



## BalkanMed E-Business Pages

# Good Practices Guide on Clusters and Technology Transfers- Albania

Centre for Competitiveness  
Promotion – Tirana, Albania



# **Good Practice on the Clusters Development and the Technology Transfer implementation**

## **ALBANIA**

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## 1. INTRODUCTION TO THE CLUSTER CONCEPT

The Cluster concept is based on the literature review of the researcher and the already accepted definition of this concept.

Clusters are a geographic concentration of firms, higher education and research institutions, and other public and private entities that facilitates collaboration on complementary economic activities and partnerships on innovative projects.

According to Michael E. Porter “Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition.

They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure. Clusters also often extend to channels and customers as well as to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs.

Also, many clusters include governmental and other institutions — such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations — that provide specialized training, education, information, research, and technical support. Innovative clusters are considered the engine of economic development and drivers of innovation in the EU. They represent a framework for business development, collaboration between companies, universities, research institutions, suppliers, customers and competitors located in the same geographical area (local, regional, national, transnational).

Today, some of the world’s leading clusters are specializes in high-technology industries clusters. But the clusters are also found in sectors ranging from wine making to automobiles to biotechnology.

EU's policy tendencies aimed at stimulating the development of competitive agglomeration are determining Member States to steer public measures to support associative forms such as clusters or poles of competitiveness.

In overall, the Clusters have these features:

- Clusters are a forum to identify fundamental challenges in the regional business environment.
- Clusters provide new roles for government, companies, and other institutions in economic development
  - Regions must leverage and expand the scope of the innovation system that supports regional competitiveness in advanced economies.
  - The strategy for long-term growth relies less on bidding wars and high-profile investments than on creating conditions for firm development and cluster formation.
- Clusters are critical engines in the economic structure of state and regional economies

## 2. INTRODUCTION TO CLUSTER CONCEPT IN ALBANIA

The new cluster concept in Albania was introduced after the year 2000. There was no any existing cluster in Albania and the concept of coordination of the geographically interested groups of companies, universities and research institutions, and stakeholders such as public and private entities was not discussed so far. Also the concept of coordination the companies from the same value chain of any industry was not considered from any national institutions. As result, the concept was not known, stemming that no cluster was existing in any of the Albanian industry, or location.

The timing period after 2000 served for awareness raising and the understanding cluster concept. At that time, there were some attempts done by The Ministry of Economic Development and Cooperation, of that time, to introduce the concept of cluster through awareness raising activities, workshops and seminars for different government agencies, public and private institutions, including business sectors organisations, business and industry associations and universities and other group of interest that might be potential for cluster organisation.

Although the concept was introduced to the relevant stakeholders, there was no any initiative undertaken by any interested group of companies or industries as bottom-up approach, as well as not initiative is undertaken by the government till 2003.

A study on “Analysis of competitiveness on the textile/garment and leather/shoes industries from an international perspective” (2003), conducted by Albanian Centre for International Centre (ACIT) among others has analysed the existing potentialities for cluster creation, within specific industries in Albania.

The conclusions on potential clustering on these industries has resulted in different recommendation for the industries, as cited, *“greater clustering potentials can be found in the leather/shoes industry. Better connections between key actors starting from raw material origin to leather processing (wet-blue) are present in this industry”*.

In the contrary the study came to the conclusion that less potential opportunities were existing in the textile/garment industry due to the *“The lack of connections with local suppliers and customers is the most important restriction that obstructs clustering projects. Thus, deterioration of the supply basis (the collection system) and suspension of many operative textile/garment divisions seriously deteriorated the clustering potential in the textile/garment industry”*.

The analysis of the real situation among these industries and the conclusions of this study had forestalled and were taken in consideration to develop a project, which would support the creation of clusters in Albania. The project “Enterprise Development and Export Market” (EDEM)” would support creation of cluster in leather and textile industries and not only.

### 3. ALBANIAN CLUSTER DEVELOPMENT

#### *3.1 A short history on cluster development in Albania*

The development of Clusters in Albania is supported by the international donor organizations. In 2004, the project “Enterprise Development and Export Market” (EDEM) supported by the “United States Agency for International Development” (USAID), started to promote and support in understanding the cluster concept and in creation some clusters’ industry-based.

The “EDEM” project was implemented for five-year period 2004-2009, aimed at fostering small and medium-sized enterprises’ competitiveness on domestic and foreign markets and to accelerate exports of Albanian agricultural and industrial commodities. The EDEM’s project worked on raising awareness and capacity building activities to advertise advantages of cooperation within cluster structures. By demonstrating good practices on strengthening the cooperation between small businesses, EDEM aimed at encouraging the replication of best-practice-approaches. Thus, with support of this project, four cluster management organisations have been created. These clusters were in the **sectors of tourism, meat processing, aromatic and medical herbs, leather goods production industries.**

Within the project implementation a number of activities were organised in different regions of Albania and a cooperation between different stakeholders was recognised in that time.

After completion of this project, Leather Goods/Shoe Production Industry Cluster was continuing to be supported by the Albanian Centre of International Trade (ACIT) and for many years the companies were connected to each other, but the relations were not characterised by the typical cooperation, organisation and management of a cluster.

In 2010, another project working in the area of economic development supported the clusters’ creation. Through the support of German International Cooperation (GIZ), the project Economic Development and Employment Promotion (EDEP) supported three clusters formation, especially the Albanian **Software Cluster (ASC). tourism and textile cluster** in Albania.

A number of international and national activities are organised by GIZ within the framework of the project and a number of companies were supported to be developed and expanded. Although strong support was given to the Albanian Software Cluster, as well as its operation with international counterparts and relevant stakeholders of the sector within the country, none of them remain active.

#### *3.2 Current situation of the clusters in Albania*

The few clusters established in Albania in previous years only survived for as long as they had the support of different donors;

The experience so far, has shown that it is quite difficult to form sustain clusters in Albania. A detailed analysis on different aspects of cluster establishment such as the circumstances how the clusters are established, the pre-condition for their establishment, the business structures of their organisation, the attitude of the businesses to cooperate, the understanding the role of government result, etc. are some elements that create reasons that explain the possibilities on clusters in Albania. Based on that analysis results that:

1. The concept of cluster is not widely known and accepted among businesses and stakeholders
2. So far, there is no any governmental support for the promotion to encourage the establishment and operation of clusters in Albania
3. The attitude of businesses in Albania toward the cooperation in cluster form is reluctant, as they consider each other as competitors rather than cooperative partner.
4. The cluster organisations find difficulties to continue their existence at the moment their donors' support was withdrawn
5. Lack of good examples existing to be repeatable in other industries
6. Lack of connection between universities and specific industries,
7. Triple helix is not applicable to contribute in cluster establishment
8. Weak industrial sectors that sometimes make difficult the cooperation relation

The conditional reasons above do not support the clusters formation. Therefore, the types and structure of clusters in Albania cannot be consider as a good example to be repeatable in different sectors. Anyway, a description of the already existing initiative will be mentioned below in this report.

### ***3.3 Types and Structure of Cluster***

The types of clusters in Albania are not quite consolidated as this concept is not well practiced, to be taken in consideration to study or to take as the good example. They are mostly functioning and are characterised by the same features as the type of the associations that support its members for a certain activities and services, advocacy lobbying, cooperation between partners, etc. However, the two clusters created with the financial support of member companies are still active and stable. They will be discussed below:

**The Albanian Textile Cluster** is a professional association established in 2013. It gathered 30 founding companies and institutions, manufacturing, academic institutions, consulting, logistics, local and international transport companies. The previous experience on collaborating relationship joined companies of operating in the garments, footwear and leather industry in Albania. The Cluster is known as the type of Association. Cooperation with government to support the sector has been evident during 2014, when the lobbying and the dialog with the government to support the sector make the creation of the Support

Package for Inward processing industries “fason”, that worked under the active regime. Also the cooperation with the Textile Department of the Polytechnic University of Tirana and other business organisations, chamber of commerce, Fashion Industry, etc. were identified in the execution and operation activities of the cluster.

**The Albanian Information Technology Association (AITA)** was established in 2007 to bring together the Albanian information technology (IT) enterprises. AITA has over 15 members from the hardware, software, and Information and communications technologies (ICT) service companies. It is the voice of the Albanian information and communications technologies (ICT) sector as well as a prominent advocate for the expansion of Albania’s innovative capacity and stronger productivity across all sectors through the strategic use of technology. It involved also the academia as the most important representative body of the Albanian IT domain.

Structured as an association the objectives of AITA are to represent of IT sector in the Government, to develop, strengthen and promote the IT industry in the country and develop the IT export services; to create partnerships with other associations and promote education and improve high school and university IT curricula

The activities of this cluster are characterized by features that aiming the sustainable development of the association, consolidate the position of the association and increase the attractiveness for potential members; preparation of strategies and daily activities for the maintenance, fundraising activities and generation of projects

Another cluster, **AgriNet**, is operating in the field of agriculture in Albania. It is established on 2005. The cluster is specialised in crop and animal production, hunting and related service activities. Also, the cluster is focus on agricultural services, social innovation with regard to environmental issues. In the technology Fields, the AgriNet Cluster deal with animal production/ husbandry, agriculture, and marine resources, crop production.

The legal form of the cluster organization is non-profit, with the total number of members of 150. There are no other organisations in Albania, declared as cluster in any other specific industry.

### ***3.4 Project supported clusters in Albania***

The EU Programme that support clusters development and promotion is COSME Programme. Under the call for application under –Cluster GO international, the association of IT (AITA) is joined since 2018 as part of the Consortium of seven partners clusters organizations in the region for implementing the GIVE Project.

The project is focused on cross- cluster and cross-industry collaboration in the field of green ICT technologies and mainly in the automotive industry and renewable energy. Cluster in



Albania are created or continue existing only as the type of industrial cluster (sectoral cluster)

### **“Focus” Project, INTERREG Balkan-Mediterranean Programme**

Cooperation through cluster cooperation is considered very important in the framework of international and regional and national cooperation for the economic development of the countries and regions.

A new trend, especially in Europe, is the creation of grouping and clusters, because the businesses find difficulties in competing solely in the international market, but through a cooperation the businesses can overcome the complex problems that go beyond the capacities of the solely business to solve alone.

It is quite important to establish clusters, organisations and other forms of organization and cooperation, as effective structures that might support the development of the specific sectors of economy or business and create synergy between the bus

With the support of the Project “FOCUS” financed by INTERREG Balkan Mediterranean Programme, the Albanian partner is supporting and promoting the cluster of aromatics and medicinal plants in the Tepelena area. Also, the support in creation of clusters in the sectors of milk processing, olive oil processing, vegetables and fruits as citrus fruits and pomegranate are foreseen to be supported within the implementing period of this project.

### **Smarter Cluster Policies for South East Europe “ClusterPoliSEE”**

ClusterPoliSEE was another project that was implemented in the regional framework. Albanian Investment development Agency was partner in this Project, but the low level of contribution of the AIDA in this project reflected the fact that the Albanian Institutions were not capable and ready to support the cluster policy and the cluster development in Albania.

### **Enterprise Europe Network- Albania (EEN-ALBANIA)**

Albania is actively joined the Enterprise Europe Network in September 2015. It is considered the best instrument to support the development of business and encouraging the technical and business cooperation in national, regional and EU level. This Network can support the establishment of the clusters, but as the partner institutions of the EEN-Albania Network are still not considerable strong and reputable institutions in the supporting the businesses in such organisations.

## **4 THE CLUSTER CONCEPT INSTEAD OF COLLECTIVE COOPERATIVE CONCEPT**

Another type of the new cluster concept is introduced in Albania, recently used by the international organisations operating in Albania, as the substitute concept of the collective cooperatives, which is a form of organization of the cooperatives in the areas of agriculture.

An example is the Cluster for the sector of Medicinal Plants. This sector enabling the employment of thousand persons in the rural areas and represents the 35% of the income of families in rural areas. 95% of them is exported, in the value of 19 million Eur, or 20% of the export of agricultural products.

Association of Food Industry in Albania is in contact with different actors in the value chain as small farmers, collectors, processors, input suppliers, exporters, supporting agencies for regional development to support the creation of the clusters of the medicinal plants in the Northern part of Albania, strongly emphasizing the basic principle of the clusters under the moto “we, not me”. It is promoted as a good initiative to have positive impact for the further development of the sector.

Creation of cluster of medicinal plants is considered as an opportunity to increase the cultivation surface, specialization of companies in distillation for production of essential oils. Through the support of cluster is aimed increasing of the quality, post-harvest, packaging, access to IPARD funds or other investment in technology, marketing and other services, etc. This initiative has attracted the interest and support of the local government.

The Cooperative concept, industry conglomeration in Albania is introduced as Cluster Concept for development of the initiatives of different groups of interest, including women and especially in the agriculture sectors.

The involvement and participation of women in economic agricultural clusters is considered as a relevant instrument for women economic empowerment, especially in rural areas. Women usually play a prominent role in processing and marketing of agriculture products. Various international studies have shown that if gender inequalities in access to land, capital, agricultural extension or inputs were eliminated, agricultural production could increase between 10 and 20 percent depending on the country.<sup>1</sup> Women’s role in rural value chains goes beyond production. Building their capacity to fully participate in the different stages (processing, packaging, marketing, etc.) can bring important gains for the rural economy as well.

One of the international organisation, UN Women in Albania, has worked in supporting the creation of clusters in cooperation with the Ministry of Agriculture, Food and Consumers’ Protection intended to bring this effort forward and concretely follow up on one initiative by assisting in the identification of one strong women producers group and its formation into an economic cluster. The aim was to contribute to the economic empowerment of women through providing support to women economic clusters to develop, diversify and promote economic clusters and women SMEs in rural and remote areas.

Particularly participation in economic agricultural clusters is considered as a relevant

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<sup>1</sup> The State of Food and Agriculture, Women in Agriculture: Closing the Gender Gap for Development. FAO, 2011.

instrument for women economic empowerment. Rural women producers require much greater support to successfully launch their aspirations for self-employment and entrepreneurship into economic reality. These women require support representing a continuum of business support needs. Linking production, science and education today is a necessary condition for increasing competitiveness. The conquest of new markets and new technologies and creation of new jobs without the participation of related institutions becomes unmanageable. Economy which wants successful development and good business results has to provide conditions for creating strong relationships with the production of scientific research and educational institutions. Networking through the cluster thus becomes a necessity for economic development. Shared vision, shared strategy, and the same goal – to succeed, become possible and feasible through the cluster.

Hence, the Institute for Democracy and Mediation with the support of the United Nations Entity for Gender Equality and the Empowerment of Women in Tirana (UN Women) implemented a project from October 2013 – 30 May 2014. This project that has as objective to ensure economic advancement and self-employment opportunities for women, as well as to develop, diversify and promote one women economic cluster in Dibra region.

A group of 20 women entrepreneurs of small fruits, aromatic and medicinal herbs and processed fruits, located in the village of Begjunec (Melan Commune) and the village of Staravec (Commune of Tomin) of Dibra, were supported by this intervention. They established the Agricultural Cooperative Association “Staraveci Products” and contributed to the design of the Strategic and Business Plan of the Cluster. Cluster members have identified the multifunctional warehouse as the best option of doing business. This intervention serves as a model for different areas of the country and similar initiatives.

Another example is the first cluster in agro-tourism for the rural women in Belsh supported by UN Women

## **5. DEVELOPMENT OF CLUSTER POLICY IN ALBANIA**

The Government of Albania has prioritized the development of clusters in its own programme. The programme specifies free economic zones including industrial parks and complementary ports, as an instrument for fiscal encouraging of private local and foreign investments to reduce unemployment and increase exporting goods and services. The need for building economic clusters is also expressed by the national strategies on “Innovation and Business Technology” and on for Business Investment Development Strategy (BIDS 2014-2020”.

Development of clusters in both developed and developing countries has become a vision guiding tool for policy-makers and has been inserted in economic development agendas. In the two recent decades, policies were promoted to support small and medium enterprises (SMEs), as one of the core units of cluster formation. Creating and supporting clusters helps

small firms to overcome production and marketing obstacles and allows them to compete with large firms and in sophisticated distant markets.

As a strong correlation exists between clusters and industry concentrations, emerging clusters in developing countries such as Albania could be supported taking into consideration spontaneous elements, policy inducement of local governments and supporting institutions and social factors in order to enhance growth and competitiveness of local economies. There is no experience of formal economic clusters in Albania, and generally the existing complementary economies have resulted due to the need of the private initiative. A thorough policy inducement approach combined with the spontaneous and social approach is required in order to support these business initiatives.

For the Albanian economy, creating clusters would mean being more competitive in the region. Shoes are definitely a success story. The government is looking at the possibility of creating an economic region based on the principle of competitiveness, where it is envisaged the creation of four areas where clusters will develop. There are some sporadic efforts to develop clusters in Albania as a way to revitalize exports, to create genuine marks, but also for added value in the economy. They are mostly examples from the manufacturing industry, but they have not been able to finalize, because chain links have not worked.

Albanian business appears to be not very interested to develop clusters, while government institutions have set aside promotion. It is anticipated the creation of four specialized economic clusters and the opening of four development incubators. In the Strategy for Business and Investments 2014-2020, it is envisaged to support cluster-based exports, key sectors, and the creation of three such ones by 2020. The Fason sector, especially the shoe, has repeatedly repeated the idea that there are all the conditions in place to close the production cycle.

Creating clusters is a known form of stimulating production in the economy. But this requires that not only the business and government institutions are involved. It also requires the academic circles and universities. Rising trust and innovation are the key to the success of creating branded Albanian products to bring them into the domestic and overseas market, no longer as raw or semi-finished

### ***5.1 Identifying advantages for cluster members level and regional level***

Formation of groups of companies and their partner institutions, in fact, creates better access in the specialized knowledge, data and information. Thus, being complementary to each-other, the companies (SMEs) and their line institutions can fully exploit the benefits from cost reduction to new products. Some of the benefits cooperating through organisation in the cluster form are:

- The companies/SMEs can have better access to the supply market to guarantee cheaper raw materials
- The companies/SMEs, in specific industries can share the cost of representation on the export markets, especially for country as Albania, with low production capacity
- The companies/SMEs can reduce cost of participation on the trade fair, by sharing costs, or using their cluster organisation, instead of the individual participation of the company
- The companies/SMEs can share the cost on expertise or consultancy in industry level
- The companies/SMEs can benefit from sharing of information among the members toward the issues of selling products, market, production, supply, etc.
- The companies/SMEs cooperating through cluster can increase the specialization between companies and create a cooperation relationship other than competition between each-other.

The advantages of the cluster in regional level are that clusters are considered as tool for recovery at the regional level. It provided an opportunity to leap forward in a more entrepreneurial and innovative way.

The benefits of cluster development are:

- Source of employment creation at the regional and national levels
- Boost regional competitiveness and regional development
- Stimulate innovation, and support companies as they acquire resources, knowledge and technology
- Facilitate ideas that can be turned into business opportunities

In Albania, the manufacturing of footwear industry remains competitive, but further incentives are required. It is one of the sectors that has dared to produce a "Made in Albania" product that has penetrated not only in Europe's major markets but also beyond the ocean. The shoe industry in Albania remains more developed than textile, with over 80% of footwear manufacturers closing the cycle itself, thus increasing the added value and the turnover achieved, an example that should be followed by other exporters.

The weak point, what could be about creating a genuine cluster in this sector, is the inability to provide raw material. The completion of the closed cycle would make it possible to expand geography of exports.

INSTAT data show that this sector continues to be largely interdependent with Italy, with about 86% of the total at the end of 2015. This high concentration makes the country highly dependent on the development and potential crises in the neighboring country.

Albania continues to be competitive in the region with respect to the shoe sector. This would be a positive impetus for countries such as Albania or the region to become more competitive. This is why a strategy is needed because the big companies involved in shoe trade are seeing the Balkan countries as a possibility for market development, still with lower cost. In the day, around 100,000 pairs of shoes are produced in Albania and this is not

a small figure. On the other hand, there are about 10 to 15 companies that directly selling shoes and serve as a "cluster".

## **6. WHAT IS THE TECHNOLOGY TRANSFER?**

Technology Transfer is the intersection between business, science, engineering, law and government.

Technology transfer is the process by which basic science research and fundamental discoveries are developed into practical and commercially relevant applications and products. Technology Transfer personnel evaluate and manage invention portfolios, oversee patent prosecution, negotiate licensing agreements and periodically review cooperative research agreements already in place.

Part of the technology transfer process involves the prosecution of patents which is overseen by the national Patent and Trademark Office.

Coordinating between technology users and developers, between researchers and manufactures is an important element of technology transfer. Access to relevant internal and external resources to individual projects and enterprises has to be enabled.

A main ingredient for moving technology from a research laboratory to a new business enterprise successfully is an environment that is supportive of entrepreneurship. This needs to be encouraged by providing guidance, counseling and resources.

Cataloging resources related to business enterprises and connecting would-be entrepreneurs/researchers and other technology developers to outside groups and organizations which can help in the process of starting new products, companies etc. Such linkages provide referrals for individual business counseling, sources of financing or the names of individuals who can help with a particular facet of business development.

### ***Technology Transfer Activities include:***

processing and evaluating invention disclosures; filing for patents; technology marketing; licensing; protecting intellectual property arising from research activity; and assisting in creating new businesses and promoting the success of existing firms. The result of these activities will be new products, more high-quality jobs, and an expanded economy.

### ***6.1 Does the sale of a technology constitute technology transfer?***

This is the right question, because in Albania as in other developing country, the introduction of a technology is understood by some developed countries as having achieved the objective of technology transfer. Technology transfer is not about selling some hardware to a client who is then left with the task of using it as he/she deems fit.

Technology transfer is the imparting of knowledge, skills and methodologies involved in the whole production cycle. Technology transfer is a system that encompasses the social and

economic fabric of a country. Where technology has been effectively transferred, there should be a visible change - from the person to the production system as well as compatibility with the needs, in the institutional framework, skills, training, financial capacity, promotion, and active support of endogenous capacity and appreciation of the natural environment of the recipient country. Technology transfer also has to do with disseminating information on the technologies themselves.

Obviously, there are problems that act as barriers to appropriate technology transfer such as local capacity as well as the multinationals whose financial powers have in many cases weakened the strengths of governments. But a much bigger problem in effective and appropriate technology transfer is focused on the priorities of the donor or purveyor. The financial limitations of most countries in Research and Technology limited the implementation of TT

There is a strong need for linkages to be developed and maintained between industry and research organizations. This requires the effective identification and specification of research needs, and knowledge of relevant research that is being conducted. For this to happen, industry needs to be involved at an early stage of research, so as to be able to participate even in the research definition stage. At the same time, public sector research organizations need to be prepared to support industry in the commercialization process. Efforts to erase preconceptions that build barriers to successful technology transfer should also be taken.

### ***6.2 Identifying the technology transfer centres operating in Albania***

One of the institution in Albania that is responsible for the Technology Transfer is the Albanian Agency for Research, Technology and Innovation. It has a dedicated structure/department of Technology and Innovation. For many years this agency has a Fund for the Transfer of Technology and Innovation, which has been established but never implemented due to lack of funding.

From an institutional viewpoint at centers for institutional research in Albania are currently lacking Technology Transfer Offices, Intellectual Properties, that in other counties play important roles in raising awareness, and counseling for the scientific community relating to the legal transfer of expertise and results towards the business and trade sector.

It is nearly 10 years since the creation of Agricultural Technology Transfer Centers – ATTC's (2007-2017) but it is fairly difficult to provide exact data relating to the application of the concept of agricultural technology transfer in the agricultural and agro-processing sector through Licensing Agreements and the use of intellectual property legislation, acknowledging that currently in Albania operate close to 400,000 agricultural units and about 5,000 units belong to the agro-processing sector.

In Albania, there are 5 (five) Centers of Agricultural Technology Transfer – CATT following the merging of 6 research institutes, which were previously under the Ministry of Agriculture and Food, including:

1. Institute of Field Crops Research, Fushe- Kruje, (IFCR);
2. Institute of Vegetables and Potatoes, Tirana, (IVP);
3. Institute of Fruit Trees, Vlora (IFT);
4. The Institute of Zootechnology Research, Tirana, (IZR);
5. Institute of Maize, Shkodra (IM);and
6. Institute of Land Research (ILR).

### ***6.3 Analysing the type of technological transfers implemented in Albania***

Albania had enjoyed an impressive economic growth during the last years but the country response toward the development of science, technology and innovation has not been in the same proportion.

Country capacity and competence to manage both basic and applied research is limited, so transferring the already existing and tried technologies from developing countries looks feasible. In this paper we shall analyze the technology transfer of building automation systems in Albania and constraints of private and public sector toward the adoption of this innovative technology.

The types of technology transfer in Albania is not quite developed. The number of research institutes and the academia are not involved on purely research that bring new innovation and development of technology that can be commercialization.

In Albania, the technology transfer is mostly related to the purchasing of the technology from the international private companies and implemented in their companies, including the receiving of the installation and knowhow on the technology application from the partner companies.

There are different agreement for the transfer technology, when the production or the technology is connected to the competitors or between parties that are not competitors to each other. Hence, with Decision Nr. 489, dated 20.12.2017 of the for approval of the regulation of the Competition Authority "For the Categories of the Agreements for the Technology Transfer", the legal framework arrange the different categories.

### ***6.4 Some examples of technology adoption in Albania***

In Albania, good examples of Technology Transfer can be considered mostly as the technology adoption.

**Some examples in Construction sector can be considered** on the process of automation systems in buildings. The technologies are transferred from EU countries. These systems provide full integration of all engineering systems of the buildings through open,



interoperable and portable automation systems. They also provide monitoring, control, alarm and operational services based on pre-defined algorithms/scenarios.

The manufacturing sector is considered a good way of economic development, because is a strong and varied sector in processing industry thanks to the cooperation with successful companies in processing textiles, clothing and footwear. Together with the development of some other sectors related with the construction, the manufacturing is positioned among the so-called positive pressures on improving the Albanian economy and its orientation towards well-consolidated European markets.

**Krienko Jeans sh.p.k.** It is a company operating as a manufacture in the clothing industry. It offers services of high standards and quality in the field of design, styling and treatment confection fashion clothing. It has been 25 years since its founder had dared to undertake the establishment of a prestigious company.

Constant investment on contemporary technology has led to perform all the technological processes of textile treatment such as tailoring, sewing, dyeing, stone washing, ironing, packaging etc. All these processes are carried out by specialized modern machinery and qualified staff. The company is operated by more than 400 workers and specialists of the clothing area. It is not limited in one clothing pattern. It is open to new ideas and projects by making its experience in the field for the sketching and design of new models available. The company is adapted to new computer systems which make it possible to offer to the clients' high levels of production outcome. The company produces clothes to the wishes and preferences of partners, but not only. It also produces and sells 3-4 collections per year, which they design on their own mark.

All these aspect, including here the fact that it is one of the most known Albanian manufactures of the clothing industry makes this company one of the best examples of Technology Transfer adoption.

Another company, **USLUGA** the manufacture in the glass products. In 2000, the company invested in new technology buying high quality glass processing machines, adding to the production line, tempering, insulating, laminating, sand blasting and printing

**AGS company in agro-processing** a multifunctional company, operating in the market since 2015 in the production of milk dairy products. The current capacities of milk processing and packaging in the company are over 100 tons per day, with the perspective to double this capacity with a new investment on processing and packaging technological lines. Thanks to adoption with the new technology in production and packaging, this is one of the most known companies operating in Albania in this sector.

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