THE ROLES OF THE UNVERSITIES IN REGIONAL DEVELOPMENT AND TURKEY'S EXPERIENCE

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ABSTRACT: Universal roles of the universities in regional development and presenting the findings of a research related to regional experiences of the universities in Priority Regions for Development (PRD) of Turkey constitute the issue of this paper. In the first section, the changing functions of the universities in about their millennium history of development and their roles in regional development policies in some OECD countries are reviewed. In the second section, the historical development of regional universities, their regional functions in Higher Education Act No. 2547 and some practices of regional universities are presented. In the third section, findings of a research providing the evaluation of the administrators of higher education institutions and occupation chambers about the external activities (applied research, non-formal education, counselling, publication and health services) of the universities in PRD are summarised. In the last section, measures required for the improvement of the regional activities of the regional universities in Turkey are presented.

KEY WORDS: University, higher education, regional functions of universities, regional development, Turkey.

ÖZET: Bu makalenin temel konusunu, evrensel düzeyde üniversitelerin bölgesel kalkınmadaki rolleri ve Türöncelikli yörelerindeki ünikalkınmada kive'nin versitelerinin bölgesel deneyimlerine ilişkin bir araştırmanın bulguları oluşturmaktadır. Makalenin ilk bölümünde, yaklaşık bin yıllık tarihsel gelişimi içinde üniversitelerin değişen işlevleri ve bazı OECD ülkelerinin bölgesel kalkınma politikaları içindeki yerleri incelenmektedir. İkinci bölümde, Türkiye'deki bölge üniversitelerinin tarihsel gelişimi, 2547 Sayılı Yükseköğretim Yasası'ndaki bölgesel işbölge üniversitelerinin çevresel levleri ve bazı etkinliklerinden örnekler sunulmaktadır. Makalenin üçüncü bölümünde, Türkiye'nin kalkınmada öncelikli yörelerindeki üniversitelerin çevresel etkinliklerinin (uygulamalı araştırma, yaygın eğitim, danışmanlık, yayın ve sağlık hizmeti boyutları) üniversite yöneticileri ve meslek odaları yetkililerince değerlendirilmesine ilişkin bir araştırmanın bulguları özetlenmektedir. Sonuçlar ve öneriler bölümünde ise Türkiye'deki bölge üniversitelerinin iyileştirilmesi için alınması gereken önlemler sunulmaktadır.

ANAHTAR SÖZCÜKLER: Üniversite, yükseköğretim, üniversitelerin bölgesel işlevleri, bölgesel kalkınma, Türkiye.

1. INTRODUCTION

In this paper, firstly, the universal roles of the universities and the regional roles of them within those roles are going to be summarised, and secondly, the roles and historical development of the regional universities in Turkey and findings of a research aiming at evaluating the regional activities of the universities in underdeveloped areas are presented and some suggestions are made to promote the regional development.

2. THE CHANGING ROLES AND FUNCTIONS OF THE UNIVERSITIES

Universities have undergone significant structural and functional transformations in accordance with the increase in their functions since the XI. century when the foundations of the contemporary universities were laid down.

Until the XIX. century, the universities, which were initially only "teaching" institutions, consisted of small communities of teachers and students. Researches and scientific discussions were carried out outside the university [1,2]. The most important change influencing the structure of the universities happened with the statement of A.V. Humboldt "mere teaching without scientific research is simply not adequate for a university" at the beginning of the XIX. century (1810) when the Berlin University was founded. Until that time, "teaching" was the only function of the universities, starting from that time "basic scientific researches" took on an important place among the functions of the universities [3]. The principle of treating "teaching and research together" stated by Humboldt influenced today's universities permanently.

In the XX. century, the years following the World War II, apart from the traditional functions of the universities -teaching and basic research-, "community services" such as applied research and consultancy took place among the functions of the universities [4]. The functions of the universities to give community services, especially at American universities, gained importance. This function of the uni-

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versity includes the activities related to applied research, health services, consultancy, art and sports[5].

Although the gravity of the functions of the universities varies from one country to another, even from one university to another in the same country, it is commonly accepted that the functions of the universities can be classified in three categories as teaching, basic research and community services (applied research, consultancy, adult education, health services, publications, etc.).

On the other hand, in an OECD publication [6] listing the functions of the contemporary universities, firstly, referring to the functions of universities such as teaching, research, meeting manpower requirements of the economy, helping the governments to strengthen the competitiveness of the economy, providing an avenue of social mobility, secondly, the functions of the universities serving to their regions and the immediate society are emphasised. In this context, especially in OECD countries, the universities, which are either local or regional, national or international institutions, are expected to give a broad range of community services varying from providing "non-formal education" possibilities to various occupation groups, counsultancy services to the local industry, opening the facilities of the university to the public use, organising social activities and involving in the present ones in health services. Due to this sort of activities, as an incentive of the development of less developed or disadvantageous areas, governments have always been on the side of the idea of establishing the new universities or supporting the formerly established ones in those areas.

Again, as it was stated in an OECD publication [7] the experiences show that universities under certain conditions play an important role in regional development. In many countries, like France, Finland, Sweden and Norway, the 20 years' regional development policies have been an important factor in determining the regional higher education and research policies. In 1960s, while the expansion plans of higher education were being done, new institutions were established especially in underdeveloped areas (mostly based on agriculture, fishing and forestry).

Some examples of the activities of the universities in some countries related to the regional roles emphasised above are going to be presented below.

1.1. The United States of America

It is well-known that the most typical examples of universities' idea and practices of serving to the local environment were given by Land-Grant type state universities established in the second half of the XIX. century. These universities analysed their regions' agricultural and economic structure, main problems such as welfare and health and made significant contribution to the development of their regions and indirectly to the development of the whole country. For instance, Tennessee University continues its cooperation with TVA (Tennessee Valley Authority) initiated in the frame of a project in 1933 and it stands as a good sample in this field[8].

The purpose of the project is preserving and improving the resources and accelerating economic development in Tennessee Valley Region. This project also covers expanding flood control fields, increasing electricity production, betterment of the moors, agriculture, forestry and industry, training project staff and personnel of public and private sectors [9].

1.2, Finland

In 1960s, in the north and west regions of Finland, universities like Oulu, Kuopio, Joensuu, established with the purpose of producing proper services for the environment and developing their regions, ignoring "what the universities should be like", are known with their new roles and practices. Some of the distinctive activities of these universities are as follows [10].

• The departments of these universities directed all their research studies to the problems of their immediate environments.

• Instead of focusing on technical solutions for the industry, their main focus was on infra-structural problems and development of the regions.

• They made studies on issues having special importance for the regional development. For instance, research studies of the zoology department of a university may include the solutions of the problems for local fishing industry such as fish genetics and physiology, processing and marketing of fish products, studying community dealing with fishing from sociological aspects.

1.3. Norway

In Norway, where a conscious regional development policy has been practised for more than 30 years, TrØmso University (1968) was established as a result of a regional development policy. Some development seen in the country can be listed as follows [10]:

• Between 1969 and 1984, 13 regional colleges were set up with the purpose of expanding higher education. Initially these schools aimed at giving vocational education, later on, the faculty was asked to make applied researches to respond local problems.

• As a further step, various applied research centres were founded in the body of these colleges. The good relations of the colleges with local governing authorities, local industry and banks played an important role in their foundations.

• There is an increasing interest in setting up science parks.

• Norway Committee of Science Policy, emphasising the important role of these colleges in the publications of research findings, encouraged these developments.

1.4. Turkistan

Tashkent University (1920) was established with the aims of increasing literacy rates, meeting the qualified manpower needs and producing solutions to the regional problems. The university, established as a "development centre", played an important role in the development of high schools, adult education, the expansion of higher education institutions and regional research centres and led them through the qualified staff and scientists brought up by the university [11].

3. HISTORICAL DEVELOPMENT OF RE-GIONAL UNIVERSITIES AND THEIR RE-GIONAL ROLES IN TURKEY

In Turkey, it was Atatürk's idea expanding the universities into Anatolia outside the metropolitan cities like Istanbul and Ankara. Atatürk, at the opening speech of Turkish National Assembly on December 1, 1937, gave the order of establishing a university in East Anatolia. But, the beginning of the expansion of the universities in Anatolia were realised in the middle of 1950s with the foundations of Aegean University (Izmir-1955), Karadeniz Technical University (1955) and Atatürk University (1957).

The second movement of expanding the universities out of the big cities were put into practice in 1990s. Between 1973 and 1981, outside the three big cities (Ankara, İstanbul, İzmir), 10 new universities were established (Elazığ, Diyarbakır, Malatya, Sivas, Samsun, Eskişehir, Konya, Bursa, Kayseri, Adana).

The third movement of expanding universities all over the country happened after the 1981 higher education regulations, especially in 1992. In 1992, 21 new universities were opened. So, in the last 15 years period (1981-96) the number of the universities reached 40 outside the big cities.

Being parallel to the foundation reasons of re-

gional universities, presently valid Higher Education Act No. 2547, emphasising environmental roles of the universities, requires the universities to perform the following tasks;

" to contribute to the bringing up professionals and improvement of their knowledge which is fitting the needs and development of their regions, to make studies and programs and put them into practice, join the existing ones which will increase the productivity and enable industry, agriculture, health services to be modern and work in co-operation with related institutions and to find out solutions to the environmental problems" (Article: 12/g).

Doğramacı [12], evaluating main reasons of the 1981 higher education reform, frankly called attention to the functions of the universities to be responsive to the community with his following statements:

"Before 1981, the relations between the universities and the society had been left the appreciation of the universities rather than being based on a founded system. Whereas, universities are founded to serve their societies and they have to be integrated with their communities. The 1981 reform brought encouraging articles for the universities to work in co-operation with public sector institutions as well as private institutions and in this way, the reform brought the principle of serving to the society as a major objective of the universities "

In terms of the regional roles of the universities presented above, external affairs of the regional universities in Turkey can be summarised as follows:

3.1. Atatürk University (Erzurum-1957)

As the oldest university in the east of Turkey, it focused its local activities on the field of health, agriculture and animal husbandry. Through research hospital of medical faculty delivers health services in a large area (Erzurum, Erzincan, Kars, Ağrı, Muş, Bingöl). Faculty of Agriculture and Kars Faculty of Veterinary make various researches to respond to agriculture and animal husbandry such as soil improvement, fertilising, irrigation, drainage, soil and water preserving, animal health, planning of animal shelters and their improvement, struggling with plant diseases, process and utilisation of agricultural yield. These studies are presented to the public on "field days", and in addition to them, courses are organised for the staff working at agricultural organisations.

Besides these activities, some other activities like symposiums, panels, conferences in some scientific and cultural issues are organised. Through the Carpet Research Centre founded with the purpose of researching and developing Turkish tapestry in 1962, the studies reached villages and several people were trained in this aspect [13, 14].

3.2. Anatolian University (Eskişehir-1973)

The university, stands for a good example of "open university", provides educational opportunities directed towards the masses by using distance learning technologies and have non-formal educational programs at nation-wide and international level. The major projects are "Vocational Training Programs for Tourism", "Summer Schools" and The Project of Western Europe". In addition to the abovementioned large-scaled projects, it organises courses in various areas such as foreign languages, tapestry, ceramic and script-writing.

On the other hand, The Technopark Company, established in co-operation with industry, carries out research and development projects [15].

3.4. Çukurova University (Adana-1973)

Çukurova University has served the immediate society in technical, economic, social and cultural areas since its foundation. Some of the activities of the university responsive to its immediate location carried out are as follows [16]:

• The university conducted 502 research projects related to the regional problems in 1985-86 academic year. About %90 of those projects were put into practice by faculties of Medicine and Agriculture.

• In 1985, the university organised 189 activities of non-formal education activities including seminars, panels and symposiums.

• In terms of broadcasting function, in cooperation with TRT Çukurova Regional Radio, university prepared several programs, especially directed toward the country side.

• In Adana and its surrounding provinces, some conferences, concerts, folklore shows and drama shows were reached for the purpose of enlightening the people and expanding art and cultural movements.

• In the framework of South-eastern Anatolia Project, researches and analysis have been conducted in the areas of garden and field plants, plant preserving, culture-technique, landscape architecture, agricultural economy and mechanisation and zoo technique.

3.5. Karadeniz Technical University (Trabzon-1955)

It is one of the first regional universities in Turkey. Some of the external activities of the faculties of the university are as follows:

• Department of Forestry Engineering of Faculty of Forestry has been giving scientific consultancy to the General Directory of Forestry, the Forestry Research Centre and the Regional Directory of Forestry.

• Department of Biology of Faculty of Science and Letter has been carrying out co-operative research projects with Trabzon Regional Directory of Water Products.

• Department of Geology of Engineering Faculty has been giving engineering services to the mining firms in the region and working in co-operation with the Institute of Mining Research and Analysis and the Office of State Irrigation Affairs.

• The departments of Mechanical and Electric-Electronic Engineering of Engineering Faculty give project, laboratory and consultancy services to the public and private industrial organisations.

• The departments of Business Administration and Economics of Faculty of Economic and Administrative Sciences :

- conduct researches and projects related to regional matters.
- give consultancy services to industrial organisation in preparing projects, making feasibility analysis and their application.
- organise vocational seminars for the members of the Chamber of Trade and Industry and Worker's Union.
- give counselling services in the initial stages of foundation and development of co-operatives.

4. THE EVALUATION OF EXTERNAL ACTIV-ITIES OF REGIONAL UNIVERSITIES: EX-PERIENCE OF PRD IN TURKEY

Similar to the experiences of some OECD countries like France, Finland, Sweden and Norway, setting up universities in underdeveloped areas as the requirement of their development policies, Turkey has also practised incentive policies for the purpose of accelerating the development of the underdeveloped regions. The provinces utilising incentive programs are determined by the Council of Ministries and they are named as "Priority Regions for Development" (PRD).

In this sub-section, the findings of a research [18] aiming at evaluating the activities of higher education institutions in Priority Regions for Development will be presented:

A questionnaire was administered to 34 administrators (deans, college principals) of higher education institutions and 47 administrators of occupation chambers (The Chambers of Doctors, Architects and Engineers, Trade and Industry) to collect the data. It included items related to major external activities of the universities: Applied research, counselling, non-formal education, publication and health services. A five point scale (very inadequate, inadequate, medium adequate, adequate and very adequate) was used in the evaluation of these activities.

The research findings can be summarised as follows:

1. Applied Research: About half of the administrators of higher education institutions stated applied research services as inadequate and very inadequate, more than half of the rest stated them as medium adequate and adequate. The evaluation of the deans is more affirmative than college administrators.

While more than half of the administrators of the occupation chambers stated the same activities as inadequate and very inadequate, one fourth of them stated them as medium adequate.

2. Non-formal (Adult) Education: The majority of the administrators of higher education institutions stated non-formal education activities of the universities as very inadequate and inadequate, about one fourth of them stated those activities as medium adequate. Again, the views of the deans are more affirmative than the college principals.

Compared to higher education administrators, the administrators of the occupation chambers stated the same activities as very inadequate and inadequate with a high percentage.

3. Counselling: One third of the administrators of the higher education institutions stated the counselling services given on local demand as medium adequate and the two third of them stated those services as very inadequate and inadequate. The administrators of the occupation chambers also share the similar ideas.

4. **Publication:** The great majority of the administrators of both groups valued publication activities of the universities as inadequate and very inadequate. Again at this point, deans also have more affirmative evaluations than the college administrators.

Compared to other activities, publication activities of the universities are the least adequate.

5. Health Services: All the administrators of the higher education institutions and majority of the administrators of the occupation chambers stated the health services of the faculties of medicine, dentistry

and veterinary in PRD as medium adequate and adequate. Contrary to the publication services, the universities is the most adequate in the field of health services.

5. CONCLUSIONS AND IMPLICATIONS

The following conclusions can be drawn from the findings evaluating the experiences of the universities in PRD of Turkey:

• Local activities of higher education institutions differ from one another.

• The most efficient area of the universities is health services and the least efficient area is publication.

• The faculties have more external activities than the colleges.

• Although the views of the administrators of the higher education, compared to occupation chambers' administrators, are more affirmative about the community services, the activities are far from satisfying the expectations of the both sides.

In the light of findings of the above presented research and other researches and studies [19, 20, 21, 22] aiming at evaluating external activities of the universities, it can be said that the regional universities in Turkey provide various community services to their immediate surroundings, but they are not satisfactory enough to meet the needs and expectations of the local community. The practices upto now show that the regional higher education institutions tend to meet the social demand for formal education rather than contributing into the regional development. The major aims and functions of the universities through researches activities. Shortly, it can be emphasised that the universities, mostly perform their traditional functions.

The following implications can be proposed to increase the contribution of the higher education institutions in PRD to regional development:

1. "Cosultancy Committees" should be established at university campuses to act as a mediator between university and community. The representatives of the following groups should take place in it:

- Occupation chambers,
- Public institutions (especially the ones related to agriculture, health, development and education)
- The distinguished figures of local community.

2. The functions and aims of the higher education institutions in PRD should be revised and identified in such a way that their direct contribution to regional development can be increased. In this context, seperating research and education functions of the universities should be opened to debate and beside education units, Research and Application Centres should be formed.

3. "Non-formal Education Centres" should be formed with the purpose of preparing adult manpower for the future's industrial society and adapt them to the social changes. In non-formal education activities, local televisions should be used in a wide range.

4. More established universities should be encouraged to set up "Research and Application Centres" in PRD and to work in co-operation with the universities in those regions.

5. An adaquate research environment should be provided for long-term, large-scaled and interdisciplinary research and team work should be supported.

6. Long-term "faculty training plans" should be prepared by each university. The developed universities of the country should primarily be utilised in training the faculty and more quota should be provided for faculty training abroad for the universities in PRD.

As a conclusion, there are various and complicated problems of improving university-community relations. The solutions of these problems require conscious and patient efforts. If past experiences are utilised, the contribution process of regional universities to regional development can be accelerated.

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