outcome of this present scenario; when talking about modernization in Latin America, Gino Germani states that marginalization is a multidimensional phenomenon that starts by the lack of participation of the individuals or of the groups, and that this usually arises from the process of transition towards an industrialized society (cited in Miguel et al., 2011); these processes can be unequal and not well synchronized when values, beliefs, habits, institutions and modern and traditional categories manifest and coexist, but individuals do not actively participate, therefore, they do not reach the desired level of development, but reach marginalization (Miguel et al., 2011) .

Mexico is a country composed by diverse cultures, talking about the spatial territoriality of the country, it is extensively diverse and plural; nonetheless, according with historian Alfredo López Austin, in this country the “future expectative” for all this diversity is being reduced by imposition, which at the same time, reduce the hope to achieve progress, when in the country only one economic system and only one way of thinking, for example, is being imposed by the governing classes (López, 2015); therefore those ones who follow another tradition and who were raised in a different way, will have little possibilities to fulfill their own development.

There exists an impoverishment of the cultural relations in the country, this issue is affecting the diversity and plurality of the country and develops poverty and

marginalization, the historian proposes that the knowledge in all traditions must be re-considered as valuable and respected in all its forms (López, 2015).

In other hand, it has been demonstrated that rural zones support the national income through the work held there; the increment of agricultural GDP, primary sector, can hold the rural emigration, allowing the members of rural communities to remain in their communities and find a job there, avoiding the migration to the urban zones in the country or to the United States (Garza, Schteingart. 2010), definitely the communities in the rural zones have the potential to economically contribute to the country, in regards of the life perspective, based on traditions or on the beliefs of their ancestors that they are possible to have.

San Luis Potosí holds an important number of indigenous and rural inhabitants; in Región Media, the migration rate is significant (INEGI, 2015), many residents moved from their places of origin due to the poor significance that is given to animal husbandry and traditional agricultural work in comparison with the work in the industrial clusters, were services, such as transportation and other connectivity services, like internet, result attractive for the workforce, as a result, rural communities significantly stress because of the pression to achieve the same urban life standards and the opportunity to prosper in their own location is valueless.

Starting from the context described, Boisier (1987) proposes, from a broader perspective, that regional development in Latin America should be the result of the interaction of the state and the region, the state must be involved due to its political, administrative and organization qualities, while the region is not merely the subject in which the state should activate itself, but in which the region has the faculty to be another active agent, capable of the same tasks as the sate's, but in accordance with it, in a conjunction work, a dichotomy that should develop a positive regionalism, as a consequence, the author proposes a more horizontal hierarchy, in which the regions and the state work in parallel. This means that the region and the state share the same functions and responsibilities, and that, can carry both, but then the organization among the regions is a requisite for this model to be functional, in which is even proposed that a collective conscience can evolve (Boisier, 1987).

This perspective is not a novelty in the regionalization literature, on the other hand, seem to be inconvenient when the stakeholders are looking to grow in power and control. Those stakeholders, in the institutions, the government and in the communities, who believe in a more horizontal hierarchy, must be, clearly, ethically committed with the interests and the needs of the community.

6.2 Región Media Portrayal

Our study region, Región Media (RM), is immersed in the State of San Luis Potosí, in the country of Mexico. This state counts with a unique ecosystem richness, across the state there are two main ecosystems present, the desert and the jungle in which we can find a difference of 2000 altitude meters, with different ecological components such as the weather, the botany, the water, the fauna, that consort with the cultural characteristics of each region (Monroy et al., 2015); this, however, simply illustrates the enormous complexity of the state characterized by its sharp contrasts, by the intricate variety of its forms and possibilities of life, that, in the case of this state, some of them result more benefitted than others.



Map 1 Localization of the State of San Luis Potosí in Mexico.
Source: SEDECO, 2015.

The State of San Luis Potosí is located between the 21°09'30 " and 24°33'09 " North latitude, and 98°19'52" and 102°17'51 " West longitude; it is crossed by the Tropic of Cancer (Monroy et al., 2015). Its territorial extension is 62.304.74 Km²., it equals to 3.22% of the country's surface. Its population corresponded to 2, 717, 820 inhabitants in the last

state's census (INEGI, 2015).

Its location in Mexico, is equally distant from the three major cities in the country: Ciudad de México, Monterrey and Guadalajara, its closeness with the state of Texas

in the United States and its nearby position to Veracruz and Tampico harbors in the Gulf of Mexico, have been significant for Asian, European, South and Central American and United States investors, as well as it is for consumers and providers (SEDECO, 2015).

The commercial activity in San Luis Potosí is of great relevance, along the state agricultural, livestock, industrial and commercial activities are combined, the Economic Development Secretariat of San Luis Potosí (Secretaría de Desarrollo Económico [SEDECO]), reports that this has been an advantage for industries and, above all, for the working population by the level of supply and consumption of the various products that the sectors offer (SEDECO, 2015).

As mentioned above, RM is located in the State of San Luis Potosí, along with Región Centro, Región Altiplano and Región Huasteca, they create four regions, shaped by the 58 municipalities that represent the state, 11 of them belong to Región Centro, 15 to Región Altiplano, 20 to Región Huasteca and the rest, 12, belong to Region Media. (INAFED, 2010).



Map 2 The four regions of San Luis Potosí. Source: SEDECO 2015.

This region has geographical limits in the north with the state of Tamaulipas and in the south with the state of Guanajuato and Querétaro, to the east with the municipalities of Aquismón, Ciudad Valles, el Naranjo and Tamasopo and to the west with the municipalities of Armadillo de los Infante, Guadalcázar, Santa María del Río, Villa Hidalgo and Zaragoza.

The diversity of ecosystems in San Luis Potosí is not only limited to jungle and desert; the presence of an important mountain chain: Sierra Madre Oriental, is part of Región Media conformed by Sierra del Rosal, Sierra de Tapona, Sierra Venado and Sierra de San Miguelito (INEGI, 2010).

RM territorial extension is 12, 776.12 Km²., it equals to 20.51% of the state's surface and it has a population of 287, 209 inhabitants (SEDECO, 2015).

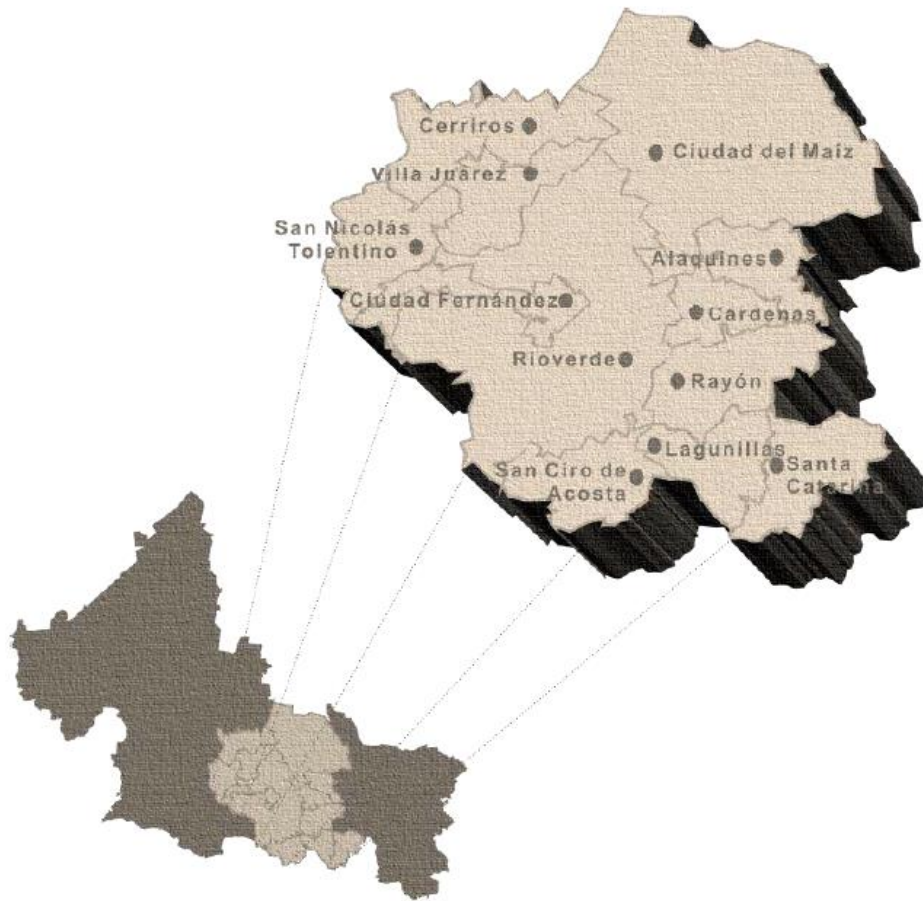
The region's twelve municipalities are:

<u>Municipality</u>	<u>ID INEGI</u>
Alaquines	002
Cárdenas	005
Cerritos	008
Ciudad del Maíz	010
Ciudad Fernández	011
Lagunillas	019
Rayón	023
Rioverde	024
San Ciro de Acosta	027
San Nicolás Tolentino	030
Santa Catarina	031
Villa Juárez	052

Table 4 Municipalities of Region Media. Own elaboration based on INEGI, 2015

According with SEDECO (2015) the main municipalities in the region are: first Rioverde, second Ciudad Fernández and then Ciudad del Maíz, Cerritos and Cárdenas.

As mention, Región Media is regarded as one of the four regions in which the state of San Luis Potosí is divided. This regional delimitation was established according to the political, economic and educational interest of the governments that served during the XX siècle, the specific methodological procedure for this delimitation into the state is not clear, however, it is estimated that natural, historic and functional factors were considered in such delimitation (Vázquez, 2011).



Map 3 Región Media municipalities. Source: SEDECO, 2015.

The commerce basis in the region is the agricultural production, in its main cities the production of citruses such as oranges, is basic and the total of its agricultural stock represents 2.0% of the gross value of the manufacturing production, as a result, the alimentary industry is the main manufacturing subsector in the zone. Rioverde, along with San Luis Potosí, Ciudad Valles, Matehuala and Soledad de Graciano Sánchez

represent the conglomerate of industrial food companies that export food products mainly to Canada, Colombia, the United States, Guatemala, Honduras, Nicaragua and Panama. (SEDECO, 2015).

Every municipality of RM is administered by a City Council of popular and democratic election; every city council is integrated by the mayor of the municipality, municipal councilors, aldermen. The mayor is elected by popular election for three years.

The municipalities have, through their city councils, the Regulatory Faculty in the matter of police and government, as well as for the municipal public administration, the procedures in areas of their competence, and above all, the public services that they are in charge of, know: production and distribution of drinking water, public lighting, clean, markets, pantheons, trails, streets, parks and gardens, and public safety.

It is important to mention that the National Institute of Statistics and Geography (Instituto Nacional de Estadística y Geografía [INEGI]), is the Mexican entity in charge of carrying on the national census every ten years and every five years per state, while at the same time is the National Cartography Agency. The diversity of information that the agency compiles, includes a wide range of social attributes such as agriculture, livestock, education, employment, infrastructure and forestry activities. Along the present thesis, we will use INEGI as a platform to assemble and review the necessary data about the study case. However, it is crucial to point out that the data collected by INEGI is a probabilistic sampling survey, the data we present are estimations of the population values and have statistical correlations of precision and confidence.

INEGI (2015), establishes that the population in each of the municipalities that conform Región Media, are compounded by the next number of inhabitants in each municipality and estimates the percentage of men and women living in each one as follows:

ID INEGI	Municipality	Population	Men %	Women %
002	Alaquines	8, 296	48.8	51.2%
005	Cárdenas	18, 491	47.7	52.3
008	Cerritos	21, 288	48.3	51.7
010	Ciudad del Maíz	32, 867	49.8	50.2
011	Ciudad Fernández	45, 385	48.3	51.7
019	Lagunillas	5, 462	49.3	50.7
023	Rayón	15, 297	48.1	51.9
024	Rioverde	94, 191	48.3	51.7
027	San Ciro de Acosta	10, 257	48.6	51.4
030	San Nicolás Tolentino	5, 176	47.9	52.1
031	Santa Catarina	11, 791	47.9	52.1
052	Villa Juárez	10, 048	46.6	50.4

Table 5 Number of inhabitants in each municipality of Región Media. Own elaboration based on Panorama sociodemográfico de San Luis Potosí 2015. Encuesta Intercensal 2015.

The differences between the percentage of men and women in each municipality, in all the cases, correspond to a minor number of men and a major of women. One of the reasons that authors profile about this situation (Monroy et al, 2015, INAFED 2010), is due to the existing men migration in the state, since San Luis Potosí is listed as one of the states with a very high migration rate (INEGI, 2010).

According with World Economic Situation and Prospect Report (WESP, 2014), Mexico is listed as a *developing* country, this consistently refers, that a country's economy is below the rate of the developed countries while its industry is weak, and

in which cases of extreme poverty conditions are akin, by these reasons, living conditions are lacking infrastructure and basic commodities, this makes the living standards low as well as the income per capita.

The Human Development Report (United Nations Development Programme, 2016), establishes that Mexico’s rank achieved a position in which the country is categorized in the high human development line, the report also demonstrates that the human development in the country increased between 1990 and 2015. Nonetheless, the report also displays a status of multidimensional poverty in the country, which “*implies that individuals living above the income poverty line may still suffer deprivations in education, health and other living conditions*” United Nations Development Programme (2016).

Corresponding with the HDR, the National Council of Evaluation of the Social Development Policy (Consejo Nacional de Evaluación de la Política de Desarrollo Social [CONEVAL]) reported in 2015 the number of residents per municipality in RM, that live under poverty and extreme poverty, as well as social recession conditions; the incidence is reported as follows:

ID INEGI	Municipality	Poverty	Extreme Poverty	Social Recession
002	Alaquines	6, 961	2, 162	High
005	Cárdenas	9, 523	1, 442	Low
008	Cerritos	11, 146	1, 529	Low
010	Ciudad del Maíz	22, 798	4,909	Medium
011	Ciudad Fernández	26, 798	4, 193	Low
019	Lagunillas	4, 483	1, 193	Medium

023	Rayón	9, 710	2, 228	Medium
024	Rioverde	52, 480	9, 111	Low
027	San Ciro de Acosta	6, 346	1,082	Medium
030	San Nicolás Tolentino	3, 805	501	Medium
031	Santa Catarina	11, 017	6, 394	Very High
052	Villa Juárez	7, 293	1,613	Medium

Table 6 Poverty status and social recession in the municipalities of Region Media. Own elaboration based on: Informe anual sobre la situación de pobreza y rezago social 2018. SEDESOL.

CONEVAL defines that a person is in a situation of *poverty* when he or she is lacking at least one of the next six indicators: educational lag, access to health services, access to social security, quality of housing spaces, basic housing services and access to food; plus, when their income is insufficient to acquire the goods and services required to satisfy their food and non-food needs (CONEVAL, 2018).

In the case of *Extreme Poverty*, the council categorizes in this status a person who has three or more shortcomings, of the six indicators referred, moreover, is below the minimum welfare line. People in this situation have such a low income that, even if they dedicate it completely to the acquisition of food, they could not acquire the necessary nutrients needed for a healthy life. (CONEVAL, 2018).

The Social Recession Index (CONEVAL, 2015), incorporates indicators of education, access to health and basic services, quality of spaces in housing and housing assets. This index facilitates the location of Priority Attention Areas and contributes with the generation of data for decision making in subject of social policy, especially to analyze the inequality of social coverage that subsists in the national territory, which in turn, improves the policy and social development programs in Mexico.

Santa Catarina is identified, in table 3, as one of the localities in which social recession is very high; the situation is similar for Alaquines with a high recession

rate; this naturally means, that the implementation of social development programs is urgent to focus in those municipalities, a resolution for these circumstances can be found through the support of the UASLP and the creation or implementation of social contribution programs and investigation; towards this objective the United Nations (2015), has proposed the Sustainable Development Goals agenda, which first aim to eradicate multidimensional poverty that still prevail in many developing countries, like Mexico, in order to increase the quality of life and enhance prosperity in the world.

In other hand, is important to highlight that the biggest cities and with an incremented economy in the region, Rioverde and Ciudad Fernández, are certainly rated as low in the recession index along with Cárdenas and Cerritos. The multiple commercial, agricultural and touristic activities in Rioverde and Ciudad Fernández, as well as the presence of universities, have allowed these cities to avoid social recession and on the contrary, increase the offer of opportunities for their citizens, although, table 2 shows that among their inhabitants, the index of men living there is medium, which might be related to the migration tendency.

Therefore, only viewed from the current political perspective of development, we find that the limits for it are feasible when politically talking, development is being conceived mainly from economic field, while from the sustainable development perspective, development is proposed to be reached not only through economy but through society, education, politic, culture and environmental elements that would englobe any development plan.

In any event Región Media has the possibility towards sustainable development because of its geographical location, which allows it to have a diversity and a variety of climates in which the soil is quite fertile; the people are akin to participation and consider important any opportunity for new learnings. In the conurbation zone, many people from other municipalities assist, given to the quality of infrastructure and the offer of services, these persons count with a strong motivation to support each other; they claimed, that what they need the most for their development is to have a well-

constructed action plan in which they can participate, while the resources are still abundant and available.

The University of San Luis Potosí plays a key role in RM, among the people of the region it is considered that the establishment of the university campus, figures as an emblem for positive historical changes, in which the society found and keep founding, opportunities for the improvement of their skills and competences, which had allowed them to enrich and cultivate their life.

7 RM actors' perceptions

7.1 RM actors' understanding of S&RD

During the field research phase many Región Media's factors, that were at first approached by literature, were perceived and understood; visiting the conurbation zone served as a reference to observe a piece of Región Media itself, in which factors like the weather, the water, the soil, the crops are imminent for the inhabitant's *modus vivendi*.

Cortbetta (2007) mentions that, during the field research and observation phase, the researcher must live like the people who is the *object of study*, share their everyday life, to discover their worries, hopes, understandings of the world and their motivations to develop a real comprehension. During the field research in the conurbation zone of Región Media, the investigator was able to share the time with many of its inhabitants, to discover everyday life, thanks to this, a better understanding of their visions and ideas was reached.

All the interviews to RM people were held in the conurbation zone, the questions were part of a semi-structured interview where a symmetry of dialogue was established between the interviewer and the interviewee, avoiding these to take a *chit-chat* form, and looking to achieve a precise outcome, through clarification and more accurateness of the questions when they were asked (Torkar et al.2011).

The interviewed people were inhabitants of the city of Rioverde, Ciudad Fernández, ejido el Refugio and San Ciro de Acosta; they were held during a period of a week. The interviewees had different occupations, but they were selected as key actors of the region, not just for the positions they have in their occupations, but also for their engagement towards sustainability or for their leadership skills in diverse fields among the region. For reasons of privacy, the interviewees will not be named, but coded.

As mentioned in the methodology, some of them were directly and personally interviewed, while other were called to participate in a focus group; in both cases, the exactly same questions were asked, the main difference observed between both techniques was that in a focus group the answers tend to lead to discussion between

the participants, which actually can enrich and offer a wider perspective of the situation of the study case, while the personal interviews led to a more personal and detailed perspective on the subject of inquiry.

Occupation	Number	Code	Gender	Age
Farmers	4	F1, F2, F3, F4	M	MA/OD
Teachers	4	T1, T2, T3, T4	Both	MA/OD
Medical Doctors	1	M1	F	MA
Governmental entities	7	G1, G2, G3, G4 G5, G6, G7	Both	YA, MA OD
Tourism	1	TO1	M	MA
Housekeepers	1	H1	F	MA
Students	2	S1, S2	Both	YA
Entrepreneurs	1	E1	M	MA

Table 7 Región Media key actor's profile. Here, "M" stands for masculine, "F" for feminine, "YA" for young adult, "MA" for middle-aged and "OD" for older adult. Source: own elaboration

Regarding the technical aspect of conducting the interviews, these were done using a recording application, although, some of the interviewees felt intimidated or a little uncomfortable by the use of this application, especially at the beginning of the interview, this sort of uncomfortableness was detected; however, all the information they were giving was being written at the same time, in the form of literally notes that were taken by the researcher, with this technique it was evident that they felt much more confident.

The informants spoke very openly, and they even shared more details about the topics they were being questioned, in a very friendly and cordial atmosphere. In fact, the information they shared went much further in terms of details, this provided

us with the necessary amount of information to be able to have an approach to their opportunities and needs in RM.

As a first approach to the compendium of responses and opinions, we would like to emphasize in the perception of the interviewed actors of RM about Regional Sustainable Development; to perform this task we used a stratagem that is completely and exclusively based on the responses of the interviewees; through their expressed ideas we selected the concepts linked to the three main researched concepts of this chapter's interest. The result is exposed on the next table, where we find an approach to the conception of the people towards the mentioned lines.

SUSTAINBLE REGIONAL DEVELOPMENT PERSPECTIVE IN REGIÓN MEDIA			
SUSTAINBLE	Resources: water, soil, weather	REGIONAL	DEVELOPMENT
	Geography		
	Balance		
	Alternative agriculture		
	Good agriculture practices		
	Techniques		
	Sustainable technology		
	Regenerate		
	Reconstruct		
	Regional balance		
	Relation between human beings, environment and society		
	Environmental culture		
	Planting trees		
	Placing waste		
	Using bicycles		
	Recycling		
	Nature conservation areas		
Environmental education			
	Cooperatives		
	Government support		
	Farmers	Commerce	
	Traditions	Modernization	
	Regulation	Change	
	Legislation	Remittances	
	Agriculture	Technology	
	Crops	Mobility	
	Productive processes	Better life conditions	
		Work with experts	
		Opportunities	
		Tourism	
		Competence	
		Economy boost	
		Training	
		Education	
		Transformation	

Table 8 Categorization of RM's people towards Sustainable Regional Development Source: own elaboration based on the interviews and on the focus group.

We observe that the participants have a general perception on sustainability, still associated with recycling and eco-techniques and imprecise ideas about

reconstruction and regeneration, but no specific strategies or commitments with the environment and with the society were mentioned; while on the regional side, what appears at first sight is, that their vision relates to the government and it also has a political contour. In other hand, their development conception is among all identified with economic growth, through the generation of commerce and job opportunities, but also it implies a change that is simultaneously related to education.

Nonetheless, the key actors' opinions towards the social and environmental problems and possible solutions were clever and clear, they see a path to the key problems as S1, a young student who is very committed socio-sustainability projects, commented when pointing out some issues:

“The environmental problem is a cultural problem, the people here is still throwing their trash on the streets; in other hand, some people is against the implementation of technology in their communities, I think this problem is linked to misinformation because they can't see things from a scientific perspective, nonetheless, some people in the rural zones, still have a huge respect for their environment”.

And about possible solutions he commented:

“El Balandrán (CINVEXT) is located between a rural and an urban zone, this institution can be a place for training in various tasks, like composting, reforesting with suitable species or creating recycling sites, like for pet, to improve the living conditions [...] There should be (also) a restructuration for a mobility culture, in which the use of bicycle and a road safety education should be promoted”.

Some sides of that perspective were shared by some farmers, like F2, commented:

“This region is «holly», but the pollution is strong, this can be ameliorated by reforestation, ecological hotels, water management, to make things different, so we could even see the trees as individuals, while us can be guided by the suggestions of experts”.

As expressed, people in the region are very aware of the pollution situation, especially when it is quite visible, most of them agree that the source of these

problems are cultural practices and behaviors that need to be changed. They seem to be willing to learn, to commit with new ideas, to follow good examples; but maybe learning to plan in a long term to see the effects of such changes is a determining factor, that the university academics could try to promote.

7.2 RM actors' expectations of S&RD and towards UASLP

People in Región Media has a very clear opinion about what they could expect from the University of San Luis Potosí in terms of sustainability, being that they trust in this institution, while many of the key actors, studied in the university campus of Rioverde or in the capital, some other where still students, therefore, they respect the entity, but hold their own opinion towards it.

In terms of sustainability, our interviewees stand mainly, that they would like to see



Photo 1 Focus group discussion with RM key actors, in CINVEXT
Author: CINVEXT Staff

the university projects spreading some results, this because according to them, the projects held by the university are not being monitored, and then the results aren't clear, F4 said:

"...people see the university as the «University», but they also see that the university projects are not being always monitored, therefore, we never get to know the results

of such projects; I think, the university should share the results of their investigations and projects with the people of the region".

Another opinion on the same subject remarked that *“(they) would like that the information generated in El Balandrán (CINVEXT) has a public utility and a major social impact, to be implemented in a productive project” -H1*

Other views mentioned that they would like to see CINVEXT as space of public access, where people can acquire new skills or meliorate them, E1 stated his opinion about this subject:

“CINVEXT can become a place where specialists in different areas work together in a multidisciplinary project, to take advantage of all the geographical advantages of the region. In such a project, all people who is willing to progress should be included, like in case they have a project in mind, in CINVEXT they could learn how to capitalize their project, how they can do it themselves, so therefore, people would stop depending on the political paternalism”

One of the government’s stakeholder opinion about what could be expected from CINVEXT and the UASLP in general, is presented by G3:

“The generated information in “el Balandrán” (CINVEXT) should have a public utility. It also, should have links with the government, with the private sector and with the civilians, so the university could have a major range of social activism and be more proactive [...] The information generated by an investigator (should) generate a resource for the implementation of a productive project”

When asked, farmers were well-defined about what they would expect for CINVEXT to be, as F2 commented:

“The investigation center (CINVEXT) has not being promoted, but we would like to see there a laboratory where we can take our organic matter, for soil test of nitrogen, phosphor and nitro-pathogen; but right now, we rely with little hope in all the institutions, however, there’s a chance for the university to teach the youth to do this kind of analysis that is needed”.

The same request was expressed by F4, whom, when interviewed, directly claimed a solution for his bigger worry:

“What we need is a laboratory close to us, it can be a laboratory from the university (referring to UASLP) [...] the university should help us, at least with that, so we can treat better our land and have a better management of the crops”.

With this in mind, we can observe that there exists some speculation about the university's products, its projects and scope, this brings up the questions about the university extend commitment with the RM society. Added to that, even though an uncertainty perception towards the university is being held among the inhabitants, they still rely in its capabilities, they know its tools and its potentialities, for that, they have a clear picture of what they could expect from it.

These opinions have the potential to give guidance to UASLP in its duties and tasks, there is no doubt that, from this point of view, the university could contribute in to ameliorate the pesticides situation, if it gives direction and help the farmers with the management of the land, which is crucial in the present days.

7.3 Development risk and opportunities

A number of key issues arise from the conception of *development*, which as mentioned in the first chapter, emerged as an economy branch, however, through time, this concept evolved to other meanings and purposes, in which not only the raising of economy is linked to welfare, but diverse elements became important, like education, environment, social dignity, gender equity, among others; all these included in the definition of sustainable development (see chapter 2.1.1); nonetheless, we have approached how the polysemy of this concept depends on the context, region and existing necessities of each case.

San Luis Potosí state's plan for development, one of the most prominent outlining documents for the state, (COPLADE, 2015) focus its strategy based on economic development, through the creation of more and better employment, the impulse for industrial, touristic, commercial, services and mining development, that will sustain the state's economic growth; this perspective is shared with another leading axes, such as fighting against poverty, health, nourishment, education, culture, equity, natural resources conservation, renewable energies, justice, civil protection, delinquency prevention, governability, corruption prevention and human rights. Clearly, this vision is close from what a sustainable development plan would propose for the development of a society, in which a more integrated, holistic and even horizontal vision would be prior to achieve development.

Nonetheless, led by the vision of economic development, the state, through the agency in charge of the economic policies: Secretaría de Desarrollo Económico (Economic Development Secretariat [SEDECO]) is promoted as an ideal platform for foreign industries investment, assuring the investors that the manufacturing activities in the region can derive in a patronal dynamic, in which the labor is guaranteed through a labor-management relationship (SEDECO, 2015), this present and promoted scenario brings to surface the need to question how stakeholders in the state approach development for the people that live in the state and what type of *development* is being promoted.

Another issue is palpable, economic inequalities in the state are among the most abysmal standards in the country, when some municipalities are positioned below the human standard rates, while others are positioned in more acceptable standards (PNUD, 2010; SEDESOL, 2017). As the industry is widely recognized as one of the major platforms for development, it is important to question to which extend, when the industrial corridors are mainly located in few municipalities i.e. San Luis Potosí, Soledad de Graciano Sánchez, Matehuala, Ciudad Valles and Rioverde; from the governmental perspective it is important to question if the rest of development opportunities driven by the state's government such as tourism, commerce, services and mining, apply and are feasible for the inhabitants who live in the most marginalized zones or if a broader perspective about development is required (SEDECO, 2015).

Even though, Rioverde corresponds to Región Media and when in this municipality the agroindustry, commerce and touristic inversions compete with the national and international economy, the situation lived in the rest of the municipalities of the region result contrasting with low development rates, migration, scarcity of population and little economic activities (Vázquez, 2011).

For RM interviewed key actors the present vulnerabilities in the region are quite clear. When they were questioned about the present situation and the problems given, each of them was able to share their perspective, nonetheless, thanks to their provided answers we can identify the major environmental vulnerabilities, presented in image 4. For inhabitants in general, the use of hazardous pesticides represents one of the major vulnerabilities of the region (interviews: F1, F3, T3, T4, M1, G3, G6, S1, E1), they link this fact as the cause of cancer in the region, even though, for them it is not clear the type and the amount of this illness presented there.



Circle 1 Key issues in RM Source: Own elaboration

In other hand, the farmer’s major concern are the pests, they related that when their crops get contaminated by the pests, they try to eradicate them as soon as possible to avoid losing the harvest. They narrated the urgency feel when they face this situation, F4 said:

“We try to avoid using dangerous pesticides, but when the pests arrive they come stronger and it is harder to kill them with the old methods; we want and we need the specialized people to tell us what kind of pests are the ones that arrive and what are their qualities, so we can know what is what we are facing, but now in order to do so, we need to take our samples all the way to San Luis Potosí, sometimes, or sometimes to Guanajuato, where they can test the soil and the plants, but, sometimes when we take the samples, by the moment they arrive in Guanajuato or in San Luis Potosí, the samples are not good anymore, they suffered changes and we don’t have the equipment to keep them alive”.

Talking about culture as a potential risk, T3 mentioned how he faces the daily behaviors of the people when, through his duties as an educator, he tries to motivate the students and the civilians:

“The culture. People is accustomed to living in a certain way. It is difficult to change the paradigm of values. The environmental issues, are not a priority of the government, every time there is an opportunity to participate or to collaborate, it is in exchange of something, money, things; if 1400 people can participate, only 50 end up participating, and here there are problems with the open brick factories that are polluting the air, farmers using hazardous pesticides, and all of a sudden, people present gastrointestinal infections...”

It would appear that due to the situation in the region, the job offer is low, but in the conurbation zone jobs are keen to find especially in small commerce, stores and boutiques, which make us wonder, why if there, there is people being poor, they don't choose to apply to one of those job offers, E1, a very active entrepreneur stated his point of view about this:

“«There are no jobs» it is what people feel and think; in reality there are jobs, the problem is that young people want to work only for a few hours, make good money with a flexible work schedule, this because “millennials” are used to immediate gratification. When they do not perceive a growth (economic), they feel frustrated and leave the task, even though the minimum wage remains low”.

About the historical situation of the region and migration, G7 shared his experience towards poverty, remittances and the reaction of the people when the scenario started to emerge in RM:

“The migration to the USA started to be very strong during the 80`s, many people here started to make money without an education, so, when they started to get money (mainly from remittances), they adopted very negative customs. With the remittances people started to buy alcohol while paying other workers to work in their land”.

As a result, through all the given responses, ideas, comments, opinions and perceptions, we can have a broader picture about the risks that RM is facing, beyond what the literature states. In a small portion of the region, the conurbation zone, is difficult to hide or to be far from the present issues, still, people find the way to manage their life in a better way.

In the next image, we present a catalogue of words that name the existent risks in the region, all of them appear exclusively according to the key actor's opinions and responses.



Circles map 1 Risks in Región Media according to interviewed key actors

There is no doubt that the agricultural activities in the region are imperative for its economy, also is the best way to take advantage of the boundaries of its geography, although, according to the key actors the agricultural practices are risking region's the environmental and human health; however, according to them, this is just one fact that makes evident the lack of better cultural practices in other aspects of daily life.

Among other problems presented in the conurbation zone, that are directly linked with sustainable development such as extreme poverty, migration, labor issues, governmental paternalism and gender inequity, these are the major problems in terms of environment, that when asked, the people from RM referred to:

RM is facing serious environmental problems, as in many other regions of Mexico, these series of problems are being underestimated by the governmental entities, and by the people who live there. For the case of this scenario, UASLP as an educative entity has the chance to deliberately contribute to ameliorate the present situation in the region; the key actors believe that education, mainly, can lead to a change of behavior and perception of the use of natural resources, in which a new civic status can arise and increase while vanishing the cloud of social confusion towards agriculture, for example, that in the region figures as the main economic activity but at the same time is the same source of water pollution.

When asked about the opportunities in the region, the key actors did not hesitate at first instance, to declare that water and the weather figure as their major opportunities; for some of them, it was even contradictory that what represents the major benefit, nowadays, figures as the major treat; many believe that the water pollution, by pesticides and bad house and street activities practices, is being the cause for cancer in this region, even though, the evidences of it are yet unknown.



Circles map 2 Opportunities in Región Media according to interviewed key actors

RM people, is people that is known for being willing to cooperate, share, construct, they are very interested in starting new projects, but they think it is important to develop a civic consciousness, to be committed with long term expected outcomes, so then, any project they are involved with, will be really integral because they will be able not only to see how it starts but how it is completed as well. Sustainability is a topic that for them is taking a substantial space in the minds of stakeholders, key actors and inhabitants in general.

Here we show some opinions that example how the key actors expressed their ideas towards Región Media opportunities.

Policies & regulations

“In the region there are no “big city” problems, so the chance to implement regulations for its development, is feasible. There are instruments (legislations) that can be implemented for a more organized region, therefore it is no longer drifting; there are many possibilities for jointly undertaking programs and projects.” - G1

Traditional agriculture
Solidarity & Social bonds

“There is the chance to start with alternative agriculture, like permaculture or agroecology, that can produce crops with a value added; working through cooperatives, is possible, because it produces synergies: “I give you, you give me”, but sometimes it is not possible to have this practices because of the paternalism, the government has damaged the chance to have other practices [...] the people here, learn with the example, they are fondly attached to the practices that produce specific results”. - F1

Educational institutions
Values & ideas

“Opportunities can be found in the university campus, in its trainings, in its courses. The mentality of the people in Región Media has changed, due to the ravages of climate change, they sought to strengthen their links with the environment, in which the government, the environmentalists work to create awareness among the people to care for the natural resources, to change the paradigm” -T2

Whilst risks appear to be overwhelming, key actors are very concise about the possible solutions, which mainly imply, from their understanding, a construction of a new civic model, because they point out that the foremost issue is the cultural behavior, probably based on a lack of information that leads to a lack of commitment, stimulated by the political paternalism, that sometimes stands against the implementation of new concepts and strategies, that at the end, take part on the specific issues of Región Media.

8 Sustainable and Regional Development of RM conceived by the stakeholders

8.1 UASLP's general resources towards Sustainable and Regional Development.

The Autonomous University of San Luis Potosí was founded in January 1923, during a period of social tribulations, such as economic and sociopolitical conflicts, derived from the 1910 Mexican Revolution. The University was founded thanks to the strong belief of state authorities and post-revolution academics and scholars, in an historical and ideological process that drove this institution to be the first university with an autonomous character in the country (UASLP, 2018).

Ever since, the university has proclaimed to be an academic entity committed with superior autonomous education that performs to serve society through the formation of professionals, conduct research and promote culture, led by the principles of academic liberty and free discussion of ideas (UASLP, 2018).

Through decades, the university has relied on different planification instruments which have served to orient decision making and its own institutional improvement. In this context, these documents have been significant and favorable, through them, the university has evaluated and demonstrated its capability in terms of academic quality not just in the state, but in the nation and in the world. In these documents, the university publicly allow to identify what is the current state with which this entity can support, or is able to support worldwide ideals, such as sustainability, which the university fondly encourage and is committed to.

Currently, the university counts with one institutional plan: Plan Institucional de Desarrollo 2013-2023 (Institutional Development Plan [PIDE] 2013-2023), this document contains and specifies the principal guidelines for UASLP's constitution and actual confinement of its actions which comprises four stages:

- 1) Mission, values, principles of university's action and vision 2023.
- 2) Analysis of the context and initial diagnosis of the situation of the institution, to identify the challenges to which the Institution must respond with opportunity and with higher quality standards.
- 3) Formulation of policies, programs and their objectives, strategies and indicators to make Vision 2023 a reality.
- 4) Internal analysis regarding the consistency of the plan.

The university committee participated in the creation of this plan, consequently, they agreed and concluded to have a forthcoming vision in which the university will achieve and will be recognized in 2023 as:

"...an institution of the highest quality, socially responsible, open, inclusive, integrated and solidly linked to its environment; promoter of the free discussion of ideas, without relations of ideological dependence or partisan politics, and its high degree of governability; as a pole of local, regional, national and international reference; for the solid formation of bachelors, professionals and citizens aware of their social responsibility; its contributions to the development of knowledge, the humanities, culture, technology and innovation; and its timely contributions and with the highest quality standards to the improvement of the human development of the society of San Luis Potosí and the country" (PIDE, 2013).

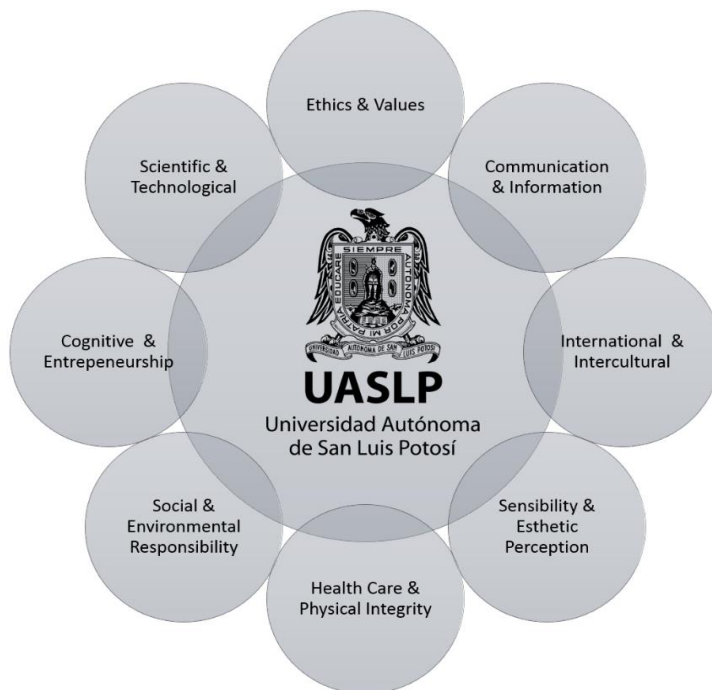
PIDE is UASLP's general guiding document, which offers a concrete approach to San Luis Potosí most relevant facts and needs; while in other hand, it presents a diagnosis in which the university denotes its strengths, weakness and challenges to pilot its own internal improvement and support the needs of society.

In order to identify the qualities that UASLP has to support regional sustainable development, we utilize this document as starting point, due to its general nature, since it presents the state of UASLP functions and strengths, that lead us to be able

to talk about what are its capacities in an introductory and general way, such as the educational offer, its academic plant, its capacity for research, linkage, art and culture, including its own sustainable and environmental perspective, and its management and administration structure.

Furthermore, as an academic entity UASLP counts with an educational model: UASLP Educational Model (Modelo Educativo de la UASLP [ME-UASLP]), this document responds to the current compulsion for innovative education in the Mexican context and presents a clear explanation and a strategy for it, outlining pedagogical goals within the university. ME-UASLP is assembled by eight transversal dimensions, each of them represents the general goals towards which, the university's educative programs, should be oriented to; this model is simultaneously oriented to PIDE goals which seeks the recognition of the institution.

About the eight dimensions it is stated that: *“This model emphasizes the development of a solid and rigorous training scientific-technological and humanistic; creativity and acquisition of high level complex cognitive skills; analytical and entrepreneurial skills; the ethical-values discernment; social responsibility; the international perspective and multicultural; autonomous and collaborative work; the appreciation of the arts and culture;*



Radial 2 UASLP Model and dimensions of integral formation.

*car*ing for one's own body and health; communication skills in at least the Spanish and English languages and the handling of information with the support of modern technologies. All this allows contributing actively to the construction of sustainability social, economic, political and environmental issues at the local level, regional, national and international” (UASLP, 2017).

ME-UASLP allow us to diagnose the present commitment of the university with education, while it exposes how UASLP ensembles its own purpose and vision based in a context that needs values, learnings and responsibilities, with and for society; one of them precisely is social and environmental responsibility, conceived as one of the transversal pillars that compose the educative model. Through ME-UASLP we encounter a holistic and complex paragon that endorse the university's commitment and skills to assist regional sustainable development, through precise educative ideals.

For PIDE and ME-UASLP, the dimension of *social and environmental responsibility* refers to the students and academics ability to identify and contribute to social, economic, political, sustainable and environmental problems, that derive in poverty, inequality, marginalization, violence, insecurity, pollution and deterioration of the natural resources; for these reasons, the students might be capable to take decisions with a wide transcendental perspective of social, economic, political and environmental sustainability.

According to the same documents, graduates are not exempted of such purposes, on the contrary, they should keep being capable to contribute to social transformation through a perspective of equity and human values such as peace, cohabitation, freedom, gender perspective and environmental protection. Also, it is stated that the graduates, during the practice of their occupation, might be able to analyze, detect and prevent possible environmental problems, even if these emerge as an outcome of their professional duties.

This endeavor will transform, all the university members, in active citizens, while they are committed to take responsibility in the environmental care and protection, while at the same time they take the needed portion of the natural resources and propose an environmental restoration whenever it comes to a necessity (UASLP, 2017). This means that the exertion of the ones who have gone through the UASLP is not limited to the campus walls, but such responsibility must be taken abroad, to the factual day by day real context.

Another document of the university that establishes its commitment with the environment and with sustainable development, is the Work Proposal 2016-2020 (Rectoría 2016-2020, 2016), in which the university's principal, outlines, that the academy's purpose is not only based in the formation, generation and transference of knowledge, but in healthy environmental and sustainable procedures, not only within the campus, but with society, for which the university postulates itself as a responsible entity, that must penetrate the social net in order to contribute and strength a culture for environmental care and preservation (Rectoría, 2016). Through this document we see how the university's main stakeholder declares its commitment with the construction of a sustainable world as a chairman, we can rely in his conviction with the goals for sustainability, and we figure this person as a tool with conviction.

UASLP has the commitment to present an annual report of its functional actions; Informe UASLP (2018), depend on every academic entities and management units. In these documents the university reports the results of its functions every year, the type of activities refers to curricula evaluation, planification, postgraduate programs, academic events participation, collaboration, existing agreements and arrangements, investigation products, acknowledgments and distinctions, university services, activities related to culture and extension.

Each of the substantive activities report a series of events held by the members, students and academics, especially, of the university. With this report, the university demonstrates its capabilities, skills and tools that it possesses in a specific manner, through these reports, we can identify the particularities of the university as abilities and capacities to assist regional sustainable development in our research area (UASLP, 2018).

On top of these documents, the university counts with an entity with a peculiar task decisively relevant for the present purpose: Agenda Ambiental (Environmental Agenda) was created in 1998 thanks to the transversal coordination between academic entities.

It has an Environmental Management System that operates supported by intense participation of the university community, whose purpose is to contribute to the construction of a culture of coexistence with nature, protection of the environment and the sustainable use of natural resources, articulated in all the work university, specifically in its functions as a teaching, research, management and relationship with the society (PIDE, 2013)

Its objective is to boost and support a sustainable and environmental perspective through its incorporation in teaching, investigation, linkage and management in the state's four regions, based in four strategic programs:

- Environmental Education Program for Sustainability (Programa de Educación Ambiental y para la Sostenibilidad [PEAS]). PEAS generate face to face and virtual venues for reflection, conceptualization and self-evaluation of different projects held by university professors about environment and sustainability.
- Postgraduate Multidisciplinary Program for Environmental Science, (Programa Multidisciplinario de Posgrado en Ciencias Ambientales [PMPCA]) which includes a Masters and a PhD.
- Environmental Management System (Sistema de Gestión Ambiental [SGA]). As a project that has the commitment to implement new habits for the sustainable transformation of the university, SGA works with all the academic entities in a transversal mode. The system includes twelve work modules:
 - Special programs for linkage and communication with society (Programas especiales de vinculación y comunicación con la sociedad).

The Environmental Agenda is the administrative and school headquarters; It also houses numerous courses and academic events: seminars, workshops, exams and work meetings academic. It also hosts the activities

By virtue, UASLP counts with profuse tools for sustainable regional development, even though, Agenda Ambiental could be named as its main tool, given that its objective is completely the promotion and the improvement of sustainability through courses, workshops, seminars, events and meetings; nonetheless, its academics

programs, investigations, research, teachers and students in general are among its key tools for sustainable development. Nevertheless, in the aim of this thesis we will expose more and specific characteristics that the university holds and that maybe are not being taking in advantage, in which the students can also learn more and new skills about regional sustainable development.

8.2 UASLP's understanding of SRD

The procedure with UASLP focal group took place in the Zona Media Extension and Investigation Center of the UASLP, located in "El Refugio" in the municipality of Ciudad Fernández, in which fifteen UASLP academics from diverse fields that work and live in the conurbation zone (Rioverde, Ciudad Fernández and El Refugio) participated in one of the two separated groups; while ten more were directly and individually interviewed from both campus: San Luis Potosí and Región Media.



Photo 2 Focus group discussion with UASLP academics in CINVEXT Author: CINVEXT Staff

The participation of these UASLP key actors was very active and a clue to understand the region's needs and the university's capabilities, in general terms and specifically on sustainability and regional development; talking about needs, their proposals and ideas emerged in a deductive way, in which their imagination

played an important role, but also in their clever perspectives and analytical and systemic knowledge.

Classification of UASLP interviewed academics

Code	P1	P2	P3	P4	P5	P6	P7	P8	P9
Age	YA	YA	YA	MA	MA	MA	MA	MA	MA
Gender	F	F	F	F	F	M	M	M	M
Code	P10	P11	P12	P13	P14	P15	P16	P17	P18
Age	MA	MA	MA	MA	MA	MA	OD	OD	OD
Gender	M	M	M	M	M	M	M	M	M

Table 9 UASLP interviewed academics profile according to their age and gender. "M" stands for masculine, "F" for feminine, "YA" for young adult, "MA" for middle-aged and "OD" for older adult. Source: own elaboration.

Whereas, university academics are more comfortable when they are questioned about their understanding and the implications of the term sustainable development, during the group interview in the focus group, one of them referred to sustainability as " ...meeting the needs of the present without compromising the ability of future generations to meet their own needs", that sounded verbatim as it is stipulated in the Brundtland inform, nonetheless most of their notions emerged from the literature, but also from their own experiences towards sustainable development, they mentioned to have attended to workshops, trainings, conferences, seminars, forums, expositions, while many of them leaded projects and activities with the students, and with both, scholars and non-scholars from a wide range of ages.

Other UASLP interviewed actors gave their own definition about sustainability, P3, a coordinator of one of the programs for environmental management commented, that sustainability is:

"It is a process, a system that seeks to rethink about the actions of society towards the environment, to generate a state of amiability between the human beings and the environment, in a friendly way"

Another coordinator in charge of one environmental education program, P2 stated her perspective on the same concept:

“It is something very wide, that covers all the topics like urbanism, commerce, metabolism; it is a whole topic that encompasses all the human aspects. It is growing but in a held way”.

In the next table, the perceptions on SRD of the interviewed UASLP academics is exposed. The following categorization is exclusively based on the responses of the interviewees, through their stated ideas, an approach of the conception towards the mentioned lines is represented as follows.

SUSTAINBLE REGIONAL DEVELOPMENT PERSPECTIVE IN UASLP					
SUSTAINBLE	REGIONAL	DEVELOPMENT	Is utopia and a guiding reference	Social Equity	Education is the best strategy
			Paradigm change	Farmers and agriculture	Civic values transmission
			Reflection	Good management	Implementation of projects
			Comprehends different levels of analysis	Long, medium and short planification	Agriculture technification
			Quality of the resources management	Adequate diagnosis	Alimentary sovereignty
			Ancestral knowledges, practices and techniques	Assertive communication	Social mindset change
			Non-harmful agriculture	Integration, interaction, exchange	Auto-motivation
			Water culture	Shared responsibility	self-learning
			Waste management	Familiarity	Self-management
			Tecniques	Values	Infrastructure
			Ecotourism	Dialogue, discussion	Technology
			Bio-remedation	Empowerment	Democracy
			Agroecology	Collective psychology	Gender equity
			Systemic thinking	Generate webs	Life quality
				Linkage	Culture
				Negotiation	Work
	Vulnerable				

Table 10 Categorization of UASLP actors towards Sustainable Regional Development Source: own elaboration based on the interviews and on the focus group.

In table 14 we observe that the participants have a rather more theoretical approach about sustainability, directly linked with activities, techniques and technologies; their understanding appears also much more abstract and substantial, than the RM's one; while speaking of region it appears that their vision relates to the government, as well, but with values and other inner capacities of the region. In other hand, their development conception is beyond the economic growth conception, where education plays an imperative role, but for self-learning and auto-motivation, aspects that are closer to the capabilities and endogenous development comprehensions.

Universities can play a key role towards regional development. The UASLP commitment with the social sphere, can find an occasion to support the development of Región Media through the planification and implementation of the university's capacities in the social field with programs, workshops and conferences in which the university's representants approach the region's inhabitants, in a knowledge exchange, to track and encourage the community towards specific approaches that suit the needs and skills of the members of the community and of the environmental context.

8.3 UASLP's capacities and experiences of SRD

After 95 years of creation, UASLP has achieved an important academic status in the thanks to its dedication towards investigation and to the implementation of thorough projects, that served for the direction and the action of the government, private sector, social entities, among others, for the construction of an organized society. Nowadays, UASLP is perceived as an entity with a solid base from which the most pristine plans and projects can be intelligently outlined to modify and contribute to the complex world and society in which we live, integrating new ideals and worldwide goals, such as global sustainability.

In order to respond to the multiple and complex social requests, there are guidelines proposed to enhance the critical and ethical skills of academics and students where not only the acquisition and transmission of knowledge is essential, but the creation and reinforcement of character for social valuable commitment between professors and students.

<i>Capacities</i>	Description
<i>Education</i>	<p>Offers extensive and pertinent educational programs that favors access to higher education in the four regions and various complementary programs that enhance critical and ethical skills while holds a sustainable and environmental perspective.</p> <p>Every academic program is composed by transversal notions of knowledge, in these it is vital to approach the perspective of sustainability.</p>
<i>Students</i>	<p>Learn to make professional, citizen and personal decisions with a broad sense of social transcendence, aimed at identifying and solving problems of social, economic, political and environmental sustainability, to contribute to social transformation with a vision of the future based on equity, quality of life, human rights, freedom, peace, coexistence and environmental protection; and that incorporate their masculinity or femininity with non-hierarchical or discriminatory links with others.</p>
<i>Academics</i>	<p>Dispose high-level recognized researchers and professors, specialized, committed and dedicated to scientific productivity; they balance and fulfill their four functions: teaching, generation and application of knowledge, management and tutoring.</p>
<i>Investigation</i>	<p>Application of theoretical and technology innovation to attend economic growth problems and human development goals to improve the life level of society, in particular of San Luis Potosí, using multidisciplinary schemes and diverse lines of generation and implementation of knowledge and research structures.</p>
<i>Linkage</i>	<p>Capacity of involvement with other institutions, academics through agreements, alliances, partnerships that leads to internationalization.</p> <p>Participation in the formulation, follow-up and evaluation of policy projects public oriented to improve the level of development of the state and the country.</p>
<i>Art and culture</i>	<p>Enrich and contributes the cultural stock of the university and of the state through courses, workshops and cultural events, to the</p>

	<p>generation, promotion and dissemination of culture and art among civilians and students to enhance human development.</p>
Health	<p>Provides and supports health and sports programs, that promotes medical check-ups, physical activities with specific programs of:</p> <p>Attention e.g. Comprehensive Care Unit and Health Research, Clinic of Psychology, Clinic Dental and Family Welfare Center, Program Integral Health Promotion, in every academic entity and in the regions, including marginalized zones.</p>
Environment and Sustainability	<p>Promotes an environmental and sustainable perspective in all the assignments of the university, contributing to the transversal construction of a culture of coexistence with nature, conservation of the environment and sustainable use of natural resources that allows facing the economic, social, cultural and environmental needs of the present, without jeopardizing the welfare of future generations.</p>
Government	<p>Supports governability and decision making based on: Democracy, justice, human rights, international perspective, communication, environment and sustainability, inclusive education, gender perspective, planification and evaluation, peace and harmony, collective work, search for truth.</p>
Values	<p>Holds a model for social responsibility. Generates, applies, promotes and spreads knowledge and culture.</p> <ul style="list-style-type: none"> • Social responsibility and commitment • Quality, equity and justice • Respect, tolerance • Honesty • Dignity • Humility • Freedom • Coherence

Infrastructure

Has important educational facilities: buildings that provide attention and serve for academic activities of research, extension and management, and adequate equipment for each of the disciplines with special attention to sustainability aspects and universal accessibility to provide optimal conditions for the development of the students and of all kind of participants.

Table 11 UASLP general capacities towards Regional Sustainable Development according to PIDE, ME-UASLP, Principal's Work Proposal and annual UASLP Reports.

Those guidelines are a useful tool for the region, because they can lead, regulate and support development plans and especially sustainable development, which also is a topic that passionate many academics, students and university functionaries. Following the guidelines of commitment, the academics expressed their feelings and thoughts towards sustainability, society and students:

Flexibility for civic

consciousness

“From the academy, one become more capable of connecting with the students and the people. A university teacher must be flexible and capable to adapt to the new trends; the teacher must be able to adapt himself/herself to the students, so as teachers, we can develop a civic consciousness, through the generation of spaces for dialogue, for integral projects, to potentialize the natural resources, but above all, to potentialize the resource that is the people” -P5

Active listening for

empowerment

“We have to use the same language of the people that one I supposed to speak to, like with the people of communities and rural zones, in an “active listening” with an attitude in which one is not supposed to teach, but to re-learn; and we must try to be part of their context, but knowing that you are not part of, avoiding the camouflage, so the people involved in a project can grow, ingrain and empower with it”-P13

UASLP as an example

for society

“The university has to be an example for civil society, if it has a good performance it functions as a replica, as a reference point for other sectors. The academy must inquire about the norms and propose, based on knowledge, better things and work in linkage through a harmonic circle, in which not only students and professors get involved, but also administrative and cleaning personal”-P18

Academics ‘abilities

and commitment

“As UASLP teachers, we are capable to reflect towards sustainability, especially when there are many experiences towards it, thanks to our investigation abilities and our interest on the subject. Our mission is to create consciousness in the students, teach them to think systematically, because we are the ones who are forming citizens, that in the future will become the stakeholders” -P3

Thanks to personal interaction, we find a real commitment and interests on the people who is actually representing the university, a commitment that is fact as it goes beyond the literature statements of the university; the comments let us perceive the real human capabilities of the university.

8.3.1 UASLP’s commitment with Sustainable and Regional Development in the RM.

Here, we will start by stating that it is important to recognize that one of the major commitments of UASLP is to perform and impulse a social-sustainable transformation in general, but of course, in the state of its interests that is San Luis Potosí, including the urban and the rural regions. For the particular case of RM, UASLP counts with two substantial tools, the Zona Media Multidisciplinary Academic Unit (UAMZM) and the Zona Media Extension and Investigation Center.

The Zona Media Multidisciplinary Academic Unit (UAMZM) is a public dependency of higher education based in Rioverde, San Luis Potosí. For 34 years it has offer educational service to the society of the Región Media. It has seven educational programs which are taught and supported by ME-UASLP, which includes the teaching of the English language, health services, sports, artistic and cultural activities, support for the students and the opportunity to complement their studies

under the “student mobility” scheme, besides the support of scholarships in different modalities.

In this unit, students and academics had worked in different projects towards sustainability, organizing recycling campaigns, challenging the students with new commitments and practices like use of bicycle, shared rides in the city and other civic habits, even though the unit counts with the promotion of Agenda Ambiental, which according to T1 the Agenda Ambiental programs could be broader and generate a higher impact if they could have a better support of the main branch.



Photo 3 Panoramic view of “El Balandrán” / CINEXT in ejido “el Refugio” of Ciudad Fernández in San Luis Potosí. Source: Rioverde, San Luis Potosí (2017).

Besides UAMZM, since June 2016, UASLP established the creation of the Zona Media Extension and Investigation Center located in el Refugio, in the municipality of Ciudad Fernández in San Luis Potosí, following the commitments established in PIDE 2013-2023, in which it is stated that the university seeks to consolidate the investigation as an element of for the generation of knowledge and for the formation of the professionals, that simultaneously search to be linked as a solution for social problems.

During the focus group session, the academics from RM expressed their reflection towards their commitment and capabilities with society, encouraged by their work as investigators and educators, in the last period of the discussion they mentioned what they expected from themselves and which character they would like to hold to support and face the contemporary issues; here we provide some comments that picture their will and awareness :

“We expect to know which actions must be implemented, what are we and the people from the region, pretending to do, to know what to must be expected”

-P11

“We are open to new ideas, that can open a major consciousness, through a vision of the future in short, medium and long term” -P7

“We can generate consciousness for a change, the chance we have now as teachers, is just a chance, a phase, and we should be rational about it” -P9

“The university can be more participative and exigent with the authorities”

P-16

“Working with the people of Región Media is something that can make you feel excited and passionate, passion can be strong but there must be levels of leadership” - P2

Together, the UASLP unit campus, CINVEXT and RM academics, can generate a space for the creation of opportunities for the collective and individual development of society, as CINVEXT was created with the mission to be a linkage platform, between the university and society, with the government and other academical institutions, private and non-governmental associations.

As a linkage platform it has the potentiality to be an open space for discussion and dialogue towards social issues, in which students, while being trained, can participate in an active participative way.

The CINVEXT's Administrative Agreement (Acuerdo Administrativo, 2016) affirms that this center "...Will work together with the different academic entities, thanks to its geographical location and infrastructure, to promote continuous education and the extension to the alumni in their professional acts. Also, based on its substantive activity to promote the culture, this space will be a regional referent, in charge of offering action spaces to all the university's dependences in charge of such task".

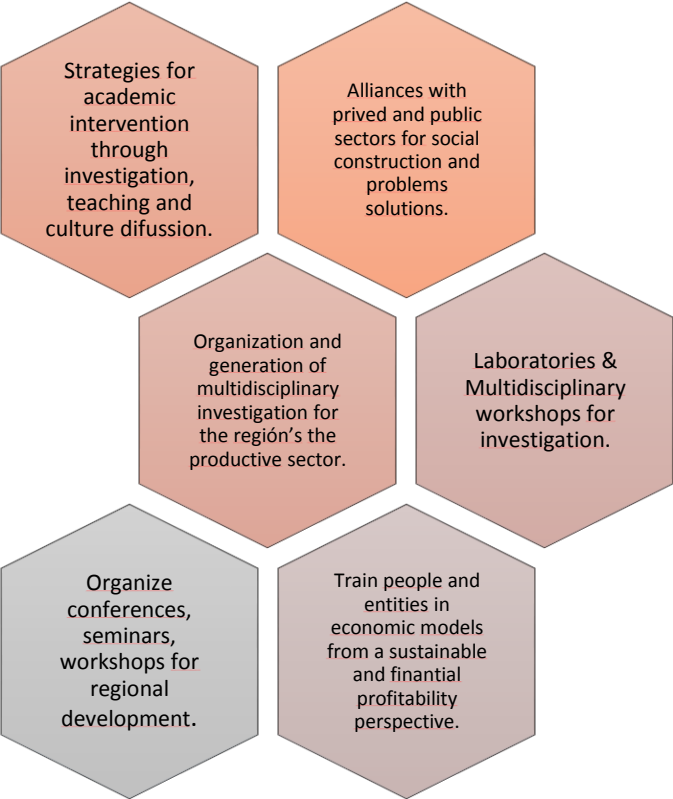


Chart 2 CINVEXT's commitments for Regional Sustainable Development of Región Media Source: Own elaboration based on Acuerdo Administrativo, 2016.

Haven said that, UASLP completely counts with the basic and general tools and capabilities to generate the conditions and spaces that can allow the organization of multidisciplinary investigations that can provide remedies for the benefit of the region's development.

8.4 UASLP relevant sustainable development capacities for Región Media

Based on the UASLP reports 2014 2015, 2015-2016, 2016-2017 and 2017-2018, the most recent years, we can find a wide range of activities that have the potential to contribute to the regional development and sustainability of the RM.

The projects that have been carried out in the university around the management of water, the waste of the waste, the use of land and even tourism, are coarse, here we present some examples of its vast capacities:

UASLP activities that serve as examples of its tools and capacities towards RM's RSD

<i>Entity / Faculty</i>	<i>Project / Activity</i>	<i>Description</i>	<i>Program Contribution to SRD</i>
<i>University Linkage</i> <i>Vinculación universitaria</i>	Forum of Impulse and Financing for Entrepreneurs Foro de Impulso y Financiamiento para Emprendedores	The Impulse and Financing Forum for Entrepreneurs was held, in coordination with the Financing System for the Development of the State of San Luis Potosí (Sifide) and the state representations of the Employer Confederation of the Mexican Republic (Coparmex), the National Chamber of the Industrial Transformation (Canacindra) and the National Chamber of Commerce Services and Tourism (Canaco-Servytur). Where, magisterial and thematic conferences were offered, as well as the approach with financial instances of support to the entrepreneur and the entrepreneur. In addition, the Investor Conferences to Support Entrepreneurs of the UASLP were held, with the participation of potosino businessmen and financing institutions willing to support financially.projects of entrepreneurs of this house of studies, where 21 business projects carried out by university students participated.	Calidad de vida endógena
<i>Academic Multidisciplinary Unity Huasteca Zone</i> <i>UnityUnidad Académica</i>	Sustainable Tourism Bachelor Licenciado en Turismo Sustentable	Students learning sustainable tourism skills (manage and promote recreational alternatives in harmony with the environment while seeking to preserve the cultural and traditional spaces) can participate and exchange experiences and ideas of projects held in Región Huasteca.	Calidad de vida endógena Consideración ambiental

<i>Multidisciplinaria Zona Huasteca</i>				
<i>Faculty of Agronomy and Veterinary</i>	<i>of and</i>	Laboratory of Climatic Variability, Remote Sensing and Agricultural Risk Assessment	Compile and integrate hydrometeorological information at the municipal level to update it. Participate in the environmental diagnosis of municipalities in general, and in particular, those in which there is information of having vulnerable hydrological resources. Participate in the assessment of the vulnerability of ecosystems and in the design of strategies to adapt to climate change. Collaborate in the formulation of technological alternatives to prevent risks in water resources. Collaborate the application of Geographic Information Systems for the presentation of results (mapping).	Consideración ambiental
<i>Facultad de Agronomía y Veterinaria</i>	<i>de y</i>	Laboratorio de Variabilidad Climática, Teledetección y Evaluación de Riesgos Agrícolas		
<i>Faculty of Engineering</i>	<i>of</i>	Collaborative research	Generation of a holistic model for the sustainable management of semi-protected and protected horticultural crops in San Luis Potosí	Colaboración Territorial
<i>Facultad de Ingeniería</i>	<i>de</i>	Investigación Colaborativa		Consideración ambiental
<i>Faculty of Engineering</i>	<i>of</i>	Posgrado en tecnología y gestión del agua	Project for the development of infrastructure that solves the problem of scattered open-air dumps, and controls the management of solid urban waste, through the construction of sanitary landfills with a useful life of 10 to 15 years. Within the Executive Project for the Construction of eleven Sanitary Landfills.	Consideración Ambiental
<i>Facultad de ingeniería</i>	<i>de</i>	Postgraduate in technology and water management		Calidad de vida endógena
<i>Faculty of Engineering</i>	<i>of</i>	Posgrado en tecnología y gestión del agua	Groundwater is an important water resource in the semiarid Mexican Altiplano, which is exposed to intense exploitation. Since the 1970s, the focus of the water suppliers has increasingly been placed on deep aquifers provoking a significant drawdown of the groundwater surface. New approaches in water management are therefore needed to keep pace with the increasing water demand. Two sedimentary basins are selected for a comprehensive study of their deep groundwater resources. By evaluating hydrogeological data as well as climate data, conceptual models are being developed ending up in flow models	Consideración Ambiental
<i>Facultad de ingeniería</i>	<i>de</i>	Postgraduate in technology and water management		Calidad de vida endógena Colaboración Territorial
		Understanding the systems of deep flow of groundwater to contribute to the sustainable development of water resources in the Mexican Altiplano		

		Comprendiendo los sistemas de flujo profundo de agua subterránea para contribuir al desarrollo sostenible de los recursos hídricos en el Altiplano Mexicano	subsequently. Comparing both systems, parallelism shall be identified concerning the flow behavior to generate modeling patterns and comparisons shall be drawn to hydro-chemical data of former studies. In a first step, a conceptual model of the basin of San Luis Potosí is build using state of the art geological 3D-modelling techniques.	
<i>Faculty Engineering</i>	<i>of</i>	Sustainability model for the sovereignty of vulnerable communities.	Application of UASLP developments in eco-techniques for energy generation, water use and food production in urban areas	Calidad de vida endógena
<i>Facultad Ingeniería</i>	<i>de</i>	Modelo de sustentabilidad para la soberanía de comunidades vulnerables.		Consideración Ambiental Colaboración Territorial
<i>Institute Metallurgy</i>	<i>of</i>	Programa de manejo ambiental	Promote a culture of respect for the environment, which includes, among other things: the management of non-hazardous solid waste, both for its disposal and for its use by recycling, handling and care of important resources such as water and electricity; for which not only consumption was reduced, but also economic savings have been generated.	Calidad de vida endógena
<i>Instituto Metalurgia</i>	<i>de</i>	Environmental management program		Consideración Ambiental Colaboración Territorial
<i>Agenda Ambiental</i>		Collaboration, mobility and academic exchange Colaboración, movilidad e intercambio académico	CER El Estribo, the Secretariat of Agricultural Development and Hydraulic Resources (Sedarh), the National Institute for the Development of Capacities of the Rural Sector, A.C. (INCA Rural), Sugarcane Product System, Committee for Health and Safety of Sugarcane (Cosica) and the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (Sagarpa), with the purpose of generating identity, purposes common and vision of the future of the sector.	Calidad de vida endógena Colaboración Territorial
<i>Agenda Ambiental</i>		Collaboration, mobility and academic exchange Colaboración, movilidad e intercambio académico	Center for Education and Training for Sustainable Development (Cecadesu) and with the Ministry of Environment and Natural Resources (Semarnat) to carry out the preparation of a manual for the design of the School Environmental Management System and the celebration of a Fair of Environmental education.	Calidad de vida endógena Consideración Ambiental

<i>Facultad de Agronomía y veterinaria</i>	Good Government Buen Gobierno	This academic entity participates in the councils: State, District and Municipal Development Rural Sustainability; in the State Forestry Council; in the State Commission of Pesticides, Fertilizers and Toxic Substances (Cesplafest); in the technical councils Subterranean Water (Cotas) of San Luis Potosí and Villa de Arista, San Luis Potosí; participates as a Vocal Advisory Board of the Regional Research Center of the Northeast (Cirne) of the National Research Institute Forestry, Agriculture and Livestock (INIFAP) and the Fundación Produce SLP and the management in the Presidency of the Mexican Association of Education Agrícola Superior, A. C. (AMEAS)	Consideración Ambiental Colaboración Territorial
<i>Human Strengthening Office</i> <i>Dirección de Fortalecimiento Humano</i>	University Observatory of Equity and Gender Observatorio Universitario de Equidad y Género	Promote a culture that creates new constructions of meaning for university and university students to incorporate their masculinity and femininity with non-hierarchical or discriminatory links in the different areas of their development: personal, professional and social. Promote a culture of gender equity through training and research on gender. Implement the gender policy as a strategy of innovation and strengthening of the institutional image.	Calidad de vida endógena Colaboración territorial

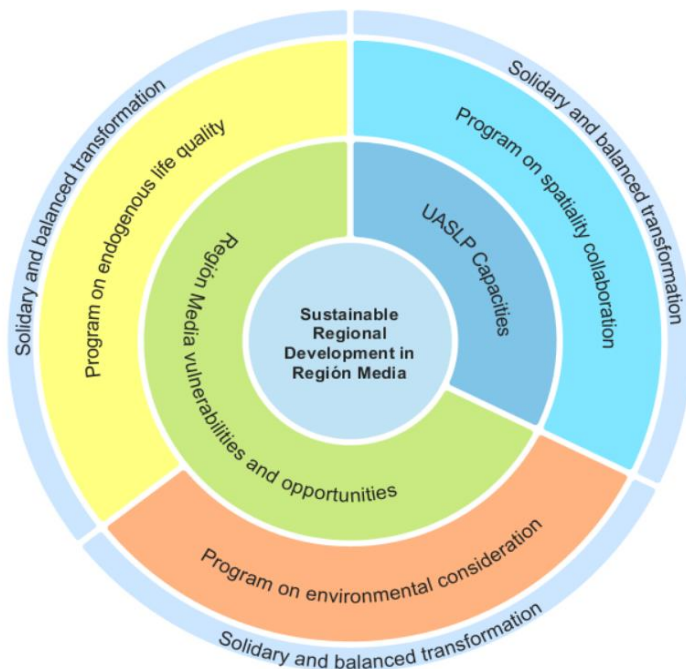
*Table 12 UASLP activities that serve as examples of its tools and capacities towards RM's RSD
Source: Own elaboration, based on Reports 2014-2015, 2015-2016, 2016-2017, 2017-2018.*

9 Portfolio of potential projects: UASLP and Región Media in co-action *The linking model.*

9.1 Regional Sustainable Development goals for Región Media

In order to develop a proposal, the aims of it should be clear, the path to it is an extensive understanding of the conditions and the features of the subject of study for which a plan is being fostered.

For the creation of this model, prioritizing the goals that want to be achieved has been a task that was intended based on explicit demands of the consulted inhabitants, this offers the chance to acquire a visible benefit for the people, for a “solidary and balanced transformation”.



Radial 3 Linking Model

The linking model comprises three programs, with specific activities and goals, while the major target we propose to be accomplished is a region that contains a society that collaborates through solidarity, that seeks a balanced use of its resources and transform itself using a long-term plan vision with which they can engage reinforced by the university and other

institutions; this was deliberated in an exercise of understanding people’s perceptions, a path to point out what are the desired specific goals of the region.

The perceptions towards Sustainable Regional Development in the three particular subjects of study: theory (itself), Región Media and UASLP are different in some features, they do not hold the same perception about each field of inquiry, on the

contrary, it is observable that UASLP relies completely in the theoretical framework, they consider that to approach and achieve the mentioned target, there must be an analysis of the current state of the region, then a planification must be held in which even, the diverse cosmovision must be part of the analysis and the planification.

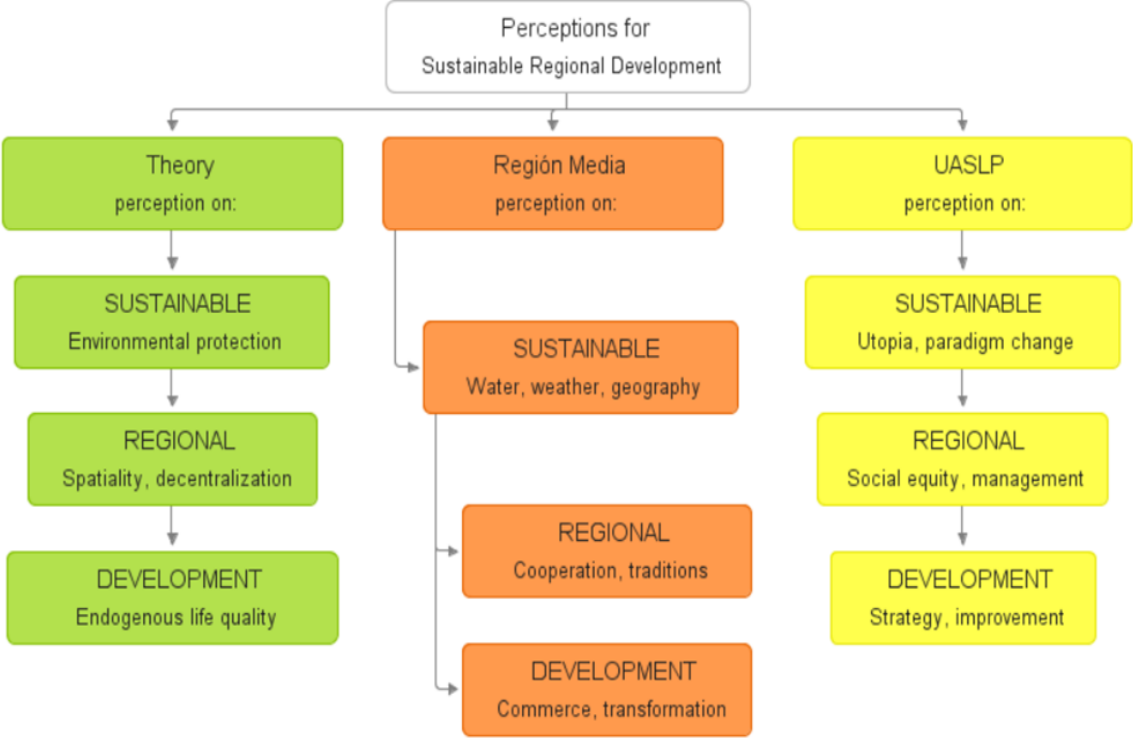


Diagram 7 Perceptions on Sustainable Regional Development from the theory, UASLP and RM interviewed people.

While RM people, holds a more, rather simplistic way, of approaching the three concepts, they point out their forthcoming requirements, especially the personal ones, there is no doubt that their perception can be enhanced through some help and guidance, so people in the region can enhance their understanding and perception on sustainability, this will provide them of clarity in terms of what they can envisage for development and sustainability.

To present another more detailed comparative approach to observe, understand and categorize both groups' perceptions, we created the next table, in which we find Table 8 and Table 10 assorted through categories, that simultaneously, define the theoretical perspective on Sustainable Regional Development and summarize the

inventory of the former perceptions. Evidently, the aim of this table is analogous to the Diagram 7, but explicit.

	RM perspective	Category	UASLP perspective
Sustainable	Balance Relation between human beings, environment and society Nature conservation areas	Theory	Is utopia and a guiding reference Paradigm change Reflection Comprehends different levels of analysis Environmental education
	Water Soil Weather Geography	Resources	Quality of the resources Work force
	Techniques Sustainable technology Planting trees Placing waste Using bicycles Alternative agriculture Good agriculture practices Environmental culture Recycling Pluvial water use	Techniques & technology	Techniques Ancestral knowledges for agricultural practices and techniques Non-harmful agriculture Waste management Ecotourism Bio-remediation Agroecology Water treatment

	<p>Regenerate Reconstruct Re-educate</p>	<p>Processes</p>	<p>Management Adequate diagnosis Cross-cutting projects</p>
Regional	<p>Cooperatives Government support Working with Ejidatarios⁶ Municipalities linkage Regulation Legislation</p>	<p>Government</p>	<p>Social Equity Good management Long, medium and short time planification</p>
	<p>Agriculture Crops Productive processes Work with local experts Citrus and vegetables</p>	<p>Traditions</p>	<p>Integration Interaction Exchange Familiarity Values Dialogue Discussion Farmers and agriculture Cosmovision</p>
	<p>Regional balance Discussion panels Leadership Participation Commitment</p>	<p>Territoriality</p>	<p>Empowerment Collective psychology Generate webs Linkage Vulnerabilities Better infrastructure Negotiation Shared responsibility Planification Regional culture Alimentary sovereignty</p>

⁶ Ejidatario/s refers to a person who is in charge of a communal area for agriculture, in which families live and share communal holdings in Mexico.

Development	Commerce Modernization Remittances Technology Economy boost Tourism Entrepreneurs Industry Small business	Economy	Implementation of projects Technological agriculture Corporate values Industry Tourism
	Change Mobility Better life conditions Education Awareness Motivation	Transformation	Social mindset change Self-management Technology Democracy Gender equity Life quality Culture Crops rotation Research & indicators
	Opportunities Competence Training Workshops Education for all ages Institutions Skills Comprehensive development Commitment Realistic education & projects	Education	Education is the best strategy Civic values transmission Environmental protection culture Work with foreign experts Systemic thinking Knowledge & awareness Self-learning Auto-motivation Assertive communication

Chart 3 Comparisons between RM and UASLP Sustainable Regional Development, based exclusively on the interviews. The categorization is a proposal of the author. Source: Own elaboration based on RM and UASLP interviewed people.

This table's content provides a tool for the discursive comprehension of the interviewed groups. As it was stated, the perception on SRD of the UASLP actors is definitely one more academical, rhetorical and analytical, while the one of RM people

can be considered one-dimensional, even though it is noticeable that they possess a considerable range of information about the topic of discussion.

On this point we stand, again, that the university academics and scholars have an opportunity of education, in terms of how sustainability can be conceived in a region, where a topic and a plan for education or re-education can start and be led through a question about how important is that a region's inhabitants be aware about the debate and the discussion towards environment, this means, how important is that the civilians extend their own perception and conception concerning such a subject.

As a result, alternative changes can be expected from a population that is informed and takes part on the discussion and debate towards a topic that pretends a change of paradigm. A more informed population that participate through debate and dialogue can be beneficial for a collective mindset change that concurrently contribute to the other aspects of the same paradigmatic plan, in the case of RM people, they demonstrate a general understating on RSD, but it could evolve to a common but eclectic understanding for a more collaborative potential in the future

Another skill that can potentially be taught in the region by the academics, and that they mentioned as important for sustainability, is the systematic thinking. It is known that being able to have a systemic comprehension is imperious when it comes to deliberate about the best way to build a sustainable paradigm (García, 2006, Morin, 2013), a systemic conception, is an ability, an intellectual capacity that allow us to see the interconnection between facts; in this case, we attempt to have such an approach to present the connection web in which risks and opportunities are involved in an interlace that is adjacent to each other, as we observed during the focus group discussion, that most of the times, what appears to be an opportunity, a good quality of the region, is at the same time its risk or is close to become it; an example of it is the water, which amongst RM people and UASLP actors, is seen as one of the main region's goodness, but the present condition of this element is a menace for their health.



7

Circles map 3 Spheres name the risks and opportunities in RM, lines show a linkage and a relation between all of them. Sustainability comprehends the interrelation of facts given, these facts emerged exclusively from the perception of the interviewed people in RM and in SLP. "Risks can also be opportunities, or lead to new opportunities, and an opportunity can be a risk" -T3. Source: own elaboration.

Therefore, it is important to visualize such interconnection, where we can see that the problems (risks) are part of the solutions (opportunities) and it can be vice versa if the implemented amending methods doesn't take in consideration how the secure

⁷ The numbers in the circles have no significance neither meaning, for its interpretation. The colors were also selected at random.

and possible effects contribute to the ultimate development goals and to the interconnection of the elements and facts that are environmentally given.

The next table is comprised by the same elements presented in Chart 3 but in a linear manner in which the elements can be perceived *disconnected*, this is done in purpose to show a first approach to the constituents of our linking model; following the conception of a model that can be divided in three axes: nature, region and society that at the same time stand for sustainable, regional, development; each program’s aim is to collaborate for the risks that RM is currently facing; nonetheless, opportunities can appear repeatedly as part of the solution for different risks in one than more program.

Región Media Goals for SRD: “Solidary and balanced transformation”				
Axes	Program name ⁸	Goals	Risks	Opportunities
Nature	Programa de Consideración Ambiental	1. Water management	*Water pollution *Unknown & uncontrolled pests	*Water, weather & geography *Technological agriculture
		2. Healthy soil & crops	*Monocultures *Deforestation	*Beneficial weather *Alternative agriculture methods
		3. Forest preservation	*Clandestine dumps *Unprotected natural sites	*Geographical position *Crops rotation
		4. Waste management	*Hazardous pesticides *Construction in fertile soils	*Reforestation *Sustainable tourism
		5. Natural sites protection		*Recycling spaces & campaigns *Traditional agricultural practices *Policies & regulations *Sustainable mobility

⁸ The programs kept its names in Spanish, just to maintain the originality of the names, in this specific case, we try to avoid some translation issues, like the precision of the word’s terminology.

Region	Programa de Colaboración Territorial	<ol style="list-style-type: none"> 1. Administration & Cooperation 2. Regional voice & participation 3. Traditional wisdom & knowledge 	<ul style="list-style-type: none"> *Lack of planning and vision *Unfinished projects *Basic infrastructure *Intransigent social behavior 	<ul style="list-style-type: none"> *Learn for planification *Sustainable mobility *Participation & cooperation *Leadership *Solidarity and social bonds *Values & ideals *Endogenous capabilities identification *Traditional agricultural practices
Society	Programa de Calidad de Vida Endógena	<ol style="list-style-type: none"> 1. Education & Values 2. Local capacities for economy 3. Self-reliance & government 4. Diffusion for health 	<ul style="list-style-type: none"> *Lack of civic skills *Low income *International & internal migration *Political paternalism *Political and institutional credibility gap *Corruption and political imbalance *Gender inequity Cancer morbidity *Extreme poverty 	<ul style="list-style-type: none"> * Educational institutions *Endogenous capabilities identification *Learn for planification *Job offers *Sustainable tourism *Traditional agricultural practices *Leadership *Collective dialogue and participation *Values & ideals *Gender equity *Technological development *Research and publication

Table 13 Región Media Goals for SRD: "Solidary and balanced transformation", first approach to the axes and programs proposed for the linking model. Source: Own elaboration.

The risks and opportunities are classified in each of the three programs, as if they particularly belonged to one specific axe, this is presented in this way to facilitate the tasks and the objectives that match with the capabilities of the UASLP, which are also classified in their data. The source of the identified risks and opportunities that are presented in this table, come from the interviews with both groups and from the revised literature about RM, that seem to be very imperative and implicit in the region's actual state of reality, even though the interviewees did not point out to those scenarios.

9.1 Linking RM opportunities with UASLP capacities

The present risks and problems given in Región Media are a mix of “good” and “bad” cultural and social practices that have been carried out in that way for years, we do not know exactly how the contemporary culture of Región Media was shaped like that through its history, it would comprehend another series of surveys that certainly, would greatly support the objectives of this thesis.

For that reason, we propose a series of activities that seek to ameliorate specific present key environmental- social issues of the region (see *Circle 1*), through them, we envisage a transformation of a portion of its reality; the whole scenario in which these, among others, risks are present is very large, and in order to develop a whole program and a series of plans for the resolution of the all the issues, a considerable group of people with different academic backgrounds and specialties, will be needed to work altogether towards this task, also, a considerable amount of time would be, as well, needed. Even though, the problematic is huge, there exist almost the same size of opportunities, tools, dispositions, skills, capabilities that definitely could contrast the ongoing situation and its circumstances.

The next sheets contain the portfolio of potential projects, activities, workshops, trainings conferences, among others. They are outlined by the form of a log frame, that recovers the information of Table 12 about the UASLP capacities, the goals for RM, the SDG's, activity, input, outcome, expected impact and time. As a model it is perfectible, just, as it starts being implemented, it will be accurate for modification, because more realistic features for its implementation will appear, then it will continue being perfectible.

Continuing with the approached theories that support the proposed linking model, we expose the *endogenous and capabilities development theory*, and we recommend it as a tool to reinforce the capabilities of RM.

**REGIONAL SUSTAINABLE DEVELOPMENT IN REGIÓN MEDIA THROUGH THE ZONA MEDIA EXTENSION AND INVESTIGATION CENTER
OF AUTONOMOUS UNIVERSITY OF SAN LUIS POTOSÍ
LINKING PORTFOLIO**

NATURE		PROGRAMA DE CONSIDERACIÓN AMBIENTAL					
OBJECTIVE:		PARADIGM CHANGE IN REGIÓN MEDIA THROUGH PARTICIPATIVE ENVIRONMENTAL PROTECTION, ESPECIALLY ON WATER, WEATHER AND ITS GEOGRAPHICAL POSITION.					
GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Economy, agriculture and sustainable tourism:</p> <p>Ancestral knowledges for agricultural practices and techniques</p>	Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	<ul style="list-style-type: none"> ~ Unidad Académica Zona Huasteca ~ Licenciatura en Turismo Sustentable 	Students who are learning sustainable tourism skills (manage and promote recreational alternatives in harmony with the environment while seeking to preserve the cultural and traditional spaces) can participate and exchange experiences from Región Huasteca in Región Media	<p>Stablish a community committee and people interested in sustainable tourism, ejidatarios for example working altogether in workshops, participating in policies construction and learning sustainable tourism skills</p> <p>Regional cooperation and social service: Sustainable tourism students can support the planification and implementation of sustainable tourism in the region, using their own knowledge and skills in the natural sites.</p> <p>It is important they contact the <i>ejidatarios</i> or the people who live in the surroundings of the natural sites, to plan and work together, especially because this people is the know who in the future will be taking care of the site.</p> <p>Students can work together with the municipality political actors to know the current plans and regulations for sustainable tourism.</p>	Capacity to build, preserve and manage the natural touristic sites	Sustainable Tourism will become a practice in RM that will allow RM people to a	<p>Medium term</p> <p>And long term</p>
		<ul style="list-style-type: none"> ~ Región Media's Natural sites, e.g.: "media luna", "los peroles". ~ Municipality political actors ~ Ejidatarios ~ Hotel owners 					



SOCIETY

PROGRAMA DE CALIDAD DE VIDA ENDÓGENA

OBJECTIVE:

IMPULSE ENTREPRENEURSHIP IN THE REGION TO REDUCE POVERTY, MIGRATION AND LOW-INCOME JOBS AND DEVELOP AN ECONOMY BASED ON ENDOGENOUS CAPABILITIES.

GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Economy, agriculture and sustainable tourism</p> <p>Solidarity and Cooperation</p>	Goal 1. End poverty in all its forms everywhere	<p>~ University linkage</p> <p>~ Academies</p> <p>~ Entrepreneurs</p> <p>~ Farmers</p>	<p>The university held The Financing Forum for Entrepreneurs, in coordination with the Financing System for the Development of the State of San Luis Potosí (Sifide) and the state representations of the Employer Confederation of the Mexican Republic (Coparmex), the National Chamber of the Industrial Transformation (Canacintra) and the National Chamber of Commerce Services and Tourism (Canaco-Servytur). Where, magisterial and thematic conferences were offered, as well as the approach with financial instances of support to the entrepreneur and the entrepreneur. university students participated.</p> <p>Source: Informe 2017-2018</p>	<p>Workshop: Financing Forum for Región Media Entrepreneurs.</p> <p>Call for all ages people interested in economy, investment, local producers, artisans, local farmers, to learn skills for planification and explore alternative investments for longer-term financial goals, using local produce and resources.</p> <p>Conferences: for startups and investment can be offered.</p>	<p><i>Capacity for short, medium and long-term plan business investment and business startups in the region.</i></p> <p><i>achieve full and productive employment and decent work for all, and equal pay for work of equal value.</i></p>	<p>RM people will be able to add possibilities for their future investment and business projects based on local resources and traditions.</p> <p>Creation of new Tourism jobs with an interest on sustainability</p>	<p>Medium term</p> <p>And long term</p>



NATURE

PROGRAM A DE CONSIDERACIÓN AMBIENTAL

OBJECTIVE:

PARADIGM CHANGE IN REGIÓN MEDIA THROUGH ENVIRONMENTAL PROTECTION, ESPECIALLY ON WATER, WEATHER AND ITS GEOGRAPHICAL POSITION.

GOAL	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Waste management</p> <p>Bio-remediation</p>	<p>Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>	<p>~ Faculty of Engineering</p> <p>~ Postgraduate in technology and water management</p> <p>~ Municipality stakeholders</p> <p>~ NGO's</p> <p>~ Ejidatarios</p> <p>~ Academics</p> <p>~ Students</p> <p>~ RM people</p>	<p>Project for the development of infrastructure that solves the problem of scattered open-air dumps, and controls the management of solid urban waste, through the construction of sanitary landfills with a useful life of 10 to 15 years. Within the Executive Project for the Construction of eleven Sanitary Landfills, I conducted the eleven environmental impact studies for the construction of sanitary landfills in the following municipalities: Villa de Reyes, Río Verde, Tamuín, Tamasopo, Cárdenas, Alaquines, Lagunillas, Matlapa, Villa de la Paz, Vanegas and Villa de Ramos, belonging to the state of San Luis Potosí.</p>	<p>Project for the development of infrastructure that solves the problem of scattered open-air dumps in Región Media, that includes waste recollection in the rural communities and on the surroundings of the conurbation zone and the rest of the municipalities.</p> <p>Workshop: "waste management tools, waste conversion and recycling", for local vendors and commerce, farmers, tourist sites workers, local market people, ejidatarios, stakeholders, academics and RM people.</p>	<p><i>Social commitment towards waste management.</i></p> <p><i>No more clandestine dumps and waste burning.</i></p>	<p>Proper waste management,</p> <p>New civic skills for the change of practices towards waste in the region.</p>	<p>Short</p> <p>Medium</p> <p>and</p> <p>Long-term</p>



SOCIETY

PROGRAMA DE CALIDAD DE VIDA ENDÓGENA

OBJECTIVE:

PARADIGM CHANGE IN REGIÓN MEDIA THROUGH THE INCLUSION AND RECOGNITION OF WOMEN AND SEXUAL DIVERSITY PEOPLE

GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Education and values</p> <p>Self-reliance and government</p> <p>Gender equity</p>	<p>Goal 5. Achieve gender equality and empower all women and girls</p>	<p>~ Human Strengthening Office</p> <p>~ University Observatory of Equity and Gender</p> <p>~ Municipality stakeholders</p> <p>~ NGO's</p> <p>~ Ejidatarios</p> <p>~ Academics</p> <p>~ Students</p> <p>~ RM people</p>	<p>Promote a culture of gender equity through training and research on gender. Implement the gender policy as a strategy of innovation and strengthening of the institutional image.</p>	<p>Workshops: "Awareness through a gender perspective"</p> <p>"Live plan for women"</p> <p>"Emotional containment for nonviolence".</p> <p>"Psychosocial competences for the resolution of conflicts".</p> <p>"Assertiveness".</p> <p>"Spaces free of homophobia and discrimination"</p> <p>Cycle of conferences (topics examples):</p> <p>"Time for everything, reconciliation between work and family."</p> <p>"Masculinities"</p> <p>"Raise awareness on homophobia, transphobia and discrimination".</p>	<p><i>Integrate and value women's</i></p> <p><i>Opinions, decisions, interests in the Region.</i></p> <p><i>Include the participation of sexual diversity people.</i></p>	<p>Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.</p> <p>Recognition of all forms of sexual diversity in the region.</p>	<p>Short and Medium term</p>



OBJECTIVE:

PARADIGM CHANGE IN REGIÓN MEDIA THROUGH ENVIRONMENTAL PROTECTION, ESPECIALLY ON SOIL AND WATER PROTECTION

GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Water management</p> <p>Quality of the resources</p> <p>Water pollution by pesticides and by bad practices</p>	<p>Goal 6. Ensure availability and sustainable management of water and sanitation for all</p>	<p>~ Faculty of Agronomy and Veterinary Medicine</p> <p>~ Climate Variability, Remote Sensing and Agricultural Risk Assessment Laboratory</p> <p>~ Farmers</p> <p>~ Academics</p> <p>~ Ejidatarios</p> <p>~ RM people</p>	<p>Compile and integrate hydrometeorological information at the municipal level to update it. Participate in the environmental diagnosis of municipalities in general, and, in those which there is information of having vulnerable hydrological resources. Participate in the assessment of the vulnerability of ecosystems and in the design of strategies to adapt to climate change. Collaborate in the formulation of technological alternatives to prevent risks in water resources. Collaborate the application of Geographic Information Systems for the presentation of results (mapping)</p>	<p>Workshop in which farmers, ejidatarios, campesinos and public in general can participate in the assessment of the vulnerability of ecosystem in which they can learn strategies for climate change adaptation to develop an assessment for such vulnerabilities and design strategies that can be held in the region with alternatives to prevent risks in water resources</p> <p>Training: for environmental diagnosis in which community members, farmers especially and students can participate during a medium-term lapse.</p>	<p><i>Capacity to identify environmental vulnerabilities, especially in water and soil.</i></p> <p><i>Participants will be able to assess and learn how to adapt strategies for climate change and change their practices.</i></p>	<p>Water bodies will be preserved uncontaminated.</p> <p>RM people will learn to collaborate in the design of strategies and solutions changing their current bad practices for new ones that will include environmental protection and commitment.</p>	<p>Short</p> <p>Medium</p> <p>and</p> <p>Long-term</p>



OBJECTIVE:

PARADIGM CHANGE IN REGIÓN MEDIA THROUGH THE USE OF LOCAL SKILLS, CAPABILITIES AND ABILITIES TO INCREASE REGIONAL EMPOWERMENT AND DEVELOPMENT.

GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Productive Processes</p> <p>Work with local experts</p> <p>Integration</p>	<p>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p>	<p>~ Faculty of Engineering</p> <p>~ Habitat Faculty</p> <p>~ Social service</p> <p>~ Agenda Ambiental</p> <p>~ RM people</p> <p>~ Farmers</p> <p>~ Campesinos</p>	<p>Application of UASLP developments in eco-techniques for energy generation, water use and food production in urban areas</p>	<p>Workshop and trainings: For the creation of green spaces: (gardens, orchards), in collaboration with the university and RM people from all ages. In patios, terraces, roofs and common public spaces.</p> <p>Workshop: Urban and rural orchards, in which farmers and university specialist are able to share their knowledge towards agriculture and orchards with the civilians that have no background on this task.</p> <p>Workshops: "How to create your own biofilter for plants' watering". Creation of biofilters using local resources, stones, plants, fishes.</p>	<p><i>Use local resources to develop eco-techniques for helping environmental issues to diminish.</i></p> <p><i>Identification of capacities, skills, empowerment.</i></p>	<p>Community members will be able to identify and implement in collaboration, proper sustainable local techniques.</p> <p>Food production.</p>	<p>Short and Medium term</p>



OBJECTIVE:

PARADIGM CHANGE IN REGIÓN MEDIA THROUGH DIALOGUE AND DISCUSSION BETWEEN THE INSTITUTIONS AND THE PEOPLE

GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Social equity</p> <p>Good Management</p> <p>Self-reliance and government</p> <p>Long, medium and short time planification</p> <p>Ancestral knowledges for agricultural practices and techniques</p>	<p>Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p>	<p>~ Agenda Ambiental</p> <p>~ University Linkage</p> <p>~ Collaboration, mobility and academic exchange</p> <p>~ Municipality stakeholders</p> <p>~ NGO's</p> <p>~ Ejidatarios</p> <p>~ Academics</p> <p>~ Housekeepers</p> <p>~ Campesinos</p> <p>~ Students</p> <p>~ RM people</p>	<p>CER El Estribo, the Secretariat of Agricultural Development and Hydraulic Resources (Sedarh), the National Institute for the Development of Capacities of the Rural Sector, A.C. (INCA Rural), Sugarcane Product System, Committee for Health and Safety of Sugarcane (Cosica) and the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (Sagarpa), with the purpose of generating identity, purposes common and vision of the future of the sector.</p>	<p>Discussion panels and round tables: Invite civilians to collaborate and participate through their opinions in the creation of a plan for regional development, in which traditions, cosmovision and costumes are considered as important for the autonomy and identity of the region's inhabitants.</p> <p>Cycle of conferences (topics examples):</p> <p>"The importance of decentralization"</p> <p>"Creation of an endogenous model for the region"</p> <p>"Our capabilities transform our own reality".</p> <p>"The scope of regional commitment and engagement"</p>	<p><i>Integrate and value opinions, decisions, interests of everyone in the Region.</i></p> <p><i>Include the participation of civilians when projects are being carried out.</i></p> <p><i>Commitment and engagement between all institutional partners</i></p>	<p>Long term regional planification and collaboration.</p> <p>Civic values transmission and implementation</p> <p>Regional knowledge and awareness</p> <p>Autonomy</p>	<p>Short and Medium term</p>



SOCIETY

PROGRAMA DE CALIDAD DE VIDA ENDÓGENA

OBJECTIVE:

TRANSFORMATIVE EDUCATION IN THE REGION FOR EVERYONE THAT WOULD LEAD TO AN ENVIRONMENTAL CULTURE AND TO A CHANGE OF DETRIMENTAL HABITS

GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Education for all ages</p> <p>Systems thinking</p> <p>Self-learning</p> <p>Environmental protection and culture</p>	<p>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p>	<p>~ Agenda Ambiental</p> <p>~ Collaboration, mobility and academic exchange</p> <p>~ RM People</p>	<p>Center for Education and Training for Sustainable Development (Cecadesu) and with the Ministry of Environment and Natural Resources (Semarnat) to carry out the preparation of a manual for the design of the School Environmental Management System and the celebration of a Fair of Environmental education.</p>	<p>Environmental Education Fair: People from all ages will be able to interact with institutions dedicated to the environmental protection. In this scenario they will have the change to exchange and transmit knowledge and philosophy towards the environment.</p> <p>People will have the chance to congregate and participate in different activities, altogether with people from other municipalities, schools, universities and regions.</p> <p>Creation of a manual for environmental management: In this, people will participate by sharing their knowledge and experiences in the protection of the environment, while simultaneously, will learn from others how to take care of the environment, depending on the issue or on the ecosystem.</p>	<p><i>RM people will be part of the creation of an Environmental Management System for the Region.</i></p> <p><i>Identification of the existing ecosystems and the effects of their interaction with human action.</i></p>	<p>Social mindset change</p> <p>Regional Systemic thinking</p> <p>Self-reliance</p>	<p>Medium term</p> <p>And long term</p>



OBJECTIVE:

INCREASE FOOD PRODUCTION THROUGH THE INTERCONNECTIONS OF FOOD, WATER AND ENERGY WITH THE PARTICIPATION OF THE PEOPLE

GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Agriculture</p> <p>Crops diversification</p> <p>Horticulture</p> <p>Participation</p> <p>Shared responsibility</p>	<p>Goal 2. End hunger achieve food security and improved nutrition and promote sustainable agriculture</p>	<p>~ Collaborative research</p> <p>~ Faculty of Engineering</p> <p>~ Farmers</p> <p>~ Housekeepers</p> <p>~ Ejidatarios</p> <p>~ Academics</p> <p>~ Students</p> <p>~ RM people</p>	<p>Generation of a holistic model for the sustainable management of semi-protected and protected horticultural crops in San Luis Potosí</p>	<p>Develop of a holistic model: That integrates the participation of farmers, housekeepers, academics, students and RM people, and state and municipal institutions to work altogether in the creation of a holistic model for the management of horticultural projects in the region. That as a holistic model, has the aim to avoid the overexploitation of the resources through policy coherence, for the increment of food production among the region.</p>	<p>A <i>holistic framework that coordinates actions and strategies, correct policy incentives and strengthen the commitment of actors involved.</i></p>	<p>Manage of food, water, and energy nexus for achieving the Sustainable Development Goals</p>	<p>Medium and long-term</p>



OBJECTIVE:

DIAGNOSE THE STATE OF WATER AND SOIL AND THE IMPLICATIONS OF IMPLEMENTING HAZARDOUS PESTICIDES

GOALS	UN SDG's	UASLP & RM CAPACITIES	UASLP CAPACITY DESCRIPTION	ACTIVITY	OUTCOME	EXPECTED IMPACT	TIME
<p>Adequate diagnosis</p> <p>Water pollution by pesticides and by bad practices</p>	<p>Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>	<p>~ Faculty of Agronomy and Veterinary</p> <p>~ Farmers</p> <p>~ Academics</p> <p>~ Ejidatarios</p> <p>~ RM people</p>	<p>This academic entity participates in the councils: State, District and Municipal Development Rural Sustainability; in the State Forestry Council; in the State Commission of Pesticides, Fertilizers and Toxic Substances (Cesplafest); in the technical councils Subterranean Water (Cotas) of San Luis Potosí and Villa de Arista, San Luis Potosí; participates as a Vocal Advisory Board of the Regional Research Center of the Northeast (Cirne) of the National Research Institute Forestry, Agriculture and Livestock (INIFAP) and the Fundación Produce SLP and the management in the Presidency of the Mexican Association of Superior Agriculture Education, A. C. (AMEAS)</p>	<p>Diagnosis: UASLP, Cesplafest, Cotas, Cirne and AMEAS, among other institutions will diagnose the state of water and soil of RM, especially in the agricultural zones. This can take part in the CINVEXT Laboratory for agricultural investigation.</p> <p>Publishing: Publication of the results found in the diagnosis with a simplified language, so people in the region can be aware of the situation.</p> <p>Workshop: “Strategies and techniques for pest’s assessment” Participants will be likely to be short and large-scale farmers, in this they will be able to learn about policies that regulate and state the use of hazardous pesticides and learn with compared study case examples. They will have the chance to share knowledge and ideas about pests.</p>	<p><i>Possibly a first approach to advertise the correlation between pesticides use and cancer.</i></p> <p><i>Participants will be able to asses and learn how to adapt pests’ strategies.</i></p>	<p>Water bodies will be preserved uncontaminated.</p> <p>Implementation of alternative pesticides.</p> <p>Healthy soils, water, fauna and humans.</p> <p>Cancer reduction.</p> <p>Respect policies towards the use of hazardous pesticides.</p>	<p>Short</p> <p>Medium</p> <p>and Long-term</p>

10 Conclusions

Región Media has an enormous wealth and great beauty, about which its inhabitants are aware. The problems that occur in the region provoke a disinterest in carrying out civic attitudes and caring for the surroundings, nonetheless the dialogue with people becomes important for a transformative change, carrying out at least a maieutic process in which, they are asked about their positions around to the given problems.

Many people in RM have a great potential of leadership, of opinion and in general of empirical knowledge, this type of people can be identified by the university to carry out its programs, workshops and activities, since these key actors many times empathize with the rest of the population and, being this way, they usually motivate them. The involvement of the population, of civilians, is a key to the entire commitment to sustainable regional development.

Although, on the contrary, if the institutions continue working from a hierarchical model, it is very possible that people will continue just waiting for the results to be achieved and denoted from that stratum, since, while not being involved, gives them the option of not acting in favor of the projects and the goals that are sought to be achieved, thus perpetuating the destructive attitudes and actions that, as they themselves have mentioned, are rooted in the prevailing culture of the inhabitants.

From the RM people viewpoint, the main difficulty that they point to around the university, is that they notice a lack of results in the projects that the university announces or claims to carry out, which puts the university at a disadvantage in front of society, therefore, it is necessary for this entity to review the actual scope of its activities in the region, not only to maintain its status, but so that people can have confidence in the commitment to which they are invited to join.

For the achievement of regional development, it is necessary to question the region's position on the first-world model of modernity, since everyone in the region do not really feel that they can achieve it, but nevertheless they can identify their own

capacities and ideals about what development means to them, since people have wisdom and intelligence.

It is imperative and highly visible that the university has the necessary tools to support the development of the region, and theoretically speaking, the UASLP has managed to train its academics around issues of sustainability in a tacit way, since they show not only a discursive and inquisitive capacity, which is the means to debate around sustainability, but also a capacity for involvement, interest and commitment that is of sudden importance, beyond the tools and infrastructures that are available, for the impulse of development.

It is suggested, once again, that this portfolio be used as a basic tool or guide; however, I think it is imperative that whoever takes this proposal into consideration, is interested in the perspective of planning in the medium and long term, since as was mentioned by one of the key actors, it is usually expected that the results and the impact will emerge from immediate or next, and when the results are not immediately visible, people often disappoint and give up on expectations.

This cultural question can be redirected, through values such as patience, or through systemic thinking techniques, since perhaps the expected changes are not visible in the space or the side they are expected to be seen, but changes may be happening in another phase of the process, the attention of the contributors can be taken to understand that the processes take time and that, this is often manipulated by contingencies. Therefore, the proposed activities are part of an invitation to modify and adapt the evolution of the programs that may arise from them.

11 Appendix

Selected SDG's and indicators from which Región Media can contribute		
GOAL	DESCRIPTION	INDICATOR
Goal 1. End poverty in all its forms everywhere	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	1.4.1 Proportion of population living in households with access to basic services 1.4.2 Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure
Goal 2. End hunger achieve food security and improved nutrition and promote sustainable agriculture	2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size 2.3.2 Average income of small-scale food producers, by sex and indigenous status
	2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.	2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities 2.5.2 Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction.
Goal 4. Ensure inclusive and equitable quality education and	4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.	4.6.1 Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex.

<p>promote lifelong learning opportunities for all</p>	<p>4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.</p>	<p>4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment.</p>
<p>Goal 5. Achieve gender equality and empower all women and girls</p>	<p>5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.</p>	<p>5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location.</p>
	<p>5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life. 5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.</p>	<p>5.5.1 Proportion of seats held by women in national parliaments and local governments. 5.5.2 Proportion of women in managerial positions. 5.c.1 Proportion of countries with systems to track and make public allocations for gender equality and women’s empowerment.</p>
<p>Goal 6. Ensure availability and sustainable management of water and sanitation for all</p>	<p>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.</p>	<p>6.3.1 Proportion of wastewater safely treated. 6.3.2 Proportion of bodies of water with good ambient water quality.</p>
	<p>6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.</p>	<p>6.5.1 Degree of integrated water resources management implementation (0-100) 6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation.</p>
	<p>6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.</p>	<p>6.6.1 Change in the extent of water-related ecosystems over time.</p>

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.	9.4.1 CO2 emission per unit of value added
	9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.	9.5.1 Research and development expenditure as a proportion of GDP. 9.5.2 Researchers (in full-time equivalent) per million inhabitants.
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.	11.3.1 Ratio of land consumption rate to population growth rate 11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically.
	11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.	11.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people. 11.5.2 Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services.
Goal 12. Ensure sustainable consumption and production patterns	12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.	12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies.
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	12.5.1 National recycling rate, tons of material Recycled.
	12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities.	12.7.1 Number of countries implementing sustainable public procurement policies and action plans.

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.	15.2.1 Progress towards sustainable forest Management
	15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.	15.3.1 Proportion of land that is degraded over total land area important sites for mountain biodiversity.
	15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.	15.4.1 Coverage by protected areas of important sites for mountain biodiversity. 15.4.2 Mountain Green Cover Index.
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all.	16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms. 16.3.2 Unsentenced detainees as a proportion of overall prison population.
	16.5 Substantially reduce corruption and bribery in all their forms.	16.5.1 Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official or were asked for a bribe by those public officials, during the previous 12 months.
	16.6 Develop effective, accountable and transparent institutions at all levels.	16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar) 16.6.2 Proportion of the population satisfied with their last experience of public services.
	16.7 Ensure responsive, inclusive participatory and representative decision-making at all levels.	16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions. 16.7.2 Proportion of population who believe decision making is inclusive and responsive, by sex, age, disability and population group.

Table 1 Selected SDG's , definition and indicators to which the linking model is committed to support and collaborate from Región Media. Source: Own elaboration

Interview Guideline for Región Media Representatives

1. How would you define your role in supporting Región Media?
2. What do you think are the major vulnerabilities and barriers in Región Media?
3. What do you think is important in Región Media to grow in economic and social scales and maintain its environment in good conditions?
4. Would you like to learn about sustainability and regional development?
5. What would you expect from the UASLP actors?
6. What do you think are the capacities that the people from Región Media should develop for the region's development?
7. What would you expect from a UASLP program that supports the social, economic and environmental welfare of Región Media?

Interview Guideline for UASLP Actors

1. What is your role as an UASLP representative?
2. What do you think are the biggest risks and barriers in the Región Media?
3. What are the greatest opportunities available to the Región Media for Regional Development and Sustainability?
4. What do you think are the capacities that people in Región Media could develop for Sustainable Development?
5. With what skills or tools do you count for the development of sustainability and for the development of the region?
6. What would they expect from the people of Región Media?

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