


## The Sustainability in The New Scenarios of Transformation in The Rural Areas of Mexico

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**Abstract:** To address the challenges of sustainability in rural areas of Mexico, it must be considered that globalization opened the way to a new conception of rural development and consequently to a change of strategies aimed at achieving higher levels of productivity, often unrelated to social welfare. This widened poverty in the countryside and forced the displacement of millions of rural dwellers. Globalization was an imposition with consequences that exceeded the socioeconomic, cultural, and political capacities of the countryside. We must not lose sight of the close interrelationship of inequality and precariousness with environmental degradation caused by unsustainable development models such as globalization. This scenario leads to the search for solutions to ensure sustainability, so rural communities must design sustainable development strategies that prioritize their autonomy, self-sufficiency, productive diversification, and ecosystem management. Multifunctionality is a key tool for conservation and economic diversification, but it must be properly regulated to avoid restrictions on agricultural production and cultural values. Payment for environmental services is an option, but it must be accompanied by social development policies to ensure sustainable development in rural areas.

**Keywords:** Rural Economy, Globalization, Rural Migration, Rural Multifunctionality, Rural Areas.

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### Introduction

Sustainability is an increasingly important development approach, especially at a time when the world is facing a number of environmental, social, and economic challenges that require a sustainable solution. To speak of sustainability is to refer to the ability of the population to maintain itself over time without exhausting its resources, without damaging the environment, without affecting people's health, without disrupting their rights, and of course without compromising the economy.

In the new scenarios of transformation in rural Mexico, sustainability has become a priority, since technological, social, and economic changes have been creating an increasingly disruptive environment, which implies new

challenges to adapt to changes and remain sustainable; that is; our rural population must be able to change and evolve over time to meet their changing needs in the environment, ensuring the social welfare of the community.

The relevance of this approach to sustainability in rural areas of Mexico is greater if it is considered that precisely in them there is the most important supply of food to the population of the country, and is the source of natural resources that provides clean air that is breathed, of the water that is consumed, and the richness in biodiversity that characterizes the country; all this undoubtedly represents the essential resources for the welfare of society and for the development of the national economy.

However, despite the importance of rural areas in Mexico, today we see an uncertain scenario that manifests itself in marked social inequality, where the majority of its inhabitants live in conditions of poverty and lack access to basic services such as education, health, and drinking water; in addition to the lack of investment in infrastructure, the shortage of employment and low agricultural productivity aggravated by climate change that exacerbates droughts and increases water scarcity; added to this is the pollution of its rivers and lakes, and the forced displacement of the population due to violence, insecurity, lack of land and lack of economic opportunities.

Therefore, sustainability is an increasingly important approach as Mexico is facing environmental, social, and economic challenges that require sustainable solutions. This panorama leads to the search for solutions to ensure sustainability in rural areas of Mexico, where knowledge through education should be a key tool that promotes environmental awareness and development with a culture of respect.

For many years, governments and organizations have addressed the issue of education, and have carried out various initiatives to improve the educational level in rural areas in order to contribute to the economic and social development of the country. It has been argued that education as a knowledge base is a key element for economic and social development, as it provides the necessary tools to improve the quality of life, starting with a greater understanding of the environment, as well as the development of practical skills that allow the population of these areas to obtain well-paid jobs, which contributes to reducing poverty and improving living conditions.

Education should be one of the main factors for rural development in Mexico. This is a key tool for progress that provides people with the skills and knowledge necessary to improve their lives and that of their communities, and should be considered one of the main ways to improve the quality of life of people in rural areas; however, access to education in these areas has been one of the main shortcomings, as many communities lack adequate schools, making it difficult to access education appropriate to their community environment. This is due to the lack of financial resources, the lack of adequate infrastructure, and the lack of qualified teachers to train children and young people in an educational model according to their social and territorial context (productive vocation, endemic natural resources, culture, and tradition, among others). This means that many children and young people do not have the opportunity to receive an education appropriate to their sociocultural environment. In

addition, many rural schools lack the resources needed to provide quality education, making it difficult for students to prepare for a complex future.

It is therefore important for the Mexican government to invest in education in rural areas, to allocate financial resources to improve the infrastructure of its schools, to provide qualified teachers, and to improve the quality of education. This would help improve people's quality of life and contribute to rural development; including rural areas where there is a potential for development based on non-renewable natural resources such as mineral reservoirs, investment in educational programs could generate great economic potential through responsible and sustainable use in the extraction of these non-renewable natural resources; in addition to the economic benefit directly related to the exploitation of non-renewable natural resources that would promote greater political participation among the population. Education provides a greater level of understanding of the modern world in which they are immersed and would promote greater environmental awareness.

The new scenarios demand precise and effective solutions based on knowledge, so it is necessary to innovate in the transformation processes with policies and investments with a vision of development and social welfare in rural areas. A solution that reduces the gap of social inequality, creates new opportunities for economic development, generates a sense of attachment to the land, and adopts a culture of respect for nature.

### **Let's Talk About Sustainability**

To speak of sustainability is to go back to the eighties of the last century when the term sustainable development was adopted, which integrates into an inseparable triad: social context, economic context, and environmental context (UNSDG, 2018). Since then, sustainability has referred to the ability of the population to maintain itself over time without depleting its resources, without damaging the environment, without affecting people's health, without disrupting their rights, and of course without compromising the economy.

Moving in time, in September 2015 the UN General Assembly adopted the 2030 Agenda for Sustainable Development, an action plan in favor of people, the planet, and prosperity, with the intention of strengthening universal peace and access to justice. It was designed to ensure that decision-makers, experts, governments, the private sector, civil society, and citizens, in general, did not lose sight of the close interrelationship between inequality, poverty and precariousness, and environmental degradation caused by unsustainable development models, such as the phenomenon of globalization (UNSDG, 2018).

Globalization has been a process of global economic, social, and cultural integration driven by international trade, foreign investment, migration, technology, culture, and politics. While globalization has brought many benefits, such as increased production, trade, and investment, as well as access to new technologies and markets, it has also generated a number of problems, such as inequality, poverty, and environmental degradation. These problems have highlighted the incompatibility of globalization with sustainable development.

Globalization has contributed to economic inequality by allowing various multinational companies to establish themselves in Mexico with low wages and in many cases with low or no taxes, which caused growing inequality. This has adversely affected sustainable development, as globalization has contributed to the deterioration of the environment, leading to the exploitation of natural resources at an unprecedented rate.

Therefore, globalization is an unavoidable topic in the analysis of the socioeconomic, political, and cultural transformations that have occurred during the last decades in Mexico; and this phenomenon has had a direct impact on traditional modes of production in rural areas and therefore in their marketing technology, evaluating, segmenting and diversifying markets and the local economy (Hernández, 2020).

Globalization has been an imposition with consequences that exceed the socioeconomic, cultural, and political capacities of Mexico, in this context the current rural development model must be redefined with the conscious acceptance of social, economic, and political actors, to go together with a model of sustainable development (Akizu and Rubio, 2005).

Globalization has led Mexico to high rates of rural migration, making the countryside multifunctional where women have had greater participation, but in an unequal scheme, making the current rural development model unsustainable.

That is why sustainability must be a priority for Mexico since it is the only way to guarantee the development of the nation in a politically, socially, and environmentally responsible context. The 2030 Agenda for Sustainable Development is a tool that will help us achieve a better quality of life for all, leaving no one behind. Globalization has brought many benefits, but it has also generated problems that must be addressed urgently. It is necessary to redefine the current rural development model to achieve sustainable development that allows Mexico to move towards a better future.

## Method

Through documentary research, various investigations were identified that support the analysis of the sustainability in the new scenarios of transformation in the Mexican rural areas, starting from the origin of a currently unsustainable model and its economic, social, and environmental repercussions, to the analysis of a new scenario of transformation. The socioformative V was used as a method to identify the main problems of the planned context and to argue the axes of analysis and solution based on academic and scientific knowledge (González, 2018). The socioformative V focused on research allowed us to visualize the research problem with a focus on contribution to the analysis of the context. With it, a documentary record was elaborated that concentrated the information of indexed articles, academic books, and other documents that allowed to carry out the state of the art on sustainability in the new scenarios of transformation in the Mexican rural areas. The information was organized into categories according to the objective of the study and then explained in the

transformation scenarios. Subsequently, the findings of the research were analyzed from the following theme: globalization is a trigger for the problem in rural areas, sustainability in the current context of rural areas, and knowledge as a fundamental pillar to face the challenges of sustainability, measurement and its impact on rural areas, sustainability as a response to the challenges of migration in Mexico, and the multifunctionality and economy in rural areas. Finally, after the analysis and discussion of the topics investigated, conclusions were reached that describe the sustainability approach as the basis of the new transformation scenarios in rural areas that Mexico needs.

## Results

In Mexico, the scarcity of employment and low performance in agriculture, worsened by climate change, forced displacement, lack of economic opportunities, insufficient access to basic services, and lack of investment in infrastructure highlight the need for a sustainability strategy to transform these rural landscapes.

The acuteness of poverty in rural areas of Mexico and the factors that correlate with it have their origin in the socioeconomic and cultural structures of the country and have been aggravated by the duality of realities that exist, such as the economic structure (modern sectors of high productivity generating great wealth next to precarious sectors of low productivity that do not generate sufficient income). To this can be added the return of the primary sector to the rural economy based on a policy of food sovereignty; indeed, without state investment and dependent on commodity business cycles, and with an inability to insert itself effectively into value chains (UNSDG, 2018; Hernandez, 2020). And what about deterritorialization, a direct consequence of globalization that brought with it the internationalization of markets and the development of a productivist agricultural model, where collective action strategies and relations between individuals depended less and less on the will of the social actors of the territory and more and more of the decisions taken outside the territory (Martínez, 2020).

### Globalization is a Trigger for the Problem in Rural Areas

Globalization transformed local, regional, and national rural development into a gravitational model of financial, economic, environmental, political, social, and cultural processes of global scope, reshaping new challenges for rural areas. The multidimensional nature of this process and its global and local interdependence can be seen in the following dimensions: the technological dimension, shaped by the development of information technology, telecommunications, and new technologies for production, transport, control, and process management; the economic dimension, reflected in the existence of a transnational financial system, the internationalization and liberalization of markets, and the increase in productivity and business competitiveness; the cultural dimension, linked to the growing development of means of communication that allow the simultaneity of information; and the political/institutional and ideological dimension, based on the existence of a multipolarity within a space of hierarchies and domains, as well as through the construction of new institutions and forms of regulation of a global nature (García and Quintero, 2009; Hernández, 2020).

This is observed in unequal manifestations in rural areas with a tendency towards the commodification of practically all activities; reductionism that has not been possible to separate from food problems, unemployment, circles of poverty, climate change, waste of natural resources (including energy), the inability to manage solid waste, immigration problems, racial and gender discrimination, among others.

Globalization altered in a peculiar way the opportunities in rural territories and this brought with it restrictions for underdeveloped countries. These modifications varied depending on the geographical location of the territory, resources, availability, population behavior, economic structure, previous historical, cultural, and political differences; as well as their initial comparative advantages and ability to build new competitive advantages (García and Quintero, 2009; Hernández, 2020).

This territorial differentiation resulted in the disaggregation of society, making inequality and exclusion even more visible, which are clearly perceived by factors of gender, age, ethnic-cultural and racial, disability, social norms, migratory status, and geographical location within the same rural area (Akizu and Rubio, 2005; Rojas, 2009; UNSDG, 2018; Hernández, 2020). This is reflected in the precariousness of employment, the multiple occupations in work, the expulsion of small and medium producers, the continuous migrations, the growing reorientation of agricultural production towards export markets, and the articulation of agricultural producers to agro-industrial complexes in which the decisions of power centers predominate to large transnational companies (Tripín, 2005; Hernández, 2020); for this reason, citing the phenomenon of globalization is unavoidable in the analysis of the socioeconomic, political and cultural transformations that have occurred during the last decades in the rural sector.

In this context, in which the Mexican rural sector has been affected by globalization, a profound transformation has been brought about in the economic, social, and cultural structure of rural territories, generating increasing inequality among the inhabitants of these areas, who have been facing unemployment problems, poverty, climate change, migration, and marginalization, among others; for the fact that it is necessary for the Mexican State to take measures to guarantee the equitable development of rural areas, in order to improve the quality of life of its inhabitants and contribute to the sustainable development of the country.

#### *Sustainability in the Context of Rural Areas of Mexico*

In the new transformation scenarios, sustainability has become a priority as technological, social, and economic changes are creating an increasingly disruptive environment, which implies new challenges to adapt to changes and remain sustainable; I mean; the population must be able to evolve to meet its changing environmental needs without affecting social welfare.

From this perspective, development must consider as a starting point the set of resources that make up the heritage and the potentialities for sustainability in all the territorial units that possess the current Mexican rural

context (human, economic, cultural, and institutional).

Political and economic decisions taken from outside, aligned with the logic of external investment and in dissociation from the historical and social context of the territory, were decisive in the process of development of rural areas in Mexico; where deterritorialization represented the rupture between agriculture and territory, giving way to the decomposition of the peasant sector at the economic level, physical and socio-organizational.

That is why today that we talk about sustainability in the new scenarios of transformation in the Mexican rural area, the term territory must be retaken or reintroduced to rethink rural spaces as the spatial and economic dimensions in dynamic and constant interrelation with the cultural, social and organizational dimensions (Martínez, 2020).

In this sense, local actors (on their own initiative) must identify projects that allow them to be more competitive and at the same time, find solutions to the problems that afflict them; that is, sustain in their own territory the alternatives to promote development (García and Quintero, 2009).

This can be achieved by building new knowledge societies, with innovation and adoption of technological progress, with the renewal of traditional productive activities, with the use of endogenous and/or exogenous resources, and with a culture of cooperation. A development model based on the territory, open to the use of endogenous resources that facilitate the reactivation of productive dynamics, and the preservation of local traditions, considering the social and cultural context of the country (García and Quintero, 2009).

With this, rural studies and rural sociology can be redirected to the territory, visualized as a process of social production and a dynamic space of cooperation for the transformation of rural areas; an irreversible sustainable rural development, respectful of the environment, agreed by all the economic and social agents of the territory at the local level (Akizu and Rubio, 2005). This perspective of transformation in rural areas not only implies a change in the economic model, but the revaluation of the territory in the face of the destruction of ecosystems and the peasant economy (Babilonia, 2014); and, of course, to recognize the way in which social relations have been reconfigured, where discrimination divides the population between those who enjoy their rights and those who limit them, where dominant and subaltern sectors are distinguished, and where patriarchal values limit the autonomy and equality of women's rights (UNSDG, 2018).

Sustainability must be seen as a solution to the great challenges, among which the ravages of globalization stand out. It must be taken into consideration that the policies governed by economic theory and neoliberalism have promoted the creation of agricultural companies and the technification of the countryside, without taking into account sustainability in economic processes. This has prevented the incorporation of a vision of environmental economics that incorporates social capital, which could generate relationships of trust, reciprocity, solidarity, and cooperation. The lack of incorporation of social capital increases the complexity of the social and logical relations in which community production is immersed, which in turn reduces productivity and causes the

destruction of ecosystems (Rosas-Baños, 2013).

As already mentioned, globalization has been a historical process that modified rural activities affecting both men and women; however, the rapid increase in production for export created job opportunities mainly for women, since they showed greater availability to accept temporary jobs with lower pay and showed less interest in joining labor unions, unlike men. Women have also been shown to be more careful in their work, which is important when it comes to production for export markets that demand quality in agricultural products (Kay, 2009). In this context, women were integrated into the rural labor market and became a key element of the boom in agricultural exports, making them more visible in society.

Globalization offered an opportunity for collaboration in progress, capital spread much more easily than labor. This meant the diffusion of new technologies, especially those related to the electronic transfer of information, which made it possible to connect distant regions and countries in real-time and stimulate activities that required more qualified labor, which promoted the improvement of higher education and the reform of some social policies (Tapella, 2004; Guillermo de León, 2018).

Also, in this context of globalization, rural areas experienced significant changes, including the proliferation of non-agricultural activities in rural areas, relegating agriculture to a second or third place in the economy of peasant communities. This led to territories being multifunctional and inhabitants adopting multi-active economic strategies, i.e. the rural self-employed and/or employed worker carrying out activities in two or more different schemes of the Social Security System (Jamaica, 2022).

It is estimated that about half of jobs in non-traditional agricultural activities are held by women and that an even higher proportion of workspaces in agro-industrial processing plants are also occupied by women; although the few permanent jobs that tend to be better paid are occupied by men (Kay, 2009).

## **Discussion**

To address the challenges of sustainability in rural areas of the country, it must be considered that globalization opened the way to a new conception of rural development in Mexico and consequently to new strategies to achieve higher levels of productivity and competitiveness, although often disconnected from social welfare, generating transformations in the organization of production, the financial and exchange market, the international division of labor and world trade framed in neoliberal policies (Akizu and Rubio, 2005; García and Quintero, 2009; Hernández, 2020); a scenario in which rural territories and their inhabitants could not escape from them.

That is why sustainability must be a priority for rural development in Mexico, since it is a tool that allows addressing the challenges of globalization, the pandemic, and poverty, through the implementation of strategies



that allow rural territories and their inhabitants to achieve greater social welfare.

Sustainability must be seen as a solution to the great challenges in the new scenarios of transformation in rural areas of Mexico. To this we must add that recently the pandemic caused by Covid-19, which has resulted in a considerable reduction in incomes in rural households and increases in food prices, reversing any progress that has been made in recent years with respect to poverty reduction, food insecurity and malnutrition in rural areas (ECLAC, 2021).

That is why sustainability must be a priority for rural development in Mexico, since only in this way can the quality of life of the inhabitants of rural areas be improved while promoting the use of natural resources in a responsible manner.

### **Knowledge is a Fundamental Pillar to Face the Challenges of Sustainability in Rural Areas of Mexico**

The challenges of sustainability in rural areas must be addressed from different perspectives, including the study of economic, social, and political transformations with an approach that privileges the local relationship with productive activities and the effects of migrations; it represents a great challenge that must lead to the construction of knowledge societies, where scientific knowledge and peasant knowledge are combined to transform traditional production systems with innovations that promote the development of sustainable systems alternatives from the local territory. This requires a combination of local and scientific knowledge about the relationship between environmental or agroecosystem variables with territorial conditions, which requires innovation, adaptation, planning, and modeling (Gavito et al., 2017).

It is evident that knowledge and development require creative methods and innovative tools, which are not generated only from the perspective of academics and then transferred but are built through technological innovation aimed at sustainable agricultural production, with the exchange of knowledge and the active participation of local actors (including producers from the beginning and at all times). This is especially important in the current national context, where problems such as desertification, global warming, biodiversity loss, and other manifestations of global change are faced.

The interaction between scientific knowledge and local knowledge is essential to find alternatives to promote the culture of conservation of agroecosystems with complementary ecological functions. This includes the application of sustainable agricultural, livestock, and forestry management practices, the implementation of local energy and food self-sufficiency projects to guarantee the survival of the population during crisis situations, the configuration of marketing and distribution networks of goods and services, solidarity social organization, and the institutional and governance framework that promote and facilitate development (Gavito et al., 2017).

It is possible that these new challenges of sustainability in rural areas require a different and more local

economic perspective that recognizes that markets cannot assign value to natural resources and that peasant production systems must be more efficient and have a lower impact on the environment (Rosas-Baños, 2013); that is, to pose these new challenges with a transdisciplinary approach in the solution of social, environmental and economic conflicts that start from the application of ethical principles that guide decision-making and the construction of alternatives.

It is necessary to promote the progress of rural communities through the search for solutions to their social and environmental problems and must be accompanied by an exchange of knowledge between universities and research centers with a pluralistic approach that includes local actors and their knowledge (Rosas-Baños, 2013).

It is important not to forget that sustainability in rural areas is of great importance to supply food to the population throughout the country, provide natural resources such as clean air, drinking water, fertile land and generate sources of employment, in addition to contributing to great biodiversity and essential resources for the welfare of society and the development of the national economy. However, the global economic model has proven to be uneven and shows signs of exhaustion (Dolores and Crespo, 2019), which is manifested in greater social inequality and migration (Rojas, 2009; Rosendo et al., 2019).

That is why knowledge is a fundamental pillar to facing the challenges of sustainability in rural areas of Mexico. The development of a culture of conservation of agroecosystems, the application of sustainable practices of agricultural, livestock, and forestry management, the implementation of local projects of energy and food self-sufficiency, the configuration of marketing and distribution networks of goods and services, social solidarity organization, and the institutional and governance framework that promote and facilitate development, these are some of the actions that must be carried out to achieve sustainability in rural areas that allow the population to have food, clean air, drinking water, sources of employment and biodiversity. This requires a combination of local and scientific knowledge, as well as a transdisciplinary approach that starts from the application of ethical principles that guide decision-making and the construction of alternatives. Sustainability in rural areas is a task that must be approached from different perspectives, in order to ensure the well-being of society and the development of the national economy.

#### *Migration and Its Impact on Rural Areas of Mexico*

Social inequality has resulted in greater conditions of poverty, which forces us to change the perception of productivity and well-being in rural territories; therefore, we must rethink the rural context to transform it into a process of poverty of inclusive and sustainable growth, with the potential to reduce hunger and unemployment and adjust territorially to the rural environment without neglecting the environment (Jara et al., 2020).

The expansion of poverty in the countryside generated by globalization forced the displacement of millions of Mexicans, mainly to the United States of America (binational migration) in search of greater certainty, employment, and opportunities; although it also forced peasant migration to other states within the country

(internal rural-urban and rural-rural migration), an economic and social phenomenon definitely increased by inequalities and aggravated by natural disasters, violence and political instability, drug trafficking and extortion (Pérez, 2004; Rojas, 2009; Guillermo de León, 2018; Rosendo et al., 2019).

The importance of migration in the lives of rural populations is important since the way of life of rural communities is cemented. Rural migration involves the loss of labor to work in agriculture but represents a potential flow of capital from abroad that intensifies not only circulation but also goods, information, and technology. This has led to conditions of well-being for families in the place of origin since in some cases the capital resulting from migration has been invested in agriculture or has been used to pay off debts that in many cases cause greater migration, and have even been used as philanthropic remittances (Rojas, 2009; Garcia, 2016; Rosendo et al., 2019; Rodriguez et al., 2019).

The decision to migrate has become a subsistence strategy for rural families and involves the youngest, who send remittances to their relatives, although over the years these begin to space out (Kay, 2009).

Remittances have become an important source of income for many families, sometimes accounting for the bulk of their income. This has brought with it unwanted effects, as family members become dependent on them and do not feel the need to look for work. This makes sense considering that the oldest, the least educated, the least entrepreneurial, the disabled, and the very poor are those who stay in the rural community, contributing to increased inequalities and differentiation processes in communities (Kay, 2009; Rodriguez et al., 2019).

Unfortunately, in some cases, agricultural land is sold to finance migration, especially when there are profitability problems, which has made this phenomenon a part of culture in rural areas. This is because the incomes of its inhabitants, especially those of agricultural workers, are lower than those of other sectors, even in the same rural area (Rojas, 2009; Rosendo et al., 2019).

The negative effects of these factors have created a complex migration situation, making Mexico one of the main countries exporting workers to the United States of America; however, paradoxically, Mexico has become a place of welcome for workers from several Central American countries and also as a transit country for migrants heading to the United States of America, with unformalized Safe Third Country actions, which will be aggravated with the recent entry into force of Title 8 in the immigration laws of the United States of America; Mexico will face a greater migration crisis (Rojas, 2009).

It is important that the Mexican government takes measures to address the problem of migration and its impact on rural areas, as this can have a significant effect on reducing poverty and social inequality. This includes the implementation of policies that promote rural development, investment in infrastructure, improved education and health, as well as the creation of jobs and opportunities to foster the rooting of the population in their rural communities; measures that help improve the quality of life of people in the countryside, while contributing to the reduction of migration and the improvement of the security of migrants.

*Sustainability as a Response to the Challenges of Migration*

In Mexico, there is a great discussion about migration, where the federal government prides itself and boasts about the remittances sent by its migrants, while academics and businessmen see it as a sign of the lack of development policies and investment in rural areas that allow the population to take root in the countryside.

The lack of opportunities and investment in rural areas has been compensated by the remittances that migrants send to Mexico, which has contributed to poverty alleviation. This has allowed rural families to continue to subsist and local governments to take advantage of it as a form of development.

In some cases, remittances have generated new jobs (not related to agriculture); however, the degree of job insecurity and the migratory status of the rural community has not improved, making it difficult for the population that still lives in the countryside to remain in their territory (Rosendo et al., 2019).

This migration crisis and its consequences pose challenges that must be addressed from the perspective of sustainability, generating opportunities and transformative actions that prioritize the most urgent issues. This requires the search for resilience in agri-food systems, as well as a balance between the rural population and the environment, to correct the social, economic, and territorial inequalities existing in rural areas (ECLAC, 2021).

This transformation requires innovative actions in various fields, with new relationships, alliances, and collaborative work between public and private actors, civil society, the scientific and academic world, and international cooperation and financing agencies; in addition to investment and promotion of a comprehensive sustainable development program suitable for each rural area (a model of development from the local: from the bottom up). We must take advantage of the innumerable opportunities represented by rural areas, encouraging and promoting new socio-economic opportunities in rural territories, with precise and effective actions; with innovation in transformation processes and policies, and investment with a vision of development and social welfare in rural areas; actions like these can reduce the social inequality gap, create new opportunities for economic development, generate a sense of rootedness to the land and adopt a culture of respect for nature.

It is clear that the connection between migration and sustainable development is much more complex than a linear relationship, and cannot be explained with predefined patterns. These relationships have unique characteristics, depending on the context, the duality of references in the field of migrations and the approach chosen to evaluate the effects and results of the interaction in a local perspective. It is very difficult to reach a conclusion due to the diversity of perspectives and metrics, so it cannot be said that migration and development are always a combination that generates positive results.

However, it should be understood that the links between migration and sustainable development are largely more complicated than linear, and cannot be explained by predefined schemes or patterns of interpretation, since their relationships have unique characteristics, depending on the context, the duality of references in the field of

migration and, of course, the approach chosen to place the interaction of its effects and results in a local perspective; so it is extremely difficult to reach a conclusion, due to heterogeneity in approaches and measurements, so migration and development are not variables that always produce positive results when combined (Santos, 2009).

Despite the fact that the progress achieved so far (still very limited), the possibility of achieving such sustainable development remains open; if this aspiration is abandoned, the possibility of improving the situation in rural areas would also be abandoned.

Further research on the connection between migration and development is essential, including the analysis of development cooperation policies and the impact of remittances that migrants send to their families or keep in financial institutions with the intention of one day returning to their rural area of origin (Santos, 2009).

#### *Multifunctionality and Economy in Rural Areas of Mexico*

Multifunctionality and economics are two concepts that are closely related in rural areas. Multifunctionality refers to the capacity of a region to develop multiple economic, social, and environmental activities. This means that a rural region can develop agricultural, livestock, tourism, services, and energy production, among others. This allows the rural region to develop a diversified and sustainable economy.

Multifunctionality is an important tool for rural development. This is because it allows rural regions to develop a diversified economy, which makes them more resilient to changes in the market. This means that if a rural region depends on a single economic activity, such as agriculture, and this activity suffers a crisis, the rural region will be affected. However, if the rural region develops a diversified economy, it will be better prepared to withstand changes in the market. In addition, multifunctionality can also help improve the quality of life of rural dwellers. This is because diversifying the economy can generate more jobs, meaning more people will have access to a source of income and more resources to meet their basic needs.

The multifunctional approach offers the possibility of simultaneously considering the territory and the population that inhabits it as fundamental parts of the same strategic asset. This approach to the problems of rural areas from a broad perspective, covering the interactions between the countryside and the city, as well as the multiple options it offers in the agricultural and non-agricultural areas, offers numerous opportunities to contribute to rural development from the principles of the new multifunctional approach (Segrelles, 2007).

Multifunctionality can help improve the environment in the rural region. This is because the diversification of the economy can reduce the pressure on natural resources, such as water, land, and biodiversity; therefore, the rural region will have a healthier environment, which can help improve the quality of life of the inhabitants of the rural region.

It is important to note that multifunctionality is not limited to improving rural tourism, local crafts or the beauty of the region's landscapes, but also requires sufficient funds to: combat rural poverty; provide infrastructure, equipment, and public services in the countryside (especially educational); promoting rural employment; reduce the technological gap between large and small agricultural enterprises; avoid the loss of resources in rural areas; decontaminate water, land, and air; promoting organic farming; and reduce as far as possible excessive exports of raw materials and commodities that are based on the excessive exploitation of natural resources (Segrelles, 2007).

Multifunctionality in rural areas must be conceived in economic terms, but with an environmental approach, since it must attract public and private intervention to reduce the negative externalities of production systems through economic incentives such as the payment of environmental services (Rosas-Baños, 2013). When multifunctionality is adopted by the rural territory, it contrasts with the depopulation caused by neoliberal economic models that have hindered development.

However, rural multifunctionality can become a utopia if issues such as the concentration of land in a few hands, the marginalization of the small farmer, the almost absolute control of agribusiness, the occupation of land by non-food crops, the predominance of agro-export models, the lack of a common agricultural policy and the economic resources necessary for its regional integration are not addressed (Segrelles, 2007).

Despite attempts to improve conditions and quality of life in rural areas, neoliberal principles that maintain poverty, productive and social imbalance, and migration continue to predominate. That is why rural multifunctionality must be a priority for the development of rural areas in Mexico. This means that policies must be implemented that promote diversification of the economy, and access to land, employment, infrastructure, technology, and financial resources. This will enable rural regions to develop a diversified and sustainable economy, which will contribute to improving the quality of life of rural dwellers. In addition, this will also help to reduce the pressure on natural resources, which will contribute to improving the environment of the rural region. Therefore, it is necessary that measures be taken to promote multifunctionality in rural areas of Mexico to achieve sustainable and equitable development.

## Conclusions

In the challenging socioeconomic context facing Mexico's rural areas, communities must design their own development strategies and adopt a sustainability and social reconciliation approach that prioritizes four fundamental principles: autonomy, self-sufficiency, productive diversification, and ecosystem management. As interest in sustainability increases, multifunctionality in rural areas becomes more important; however, these activities are often poorly or poorly regulated by the market, especially those that have a social or environmental impact.

It is necessary that the rural population, the government, and the business sector meet to discuss multifunctionality in the near future; this will allow economic diversification in rural areas, where their inhabitants can obtain additional income to combat poverty, as well as sustainable, multipurpose quality and environmentally friendly agricultural production.

Payment for environmental services should be explored as a conservation tool that drives an environmental economy; however, without a social development policy, this could erode culturally rooted conservation values, or limit development possibilities by restricting or forcing communities not to use their natural resources; these restrictions are the main reason why many rural communities are not interested in adopting any payment for environmental services program, in addition to the low remuneration that some government programs proposed so far. It is therefore important for rural regions to develop a multifunctional economy to ensure sustainable development.

## Recommendations

It is important that the Public Universities of Mexico get involved in the challenges of rural development in the country, since they have the capacity to contribute with knowledge and social sensitivity to achieve sustainability in the new transformation scenarios. This implies that universities must work together with the government to promote sustainable development in rural areas, which are considered to be the motor areas of the country's development. This means that universities must assume a great responsibility to promote rural development, through research, education, training of human resources and technology transfer. In addition, universities should promote community participation in rural development, so that the inhabitants of rural areas can contribute their knowledge and experiences. This will allow rural communities to be an active part of rural development, which will contribute to the sustainability of these areas.

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