

The integral approach as an indispensable element in the spatial planning in Chihuahua

Díaz González, Helí Hassán ⁽¹⁾ hhdiazq@gmail.com

Rodríguez Andujo, Aída ⁽²⁾ arodrigu@uach.mx

Maldonado Estrada, Mario ⁽³⁾ maldonad@uach.mx

(1) *Student of "Ingeniería en Desarrollo Territorial"*

(2) *Full time Professor*

(3) *Director of the "Facultad de Ciencias Agrotecnológicas", UACH.*

Facultad de Ciencias Agrotecnológicas de la Universidad Autónoma de Chihuahua, Ciudad Universitaria, campus Universitario I, Chihuahua, Chih., México, C.P. 31000, Tel. 52 (614) 4391844 y 45.

Abstract:

Result of the globalization process, the competition schemes have been modified. Now the flow of goods, services and people occurs all over world-wide geography; the political borders are no longer a barrier, the majority of the world economies have chosen to open their borders to the commerce with other nations. This has been resulted in a common exigency for the regions: a high level of competitiveness to face the challenges that these new conditions represent. The strategies and the efforts have been reoriented; the paradigm changed its sectorial approach for one based on the integral development of the regions, that promotes the correct use of the local assets being the development of the social, economic, political,

cultural, technological and of natural resources aspects, one of the most viable alternatives for the harmonic development of these regions.

Key words: Territorial development, socio-economic development, management.

Content:

Chihuahua is the biggest state of Mexico as far as territorial surface refers (247.087,7 km²), representing the 12,6% of the territory of the country. Chihuahua, located to the north of Mexico, between the high plateau and the "Sierra Madre Occidental", has limits with the United States of America to the north and the northeast, with the state from Coahuila to the east, with the state from Durango to the south, and with the Sinaloa and Sonora states to the west and southwest, respectively. To the west, center and the south, its territory is covered by the "Sierra Madre Occidental", with heights of 2,000 to 3,000 ms (reaches its greater elevation in the Sierra Tarahumara) and deep canyons and ravines between which are included the Tararécua, Cobre and Urique. In the north and east are ample plains of to the Mexican high plateau, interrupted by isolated mountain ranges, and to the south-east the is located the "Bolsón del Mapimí".

Chihuahua counts with three water slopes: towards the gulf of Mexico the Conchos river, tributary of Bravo, and its affluents Parral, San Pedro and Chuvíscar; towards the Pacific the rivers Bavispe, Papigochic, Mayo, del Fuerte, Chínipas, Urique and el Verde. Its climate in the eastern half is desert with irregular and semi warm and irregular rains in the western portion, although when the height of the Sierra Madre Occidental increases becomes semi-dry until arriving at sub humid. The region of the "Barrancas" where the height is smaller of 1.000 msnm the climate is tropical, humid with

abundant rains in summer and deficient in winter, region considered like the hot Earth of the state with abundant vegetation.

The State registers an annual average precipitation of 445 mm, which is equivalent to an approximated volume of 110 billions of m³, of which 88% evaporates. It is possible to indicate that near 60% of the state surface has a smaller precipitation to 350 annual mm. Four types of ecosystems exist, with a great biodiversity of flora and fauna; 37% is constituted by the ecosystem of arid zones, 29% by pastures, agricultural surface and urban zone, 29% by forest of cold temperate climate, and in smaller distribution tropical ecosystem and disturbed areas with 3 and 2% respectively.

The main areas where the agricultural activity is developed locate to the north, center, the south and the northwest. The main grows are bean, corn, cotton, alfalfa and wheat, this last one of irrigation. Of the fruit growing it excels the apple, peach, walnut, pear, quince and plum production. Chihuahua is one of the more important cattle states of the country, mainly of bovine cattle (of meat and milk) and pig; part of its production is exported to the United States. The western zone represents the main product region of wood: pine, oak, juniper and firs.

The Primary Sector that surrounds the agriculture, cattle ranch, forestry and aquaculture has been for a long time indispensable for the state economic development. This sector has contributed of important way in the state gross internal product, because in agreement with information of INEGI in 2001 this contribution was of the 6,4% and it had a participation for this sector with respect to the national total of the 4,8%. Chihuahua counts on a territorial extension of 24,7 million hectares, of which 17,5 million of them consider as forest surface.

Chihuahua counts with one of best road infrastructures of the country, these roads allow an efficient transit of merchandise, shortening distances and reducing times; it counts with four tracks highways, as well as location and direction of important economic destinies in the country. Also it counts with around 1.400 companies dedicated the agro-industrial production. Meat, sausages, wood processing, pepper, apple and dairy as cheese, cream and yogurt are only some of the products of this important branch for the state economy.

The rural population in the state ascends to 500 thousand inhabitants, dispersed in more than 4 thousand communities with a density of population lower to the 2.500 inhabitants. The more marginalized communities are mainly located in the high Sierra Tarahumara, where the basic services of health, house, education and electrification do not exist, among others. The migration towards other sectors and to the foreign is increasing, the men of the field leave in search of better alternatives. In the majority of the rural communities the average of age of the rural population is superior to the 50 years. The communities with greater population have increased their economic potential due to the remittance of dollars of the emigrant population, whereas the small communities are becoming gradually depopulated. In correspondence with the population concentration - in two great population centers - the economic activities demonstrate a similar noticeable regional presence. Altogether, the one of Chihuahua and Juárez, contribute two of each three pesos of the gross domestic product.

Nevertheless, the global economic dynamism of the entity has not been a homogenous process; this one has been built in the growth of sectors such as: manufactures; electricity, gas and water; commerce, transport and communications and financial services. It emphasizes, with singular preoccupation, the reduction of the farming activities in the generation of the state wealth.

It has given rise, from different perspective, to the development of action lines and regionalist thought in the State. They include the legal scope, through the national, local or state reforms, that aim at the regional fortification as a development way; the political scope, by means of the legislation and formulation of state policies, that increase the public competitions and functions in the municipal jurisdictions; to the economic scope, with the stimulus of the development, through the reassessment of the productive supports; and also in different academic scopes we look for an increasing form to focus the investigations and professional formation on a great diversity of local and regional questions.

Diverse situations in the localities of Chihuahua exist and they try to approach with the incorporation of this approach to the territorial development, more common related to:

- a) The structural economic stagnation of different regions of the State that affects the production, the employment and the wage, generating the growth of the poverty and social exclusion, which leads to the emigration of the population that does not manage to survive. These regions, have suffered, in a more accelerated form, an increasing technological delay with respect the great cities and the important urban centers for which we need to develop policies of demographic planning that allows the root of the people in its localities.
- b) The weak capacity of governmental and institutional management, since they prevail, in form generalized, conditions of administrative inefficiency and little effectiveness of the public local policies. For this, the federal and state Government have developed processes of political and administrative decentralization that significantly increase the competitions of the local governments to count with human and financial resources, and technologies of management adapted to the new functions to exert. Nevertheless, numerous municipal governments still have lack of sufficient capacity to formulate and to manage policies and programs of development, framed in the indicated paradigms.

The field is the most vulnerable and marginalized sector of Chihuahua's society, also it is where the marginalized population concentrates, seven of each ten people in extreme poverty live in the rural communities. The life of these families' farmers is of survival. To make produce the Earth is more difficult, the reprieve zones, where the majority of the small producers seed their hopes are less productive, the consumptions, machinery and equipment necessary to harvest good fruits are generally of difficult access.

On the other hand, the international competence that, sometimes is caused by little effective farming policies cause that the prices

of cattle and agricultural products are reduced, making difficult the production of foods.

The conditions of low yield in which the activities of the primary sector develop do not allow to give a worthy life to the families of lower resources, mainly of the most vulnerable groups as they are the natives, women, young people, people of the third age and people with different capacities.

The farming producers of the rural sector do not have capacity to be inserted in schemes of economic self-sufficiency and social development, causing little access to a better quality of life of the rural families. The rural sector, affected strongly by the previously described factors does not have the capacity to generate sources of employment mainly necessary at times of low activity in the workings of the field, on the other hand, is necessary to obtain the food self-sufficiency for the families of limited resources in the chihuahuense countryside.

- c) The degradation of the environment, whose production constitutes the basic economic support of numerous communities by an inadequate or nonexistent treatment of the organic and inorganic residues, of the liquids and the industrial effluents, affecting the environment of diverse forms; among them, the environmental contamination and water-bearing river that provide water for the human consumption. To it, is added the problematic increase of the forests fires, that generate a serious ecological deterioration on the native flora and fauna, with direct influences in the regional local production. Also, although in a more focused form, exists considerable problems of air pollution and acoustic, affecting of diverse forms the quality of life of their inhabitants.

This degradation exists by the social pressure, the lack of interest in the care of the resources and the low ecological culture, that derive in: illegal exploitation, changes in the use of the ground, forest fires, presence of plagues, bad forest handling and over pasturing, originating serious processes of erosion by the loss of the vegetal cover that take to the reduction of the productive potential of the ground and to the diminution in the water uptake and charge of aquifer

mantles; on the other is insufficient the reforestation realized in forest zones.

- d) The territorial deficiencies, expressed through a physical disorder of the mean, in which multiple factors affect, among others, the discretionary use of the ground, the domain of real estate market or individual interests, upon the common interest; inadequate or nonexistent norms of territorial regulation, or non implementation of this norms; existence of inadequate regulating plans for its application. We can add to it the residential deficiencies, expressed in an increasing deficit of houses and inadequate, insufficient or nonexistent services, social infrastructures and equipment; all this approached, traditionally, through centralized and unsuitable public policies.

Materials and methods:

The preparation of the human capital that requires the state of Chihuahua, today and in the future, is a priority recognized by the University of Chihuahua. With this vision, was developed the degree program denominated Territorial development Engineer which constitutes a new perspective of integration of different areas from the knowledge in the scope of the university professional formation. It has, as a main objective, to educate a multipurpose professional, able to propose solutions, offering alternative of development in front of diverse problematic and situations that appear in Urban and Rural localities in their regional contexts.

The University does not register any type of academic record in the scope of this career. This academic project arises from the critical observation of different national and international educative programs referred from subjects linked to the ordering and territorial development.

The analysis initiates taking as reference the educative model of the UACH, as conceptual and methodological frame for the curricular design, according to the social and philosophical needs and the own conditions of the Institution. (Image 1).

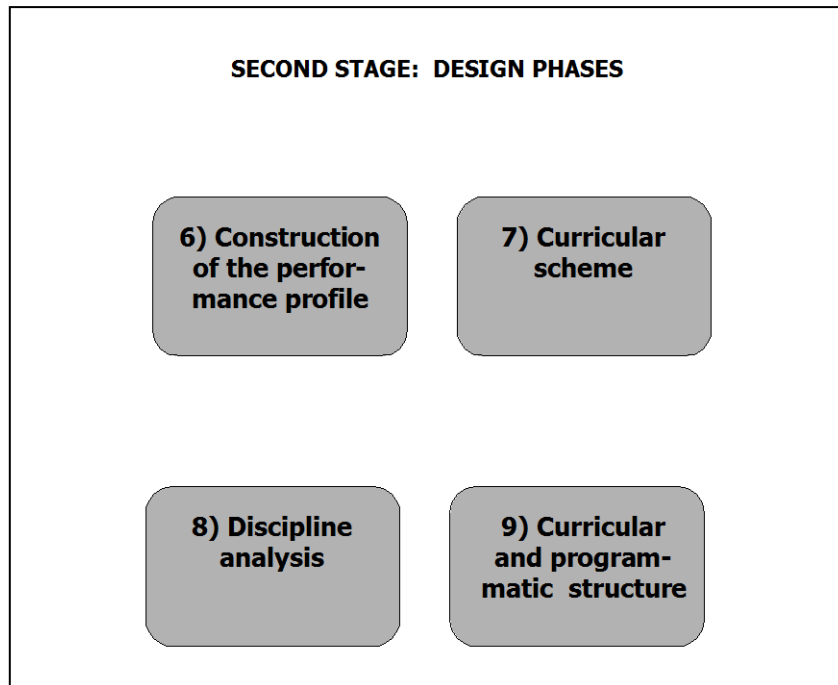
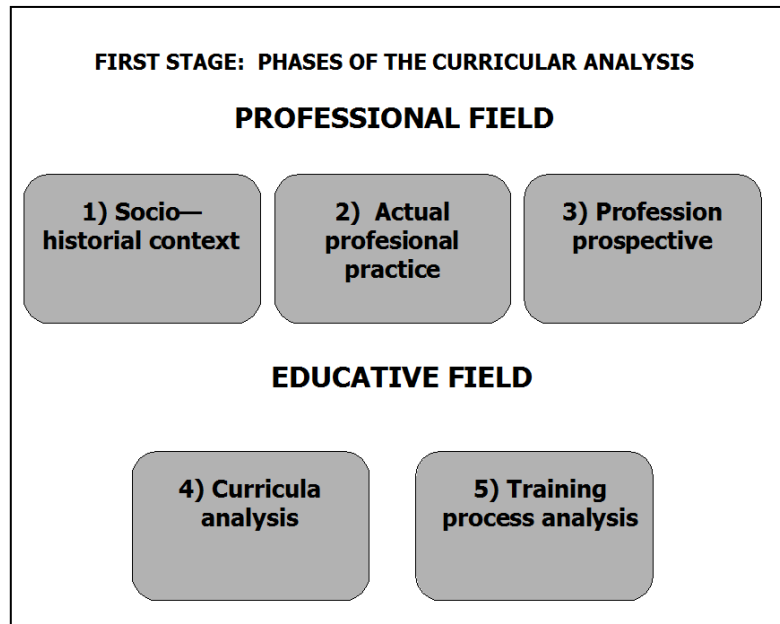


Imagen 1. Analysis and curricular design phases

The actions to follow within the design included an analysis of the professional and educative fields; in order to fulfill this, it was imperative to generate and to | bows of entailment with the social and productive sectors

of goods and services, in order to determine in a joint way the competences that are required for the formation of these professionals.

Also, were taken recommendations made by the accreditation organism COMEAA, by the associations of professionals and were made studies of viability and social relevance that integrated the following aspects: analysis macro regional, analysis micro regional, analysis of the labor market, socioeconomic analysis and of expectations of the career, analysis of the human resources and available materials.

From this analysis arise the basic, professional and specific competences of the Territorial development Engineer (image 2)

Basic competences: socio cultural, problem solution, communication, entrepreneur, work team and leadership.

Professional competences: viable development of the ecosystems, use and operation of tool and equipment, handling of production systems, strategic administration of the resources, innovation and transference of technology.

Specific competences: Diagnostic evaluation of the territory, territorial planning, territorial management.

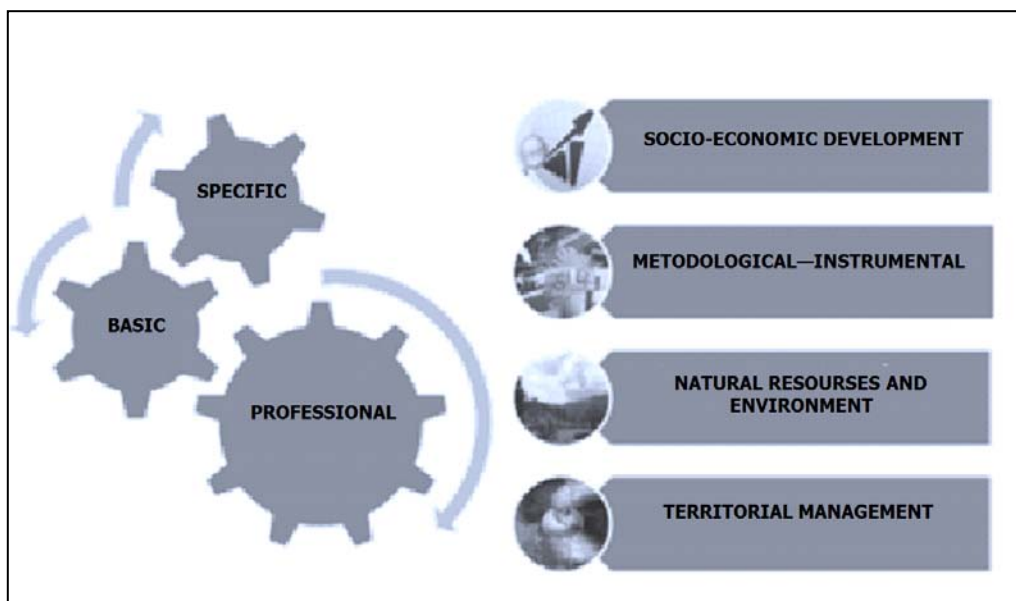


Imagen 2 Basic, profesional and specific competences of the IDT

Conclusions:

By the exposed before and with the conviction to contribute with the regional development, the Facultad de Ciencias Agrotecnológicas take the task of present the present proposal as an alternative to the formation of human resources in these disciplines that help to the harmonic regional development due to prevails a structural economic problem of different regions of the State that affects the production, the employment and the wage, generating the growth of the poverty and social exclusion, which has lead to the emigration of the population that does not manage to survive. These regions, have suffered, in a more accelerated form, an increasing technological delay with respect to the great cities. Consequently, numerous local governments have no sufficient capacity to formulate and to manage development policies and programs, framed in the following paradigms: democratic, participative with a social, institutional and environmental approach.

This proposal implies an active and permanent relation with the concrete social mean, its reality and its context. It constitutes a new perspective of integration of different areas from the knowledge in the integral development of the regions of the State of Chihuahua offering alternative of development in front of diverse problematic and situations that appear in urban localities or in their regional contexts. This, from a democratic and participating perspective, with a social, institutional, environmental, integral and integrating approach.

In this background, the approach of Territorial Development, gather the necessity to study the local problems, from the complex situations and agreements that come together at the moment in the societies and that affect their possibilities of economic-social development, within the framework of the new international, national, state and municipal relations. Incorporate "the Territorial" approach, implies to assume the construction of a new object of study, one that will lead the study and analysis, like a conceptual unit, of complex interrelations, of economic, social, political, cultural and environmental processes, with the purpose of formulate and manage coherent and effective policies and projects of local and regional development.

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