

Integrating entrepreneurial initiatives in Brazilian universities

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Abstract

Universities contribution to development are being thought to go further than generate knowledge and training high qualified professionals, performing a third stream of activities in a proactive fashion, for economic and societal development.

One route for achieve this proactive role for developmental purposes is under way at the Brazilian universities, related to the emergence of a growing concerning with regional development.

In this paper we analyze two important courses of action under the regional development concern a first one coming from the public universities and the second one coming from the communitarian universities.

Key words: Universities; Regional Development; Third mission

1. Introduction

Nowadays there is a growing national concern with the contribution of the universities to innovation and economic performance, demanding more from the universities besides human resources formation. However, in development countries like Brazil, this contribution is severely limited due to a low dynamism of innovation presented by Brazilian industrial enterprises.

The results of two Innovation surveys published by the Brazilian Agency for Geography and Statistics (PINTEC) may summarize this low dynamism (as presented in Cassiolato & Lundvall, 2005): (i) Innovation rates (percentage of firms that introduced in the market new or improved products and/or process in the 3

year prior to the survey) are very low and declining for most sectors; (ii) R&D expenditures by firms are not only small, but seems to be declining.

That is the Brazilian innovation paradox: “We have science and technology development at the universities, but we don’t have innovation at the industrial enterprises”.

For sure, that is a common paradox for many developing countries. More sound and proper industrial and trade policies, a more friendly business ambient, more diffusion of an innovation culture, among others things, are necessary to provide the right context for industrial enterprises more adequately use the research findings and techniques delivered at the universities.

The innovation paradox (in developing countries) works like a trap for the university role. For one side, only the contribution of the universities for technological innovation seems worth to be considered. For the other side, under that paradox, universities are supposed to have a reactive role, waiting for demands from outside, being paralyzed until major changes in the macro environment occur.

Universities, of course, should continue with their missions to generate knowledge and training high qualified professionals, an important contribution for development.

Universities, however, should perform in addition a third stream of activities in a proactive fashion, for economic and societal development.

That is precisely what has been acknowledged by a recent specialized literature on triple helix model and on engaged university. (Etzkowitz, Mello, 2004, Etzkowitz, 2002a, 2002b, Etzkowitz and Leydesdorff 2000, 1999, 1997; Leydesdorff and Etzkowitz 1998; Holland 2001, 1999; Chatterton and Goddard 2000; Goddard and Chatterton 1999; Gunasekara, 2004a, 2004b, 2004c; Howard 2005)

Attempts have been made by Brazilian universities authorities, however, aiming a more pro active role, for developmental purposes, and are related to the emergence of a concern with regional development.

Two important courses of action under the regional development concern may be selected for the Brazilian reality. A first one comes from the federal government province. Federal government is creating federal public universities precisely to act regionally. Moreover, federal government is stimulating the public universities under their administration (the federal public universities) to open campus in municipalities close to their main headquarters.

A second course of action selected comes in form of a bottom up initiative, not from the governmental sphere but from the civil society one. It may be characterized the efforts of one class of universities, the so-called communitarian universities, for the development of their communities, of their regions.

We start our paper with an overview of the Brazilian higher education system, with emphasize at the undergraduate human capital formation. Then we move to present the Brazilian university system and their performance in research and postgraduate formation. Afterwards regional policies are analyzed under the perspective of the federal universities and the communitarian universities, ending with the final conclusions.

2. Brazilian Higher Education System: an overview

The university is an institution of European medieval origin that has been universalized and successively transformed to perform new tasks in developed and developing countries. The first Spanish university in Latin America was founded in Santo Domingo, in 1538, soon after the conquest of the new world, well before the first universities were established in colonial America, such as Harvard, in 1636, to train religious and political leaders. In less than one century, 12 universities were founded by the Spanish, from the North to the South of the continent, the University of Cordoba, in 1613 (Buarque 2003).

In Brazil, a Latin American country, colonized by the Portuguese, however, higher education institutions started to be established only at the first half of the XIX century, with the foundation of isolated undergraduate professional schools, and universities only at the beginning of the XX century.

The importance of Brazilian higher education system for the country development becomes officially recognized by a major legal framework established by law in 1968, which defined their organization, functions and competences.

Higher education institutions, according to this 1968 Law, may be classified as publics or privates. Publics institutions can be sub classified as (i) Federals – supported and managed by the Federal Government; (ii) States – supported and managed by State Governments; (iii) Municipals – supported and managed by Municipal Governments

Private institutions, by other hand, can be sub classified as non-profit or pro-profit ones. Finally, the non-profit private institutions can be (i) Communitarians; (ii) Confessionals – religious orientation; and (iii) Philanthropists.

As far as the academic organization, by the same 1968 Law, higher education institutions can be classified as Universities, Specialized Universities and Universities Centers, Centers for Technological Education, Isolated Schools, Extensive Schools and Institutes of Higher Education.

An overview picture of Brazil Higher Education Institutions can be figure out from INEP (2004) Educational Census. There are 1859 Higher Education Institutions (HEIs), distributed along the following categories:

HEIs type	Univ.	Spe. Univ / Univ. Center	Isol. Scho.	Ext Scho. / Inst.	Cent for Tech	Total HEI
Federal	44	1	1	6	31	83
States	31	0	0	26	8	65
Municipals	4	2	3	50	0	59
Total Publics	79	3	4	82	39	207
Pro-profit	26	47	95	1080	54	1302
Non-profit	58	31	20	241	0	350
Total Privates	84	78	115	1321	54	1652
Total HEI	163	81	119	1403	93	1859

Table 1 - Higher Education Institutions in Brazil, 2003
Source: INEP (2004) Census

Those Higher Education Institutions are the ones authorized by the Brazilian Minister of Education to offer undergraduate courses, under exam and approval of solicitations. They form the Brazilian tertiary education system

It is a system in expansion. The total number of undergraduate students went from 93,202 (1960) to 1,437,232 (1985), reaching 3,887,022 in 2003; the number of universities growth from 39 (1964) to 163 in 2003, a growth of 64%, and, during the last years, the total number of HEI growth from 900 (1997) to 1,859 (2003), a growth of 106% (INEP 2004).

This expansion, however, were favoring atomization, with more than 44% HEI with less than 500 students, and with the high predominance of specialized schools and institutes. In addition, the expansion was lower than desirable; since the number of undergraduate students enrolled at HEIs in 2003 (3,887,022) comprised only 11% of their age group (18-25 years), the same proportion achieved in 1985. Government plan is to increase that proportion to 30% up to the year of 2010, what looks very unlike, take in account today figures (Project of law of high education reform, 2005)

The more distinguished phenomenon is the fast expansion of the private institutions during the last decades, what puts Brazil at the leadership in Latin America in number of institutions and of students enrolled in private institutions.

The percentage of private HEI related to the total number of HEI growth from 74,4% (1994) to 88,9% in 2003, were the public sector, already minority (25,6%), was reduced to 11,1%.

Number of HEI (%)	1994	1998	2002	2003
Public	25.6	21.5	11.9	11.1
Private	74.4	78.5	88.5	88.9

Table 2 - Evolution of the distribution of Public and Private HEI
Source: INEP (2004) Census

Data from the enrollment of tertiary students confirm the uncontested hegemony of the private sector. From a total of 1,661,034 students enrolled in undergraduate courses in 1994, 41.64% were at public institutions and 58.4% at private ones. From 1994 to 2003 there was one exponential growth in the enrolled numbers in private institutions. Data from INEP 2004 Census reveal that private institutions hold 70.8% of the 3,887,771 students enrolled; the public sector remained with 29.2%.

One last point is concerned to the undergraduate students enrolment related to the areas of knowledge. A disturbing picture appears; nearly 70% of the students are enrolled at undergraduate courses in Human and Social sciences and only 11% in Engineering and Technologies, data for the year 2003. Brazil The whole picture is provided below

Areas	Human & Social Sciences	Life Science	Exact Sciences	Agriculture Science	Engineering & Technology	Others
% enrolment	69%	13%	4%	2%	11%	1%

Table 3 - Areas of Knowledge enrolment distribution
Source: Cavalcante (2005)

3. The Brazilian university system and their generic contribution to development

Among all types of Higher Education Institutions, University becomes the preferred one by the Brazilian governmental educational organs. University is legally defined as institutions multi disciplinary, public or private, that develops regular activities of teaching, research and extension and that enjoy managerial, scientific and didactic autonomy.

For their size, for their range of areas of knowledge, for their multi disciplinary character, universities develop their basic mission of teaching, research and extension in a multifaceted way, making so a generic contribution to development, as described below.

Teaching mission: universities offer a large range of courses, including undergraduate courses, postgraduate courses stricto sensu (leading to master and doctorate degrees), postgraduate courses lato sensu (specialization and MBA) and short term courses of continuous education.

The importance of the universities among the others HEIs types may be attested by the fact that more than half of the undergraduate students (58,6%) are enrolled at universities in Brazil, and that more than half of the undergraduate courses offered by the HEIs are delivered by the universities, as we may see from the tables below

Total HEI enrollment	Universities enrollment	Non-universities enrollments
3,887,022 (100%)	2,276,281 (58,6%)	1, 610, 741 (41,4%)

Table 4. Undergraduate enrollments in 2003; Source MEC (2005)

Total HEI undergraduate courses	Universities undergraduate courses	Non-universities undergraduate courses
16,453 (100%)	9,396 (57,1%)	7,057 (42,9%)

Table 5. Undergraduate courses in 2003. Source MEC (2005)

Looking at the postgraduate level, taking together Brazilian universities plus research institutes, around 8,000 PhD's and 28,000 M.Sc's degrees were awarded in 2003. In that year, there were around 11,000 Ph.D's students and 35,000 M.Sc.'s students enrolled.

Research mission: universities perform research activities, contributing to knowledge generation and diffusion. Under the Brazilian university legal framework, stricto sensu postgraduate studies are organized under the format of programs, and are supposed to perform research activities as part of their pedagogical setting.

Knowledge generation may be expressed by publications at prestigious scientific journals, normally referred to the journals indexed at the Science Citation Index. Brazilian universities are also the major responsible for the expressive results in terms of papers published in international journals indexed at the Science Citation Index, around 1,55% of the total papers published in the world and around 40% of the total published by Latin American countries (MCT, 2005).

Extension mission: university extension is an educative, cultural and scientific process that articulate teaching and research in a combined way to meet societal

needs. It includes community services programs such as medical care, law assistance, radio broadcasting and so on.

Medical care is one of the most important community service delivered by the universities, through their hospitals. At the year 2003, the number of attendances at the universities health units reached the figure of 175,268,971, a number practically equals to the Brazilian population! (INEP,2004).

Law assistance is another major community service delivered by the universities, on the same year of 2003, around 350 thousands attendances was done by universities law units. (INEP, 2004)

It includes also the so called third stream activities, passing from technical assistance to industry, transfer of knowledge and technology, incubators, science parks etc.

4. Brazilian public universities and their regional perspective

The Brazilian Minister of Education is the institution in charge of the regulation of the higher education system and the university system in particular. They have mandatory power over the federal public universities and an accreditation power over the private universities.

Over the last forty years federal government have created federal universities in all states of Brazil. They were universities more akin to develop their teaching and research mission more nationally oriented, to cover all possible areas of knowledge, not primarily concerned with their socioeconomic context.

Recently the federal government change this up down orientation, starting be more sensible to appeals coming from the regions, founding universities to operate regionally, defining their areas of competence according to the regional needs, taken in account all major players in the region.

Being created with that purpose those regional universities will presumably better integrate societal and economic development missions, adapting their core functions of teaching and research, as well as community service, to address regional needs.

Besides the creation of new “regional” universities, government is stimulating the internalization of the old federal public universities by means of creation of new campi.

New campi and new universities are been created so to push ahead the production of the knowledge and the quality of life in the diverse regions of the country.

New regional universities

Usually regions are classified take in account the technological level of their productive sector. The definition of the competences of the regional universities also takes in account that variable. Looking at the regional universities recently created by the federal government, we may verified how the teaching and research organization in fact reflects those regional technological characteristics.

We may appreciate the richness of such regional characteristics looking in more details two of the new regional universities recently created by the federal government, the Fedral University of Grande Dourados - UFGD, at the Grande Dourados region, inside the State of Mato Grosso and the Federal University of ABC – UFABC, at the ABC region, inside the state of São Paulo.

The Federal University of Grande Dourados (UFGD)

The Federal University of Grande Dourados (UFGD) arrives to benefit an area in accelerated economic expansion that includes the second bigger city of the State of Mato Grosso do Sul. The region of Grande Dourados is characterized by its high rate of farming production directed to the exportation, which comes out from its fertile ground and propitious climate.

The UFGD has as the one of its main lines of direction social responsibility, looking for to contribute for the sustainable development of their region, with strong emphasis in teaching and research directed toward the preservation of the natural resources and biodiversity.

It will be created twenty six courses of graduation, one of specialization, three of master and three of doctorates, for a potential population of 2,000 students. Besides that, a university hospital will be installed.

The courses to be implanted immediately in the university are food processing engineering, odontology, forest engineering, psychology, social sciences, physical education, mathematics, geography, letters, pedagogy, biology and history. The personnel foreseen for the university, when in its complete implantation, it is composed of 480 professors, 96 doctors, 281 administrative employees of superior level, 534 administrative employees of medium level and 220 employees of support level.

The Federal University of ABC (UFABC)

The region of ABC is formed by three municipalities, Santo André, São Bernado do Campo e São Caetano do Sul, and it is a prosperous industrial region of the State of São Paulo.

UFABC is one of the first federal universities of Brazil to be inaugurated in century XXI. Being so, it is born with potential fort for the innovation and the diversification.

It comes with a structure that conjugates academic and curricular flexibility with high standards of quality. Beyond activities of education, the new university will have for objective to develop research in the diverse areas of the knowledge and to promote the extension activities.

The university is born with the mission to form professionals of high qualification in strategical areas for the regional / national development: natural sciences, mathematics and computer science and technology (dealing with seven engineering areas). Courses of formation of professors for the secondary education level in the areas of physics, chemistry, biology, mathematics and computer sciences will be offered.

About one thousand students will be enrolled in the first year of functioning. When the institution will be fully installed, there will be twenty thousand students of graduation, 2,500 of master and 1,000 in programs of doctorate. There will be around 600 professors and also around one thousand monitoring scholarships to be provided for students. The campus will be installed in Santo André, in a land of seven thousand square meters.

New Campi

Beyond the new universities, the Ministry of Education is creating or consolidating 36 campi, making possible the access to the public higher education to a very bigger number of Brazilians and extending the beneficial influence of the university interiorizing it.

Already 14 campi had been created. They are the campus of the Floresta (in Cruzeiro do Sul, in the State of Acre, AC); of Marabá, Bragança, Castanhal and Santarém (in the State of Pará, PA); of Caruaru and Garanhuns (in the State of Pernambuco, PE), of Vitória da Conquista (in the State of Bahia, BA), of Planaltina (in the Federal District, DF), of Volta Redonda and of Nova Iguaçu (in the State of Rio de Janeiro, RJ), of the Baixada Santista and of Sorocaba (in the State of São Paulo, SP) and of the Litoral do Paraná (in the State of Paraná, PA).

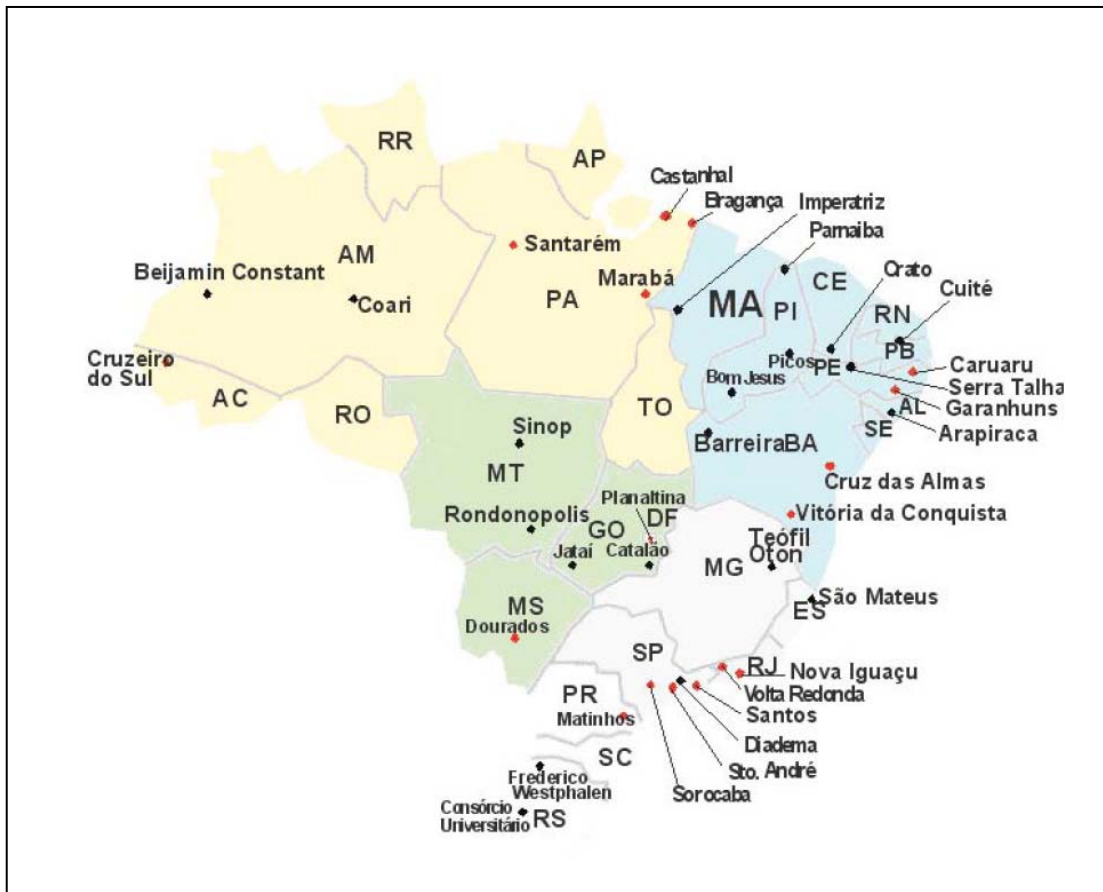


Figure 1 – Brazilian Public Universities Campi (2006)

Others 26 campi are in process of creation or consolidation: Manaus (State of Amazonas, AM), Chapadinha (ME), Arapiraca (State of Alagoas, AL), Bom Jesus (State of Piauí, PI), Itabaiana (State of Bahia, BA), Barreiras (State of Bahia, BA), Crato (State of Ceará, CE), Curimataú (State of Rio Grande do Norte, RN), Diadema (State of São Paulo, SP), Teófilo Otoni (State of Minas Gerais, MG), Alegre (State of Espírito Santo, ES) and Frederico Westphalen (State of Rio Grande do Sul, RS). The Consórcio Universitário Metade do Sul will (State of Rio Grande do Sul, RS), Coari (State of Amazonas, AM), Benjamin Constant (State of Amazonas, AM), Imperatriz,(State of Maranhão, ME), Serra Talhada (State of Pernambuco, PE), Picos (State of Piauí, PI), Parnaíba (State of Sergipe, SE), Catalão (State of Goiás, GO), Jataí (State of Goiás, GO), Rondonópolis (State of Mato Grosso, MT), Sinop (State of Mato Grosso, MT) and São Mateus (State of Espírito Santos, ES).

This campi policy may be exemplified by the following examples:

Campus of Imperatriz - Federal University of the Maranhão - State of Maranhão

With a population of 231.950 inhabitants, Imperatriz, at 696 kilometers of São Luís, capital of the state of Maranhão, is the bigger city of the south of the Maranhão. Its

region concentrates 16 municipalities and a population of 491.405 inhabitants. The consolidation of the campus of Imperatriz, with the creation of the courses of food processing engineering, nursing, physical education and social communication, will allow to extend and to diversify offers of places for students, contributing for the formation of the necessary human resources to the economic and social development of the region.

Campus of Curimataú - Federal University of Campina Grande - State of Paraíba

The mountain region of the state of Paraíba, where is located the city of Cuité, is characterized for its low level of tertiary education and economic development. Behind the creation of a campus there is the idea to induce a process of development in this region from a perspective of a systemic university formation that articulates, on one hand, courses in basic sciences to form professors for the second grade, with the objective to improve secondary education and, for another hand, courses turned to the local productive capabilities.

Campus of Serra Talhada- Rural Federal University of Pernambuco - State of Pernambuco

Serra Talhada, located in the hinterland of the Alto Pajeú, is at 420 km of Recife, capital of the State of Pernambuco, concentrates a population of more than seventy thousand inhabitants and has in farming its predominant economic activity. The implantation in the city of a campus of the UFRPE, with the courses in agricultural economy, agricultural engineering, fishing engineering and in computation, will contribute in large measured for its economic and social development.

Consórcio Metade Sul - Federal University of the Region of Pampas – State of Rio Grande do Sul

.The Federal University of the Region of Pampas will be formed by poles installed in municipalities of the region and will offer, initially, thirteen courses of graduation integrated to the necessities of the local productive base. The courses will be structuralized in two cycles: the basic cycle that will be offered in each one of the municipalities that will hold university poles; and the professional cycle, that will be offered only in some poles. Initially, the institution will be structuralized in a trust: the Consórcio Metade Sul.

One of the main characteristics of the University will be the curricular flexibility, that allows to reduce the necessity of great displacements to attend a higher education course. The students will initiate its courses in its municipalities of origin and will be able to conclude them in a neighboring municipality, without having that to emigrate to the central pole. Moreover, the university poles will also count on an

infrastructure that will allow the development of activities not only in the classrooms, but also through the use of libraries and of the Internet.

The Consórcio Metade Sul will initiate its activities in 2006, embracing 2,000 students. When of its complete implantation, foreseen for 2008, it will count on 400 professors and 10,000 students.

The institutional innovation represented by this institution is to be extended by the federal government to other regions of the Country.

5. Brazilian communitarian universities and their regional perspective

Under the Brazilian classification, private universities may be additionally classified as pro-profit universities and non-profit universities. Non-profit universities are institutions without lucrative ends, their generated or received resources are integrally applied in its activities. Further, non-profit universities can be classified as communitarians, confessionals and philanthropic.

Communitarian universities have their roots with the immigration process that happens in Brazil mainly at the end of the XIX century and beginning of the XX century, in the South and South east, with the arrival of the Europeans, mainly Italians and Germanys.

They soon realize that they were abandoned by the Brazilian government and that they should do everything by their own means, all services usually provided by the state was to be done by themselves.

Communitarian universities has been created initially in and by communities with those characteristic, completely supported by their communities, mostly by student's fees.

This model has propagated everywhere, being established by a group of persons or by juridical entities like cooperative of professors and students, always including members of the community.

Communitarian universities are expected to be fully engaged with its community – not tacitly but explicitly, and not only in research partnerships, but in ways which profoundly influence both teaching and research, as well as reaching out to meet society's intellectual, social and cultural needs. Communitarian universities are said to be linked to place, that is, to their local and regional economies.

Recently communitarian universities started to expand their activities, from the original municipality to neighbors' municipalities, acting regionally. The regional

perspective of the communitarian universities embraces the fulfillment of their teaching, research and extension missions.

It is interesting to note that the sense of independence of the state takes the communitarian universities to perform profoundly their extension mission, for societal and economic development, going from community services to third mission activities.

To appreciate the richness of the communitarian universities missions we went deeply into the history and actual performance of the Communitarian University of Caxias do Sul, located at the State of Rio Grande do Sul, south of Brazil, to retreats how well communitarian universities are acting regionally. .

The communitarian and regional University of Caxias do Sul

The implantation of the first courses of higher education in Caxias do Sul happened during the decade of 50, period marked in the history of Brazil for transformations in the economic, social field and politician, as result of the modernization process for which it passed the country. The delay in overcoming the social, economic and cultural problems was some of the subjects that mobilized the organized sectors of the society. In the field of the education, the universalization of the primary instruction, the expansion of secondary education and the official politics of incentive to the installation of private higher education schools were some of the proposals launched by the State as form to insert the education in the “development” effort.

Caxias do Sul, the second metropolis of the state already in the decade of 50, also lived a period of economic growth and modernization, like any great urban centers of the country. The city renewed, the population modernized thoughts and habits, new priorities were placed. Between the new social demands, there was the creation of new options of education with the implantation of courses of higher education for the young of the city and the region. Still in the end of the decade, diverse entities and personalities of the community mobilized to get from the federal government the authorization for the installation of the first courses of higher education in the city.

In 1956, Dom Benedict Zorzi, Bishop of Caxias do Sul, already defended the union of the society around a common ideal: “the creation of faculties that, in turn, would make possible the creation of the University of the Region”.

Thus, the installation of the first faculties in the city resulted of the mobilization and the effort of the society to impose new platforms for its development. At the beginning of the Sixties, Caxias do Sul already counted on five installed institutions of higher education that offered courses such as: Economic sciences, Philosophy, Painting and Music, Nursing and Law, among others.

Those first faculties were: College of Economic Sciences and College of Philosophy, under orientation of the Diocesana Miter; School of Nursing Madre Justina Ines, of the Literary Society of Saint Jose; Law school, under the direction of the Hospital Society of Saint Fátima and the School of Beaux Arts, of the Municipal City hall.

Frequented by students of Caxias and the neighboring municipalities, these faculties were them pillars on which the future University of Caxias of the South was raised, fruit of the union of the faculties around a common ideal: the creation of a University that, in understanding of its idealizers, would have to symbolize the cultural expression of the region and to keep strong links with its community.

It was in 10 of February of 1967 that the University of Caxias do Sul was finally established.

Currently, its performance extends to a geographic area of seventy municipalities, a region of important economic performance, with a population of more than a million of inhabitants, which consider the University as an important allied in the search of new bases to transform economic development into social progress for its population.

Its Campus Headquarters is located in the University City in Caxias do Sul, where are the main agencies and services of administration and support to the university units located in: Bento Gonçalves, Vaccaria, Canela, Farroupilha, Guaporé, Nova Prata, Veranópolis and São Sebastião do Cai.

As a communitarian university, the UCS looks for to remain itself in permanent dialogue with the society. Its interests are of the collective and the result of its work is totally reinvested in the qualification of its action and in the improvement of the services it offered to the population.

The University of Caxias do Sul (UCS) is maintained by the Foundation University of Caxias of the Sul, legal entity of Private Status, with a Managing Advice formed by the Rector of the UCS; two representatives of the Chamber of Industry, Commerce and Services of Caxias do Sul; two representatives of the Ministry of the Education; one representative of the Municipal City Hall of Caxias do Sul; one representative of the Government of the State of the Rio Grande do Sul; one representative of the Miter Diocesana de Caxias do Sul and one representative of the Cultural and Scientific Association of Caxias do Sul

UCS has two councils of superior deliberation: The University Council (CONSUNI) and the Council of Teaching, Research and Extension (CEPE).

The CONSUNI is responsible for the formularization of the general politics of the University in the plans administrative, financial and disciplinary. It establishes the linking with the Managing Advice of the Foundation University of Caxias do Sul.

The CEPE is responsible for the teaching, research and extension university policies.

UCS in numbers:

36,444 students; 942 employees 1,141 professors with 388 being full time and where 232 has doctorate degree; 563 master degree;

Budget of 90,000,000 USD (2005) [Students fees annual average of 2,400 USD]

65 graduate courses; 59 sequential courses; 51 courses of postgraduate lato sensu

Master and Doctorate programs in:

Biotechnology; Law; Tourism; Letters and Regional Culture; Science of the Materials; Administration; Nursing and Chirurgic

94 Research Groups registered at the Brazilian Research Council (CNPq)

Communitarian and Regional effects of the UCS in their region:

Using the typology proposed by John Goddard (1999), the effects of the UCS in their region may be analyzed according to three categories: (i) The static impact as employer and generating of flows of expenses in the region; (ii) the dynamic impacts to it of the interaction between the university and the companies located in the regions where they act and (iii) the contribution for the social and communitarian development of the regions where they act,

Effects of the first Type:

Employer and generating of flows of expenses in the region - static role

- The movement of a budget of 90,000,000 USD and employer of approximately 2000 people
- The budget of the UCS is greater than many municipalities budgets in their region.

Effects of the second type:

Refers to the dynamic impacts of the interaction between the university and the companies located in the regions where they act. These impacts occur through the activities of teaching, research and extension

Technological Initiatives

- Exploitation of Residues of the Civil Construction
- Standardization of the System of Production of Cheese Serrano and Treatment of the Residues
- Recycling of Residues of the Leather- Shoes Sector
- Re utilization of residues of confections industry
- Extraction of essential oils attended by microwaves
- Development of *termociclador* in real time.
- Evaluation of the concentration of chemical residues in water
- Development of stationary engines for use of *biodiesel* and vegetal oil *in natura*
- Development of vacuum-oven for cementation and steel hardness

Training Initiatives

- School of Gastronomy UCS-ICIF
- Program of Familiar Agro-Industry
- Capability in modeling – Fashion Pole
- Programs of Network Cooperation
- Programs of Extension for Enterprise Qualification and Exportation.

Effects of the third type

Deals with the contribution for the social and communitarian development of the regions where they act, through its general influence on the local cultural environment and the formation of leaderships, as well as by means of its role in the formularization of a strategical vision on the economy of the region. .

- Pole of Computer Science of Caxias of Sul and the Technological park
- Design Incubator of the UCS
- Technological Transfer Office of the UCS
- Entrepreneurship programs
- Technological Incubator of Caxias do Sul (UCS, Municipality of Caxias do Sul, Industry association)

- Metal – Mechanical for Car Assembly Industry Cluster

Participation in projects like:

- Center of Homologation and Tests
- Center of Reference for Gas fuel for Car Assembly Industry
- School of Metallurgy
- Qualification of Suppliers

- Cluster of Wood and Furniture

Participation in projects like:

- SIC – System of Competitive Information
 - Management of Design
 - Modeling of system of information for furniture sector
 - Diagnosis of the Generation of Residues of the Furniture Pole
-
- Joint Regional Programs with the Municipality Department of Education and Regional Coordinators of Education.
 - Center of Familiar Agriculture (UCS, Municipality of Varanópolis; and Federation of the Agriculture FEPAGRO)
 - Fashion Pole of Caxias do Sul
-
- Museum of Natural Sciences
 - Symphonic orchestra of the UCS
 - String Quartet of the UCS
 - Institute of Municipal Administration
 - Institute of Historical and Cultural Memory

Problems with the regionalization process

Likewise what was observed with the regionalization process at the public universities, all care should be taken to clearly define the activities to be implemented at the campus of the communitarian universities.

The definition of scope of the teaching, research and extension activities should be preceded by an deeper study of demand allied with a scenario prospecting. All details matter even in the event of a new course implementation.

One small case deserves to be exposed, just to illustrate this point. Guaporé is a municipality nearby Caxias do Sul, a jeweler region, with hundred of small companies in that sector. The University of Caxias do Sul was asked to implement there a course to form jeweler's technicians. The university understood that the demand was to qualify high technician and them installed there laboratories with equipments for such. The cost of the course becomes too high. The municipality city hall and the industrial association realize that would be very expensive to them to assume that obligation, and the students also found it very expensive for them.

In fact what was wanted was a medium level technical course, not a higher one. The course was offered just one time for very few students, and closed afterwards.

6. Conclusion

Brazilian universities have been contributing the socioeconomic development of the country in a generic way through their teaching, research and extension missions.

Recently they become more concerned in deeper their contribution to their socioeconomic environment, acting more regionally oriented.

Reflecting new policy orientations from the federal government, new public universities starting to be created based on regional needs and new campus has been created based on regional expansion of the present universities.

Our analyzes reveals two main types of those new universities, one with areas of competence more science and engineering oriented, which appears desirable for regions with industries of advanced technology, and the other with more traditional areas of competence, in regions of industries of low technological level.

Regional concern appears also at communitarian universities, a type of university community oriented by definition. Here our analyzes treated in more detail one exemplar of such universities, the University of Caxias do Sul, exploring their communitarian and regional features.

Finally, the necessity of subordinate regional university policies to a proper study of socioeconomic scenario is also discussed, for both types of university.

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