

# From Brain Drain to Brain Gain: Mobilising Albania's Skilled Diaspora

A policy paper for the Government of Albania

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# Introduction

In the last 15 years, the phenomenon of emigration has been at the core of economic and social changes occurred in Albania. By the end of 2005, more than 25 percent of Albanian citizens were estimated to be living abroad. No other Central or East European country has been so affected by emigration in such a short period of time. Russell King (2003) goes as far as to describe Albania as "a kind of laboratory for studying new migratory processes".

What is the relationship between emigration and economic and social change in Albania? Like other economic and social phenomena, emigration has had both positive and negative affects on the economic development of the country. In this context, the task for economic policy is to seek to maximize the positive aspects of emigration, whilst minimizing negative ones. In the overall context of Albanian emigration, three are the major issues that deserve particular attention: remittances, the sustainable return of emigrants and "the brain drain".

#### Remittances

In 2004, remittances sent by Albanian emigrants were estimated at 1 billion USD. They constituted some 13.5 percent of the GDP (almost the size of an economic sector), were three times higher than net foreign direct investment, double the official development aid received by Albania and covered 50 percent of the trade deficit (Bank of Albania, 2005). As a result, remittances have played a significant role in the poverty reduction of many households in Albania, representing the major factor that distinguishes "poor" and "nonpoor" households (De Soto et al., 2003). However, in the context of unfavorable economic and social conditions, this monetary value injected into the Albanian economy from emigration has until now been insufficient to increase domestic production. It has been mainly used for the import of the consumption goods. It has also been a key factor influencing one of the peculiarities of the Albanian economy during the transition period; extroversion (Samson, 1996), meaning that internal consumption greatly exceeds the capacity of national production to meet the needs of the population. Due to a shortage of investment, which could potentially generate more employment opportunities, a part of the younger generation is obliged in turn also emigrate. In this case, emigration recycles emigration. Furthermore, recent studies suggest that, primarily as a result of the family unification in host countries, the remittances of Albanian emigration have reached a new phase of maturity, and are likely to undergo a gradual decline in the short term (De Zwager et al., 2005; Maroukis, 2005; Gedeshi et al., 2003).

#### Sustainable return of emigrants

Turning to the question of return, a recent set of studies suggests that perhaps more than half of Albanian emigrants, especially in Greece and Italy, are willing to come back to their country of origin – but only after on average 14-17 years in their country of destination (De Zwager et al., 2005; Gedeshi et al., 2003). The return of emigrants is potentially important for the economic growth of Albania, as they may bring back capital, foreign work experience and new ideas. A study by IOM, De Zwager et al. (2005) estimated that long-term emigrants have accumulated in the country of emigration a total

pool of retained savings of between 10 and 15 thousand million Euros. Out of this group of emigrants, 38 percent indicated an intention to return and invest in Albania. Applying an average multiplier this leads to an estimated remittance pool of Euro 8.5 to 9.7 billion (De Zwager et al. 2005). Besides, the return of a proportion of those who emigrated might balance the negative trend of remittances' falling curve. However, interviews with emigrants indicate that many things need to change in Albania in order to make return sustainable (King, 2005).

### 'Brain drain'

The third issue highlighted above, and the one on which this paper is focused, is the 'brain drain'. Work by the Centre for Economic and Social Studies suggests that about 50 percent of all lecturers, research people and intellectuals in the country, most of them young and trained in part in Europe, have left Albania since 1990. Nearly 66 percent of those Albanians known to have carried out a PhD in Western Europe or the US since 1990 have either emigrated from Albania, or never returned after their graduation. This emigration continues even nowadays, with a significant group of talented and successful students remaining abroad after finishing the university or post-graduate studies there.

This is important, since according to "new growth literature", people equipped with a high level of human capital constitute one of the major factors, probably the key one, in promoting the economic growth of a country (Lucas, 1988).

In the 1970s, to protect developing countries from the "brain drain" phenomenon, Bhagwati et al. (1976) suggested the establishment of "a tax on the brain", and a number of other measures have been suggested since that date, including "ethical recruitment" that would prevent recruitment of certain professionals from poor countries, or compensation to be paid by rich countries to poorer countries for "stealing" their skilled personnel. However, in the context of economic globalization and freedom of the individual, such approaches face significant obstacles. Instead, therefore, we ask a number of rather different questions, including: What conditions need to be created to encourage skilled people to remain in Albania? What can be done to encourage a proportion of talented students to return to Albania after their university graduation? And last but not least, what forms of partnership might be established with Albanian lecturers and researchers working in the universities and research institutions of Europe and USA, so that in the end both sides can enjoy a win-win situation?

#### Summary

The Albanian government has many challenges ahead in the domain of migration, and finds itself in front of a critical dilemma. If nothing is done, many of the problems described above will be aggravated in the future, potentially resulting in negative effects on economic and social growth. However, if appropriate actions are taken, it is at least feasible that the country could place itself in a new spiral of development.

The paper is organized in three main parts, which are followed by some relevant conclusions and entry points for government action. The first part explains the methodology and data sources. The second section illustrates the brain drain phenomenon in Albania and the third part consists of ideas and suggestions about how to turn the 'brain drain' into 'brain gain'. The paper is enriched with relevant experiences from other countries that can be taken into consideration and applied in Albania.

1. Objectives and Methodology

# 1.1. Objectives

The purpose of this paper, formulated in the context of the 'Brain Gain' UNDP Program, is to offer the Albanian government an input on the relevant steps and actions that can be undertaken to institutionalize 'brain gain' in Albania. The specific objectives include:

• Suggest the relevant conditions to create a framework to combat the "brain drain" phenomenon;

- Show the experience gained so far on 'brain gain' in Albania, the concrete results and conclusions to be drawn;
- Identify a few positive experiences of other countries in 'brain gain' processes and analyze their potential for success in Albania;
- Set out some forms of cooperation between Albanian institutions and Albanians that have trained and are living abroad.

# **1.2.** Methodology<sup>1</sup>

**Quantitative and qualitative research techniques** The analytical work for this policy paper consisted of an analysis of both primary and secondary data. This included an overview of the available literature; semi-structured interviews with leaders of research and academic institutions, with Albanian researchers working in scientific/academic institutions abroad, etc.; and a survey of more than 40 research institutions and 10 public universities across the country.

**Desktop Review**. The research team studied the available literature on "brain drain", "brain exchange" and "brain gain". Furthermore, it studied the policies and practices adopted in some countries on transition with a high incidence of brain drain (e,g, Georgia and Serbia) and TOKTEN experience in other countries worldwide. All the sources used have been listed in the bibliography section of the study.

**Semi-structured interviews in Albania**. A total of 30 semi-structured interviews were realized with leaders of research institutions and universities, researchers and lecturers, newly graduated researchers wishing to emigrate, and researchers returned from emigration and established in different institutions of the country. The questions raised in these interviews had to do with the causes and consequences of brain drain, and the potential for forms of cooperation with Albanian researchers abroad. All interviews were recorded and transcribed prior to analysis.

Interviews with Albanian researchers and lecturers working in research and academic institutions in Europe and the US. A total 15 interviews were realized via

<sup>&</sup>lt;sup>1</sup> Academics and university lecturers will be the main focus of this paper since emigration from other state institutions and private enterprises requires far more extensive research and is difficult to measure and assess at this stage.

email with Albanian researchers and lecturers working abroad. Our team also participated in an open discussion via Internet with the members of Albshkenca network, with a membership of over 800 experts. Once again, all interviews were recorded and transcribed prior to analysis.

**Survey of Albanian institutions**. During the period November 2005 - January 2006, a survey was carried out of more than 40 research institutions and centers under the umbrella of the Academy of Sciences (13 institutes), Ministry of Agriculture and Food (12 institutes) and other ministries, as well as in 10 public universities (the full list of the institutes, research centers and universities is shown in one of the annexes in this study). The survey's outreach included the districts of Tiranë, Shkodër, Fushë, Krujë, Durrës, Elbasan, Korcë, Lushnje, Fier, Vlorë and Gjirokastër. The survey contained 15 questions and provided quantitative data about the researchers / lecturers who had emigrated from these institutions/universities, divided by the country and year of emigration, age, scientific degrees and the area of expertise, work experience in the institution, training courses carried out abroad and their duration, etc. Those surveyed were mainly either Directors of Human Resources, or heads of institutions. By the end of the survey, quantitative data had been collected on 1,295 persons, all of whom had emigrated in the period 1991-2005.

This policy paper also made use of quantitative data derived from a *data bank* established by CESS in collaboration with the Soros Foundation in the period 1998-1999 and 2003 - 2004, on Albanian scholars who have either completed or are still attending a master or PhD at institutions or universities in Western Europe and the US. This data bank contained information on some 1,100 persons.

# 2. The process of "brain drain"

# 2.1. Dynamics of the "brain drain"

Brain drain<sup>2</sup> is usually a label used to describe the phenomenon of emigration of highly qualified, talented professionals from one country to the other and as such, it is part of the broader process of international migration. The phenomenon has been extensively studied in the 1960s and 1970s, when a mass and permanent emigration of highly qualified and talented professionals (researchers and scientists) from developing countries took place that in a number of cases was quite detrimental to their economic growth and developing countries, and developing countries suffer major losses when these people decide to leave, this phenomenon tends to become a focus of anxiety even today. Many governments, especially those that are losing these professionals, have shown great concerns about the possible adverse effects of brain drain phenomenon on economic growth, education, income distribution and welfare.

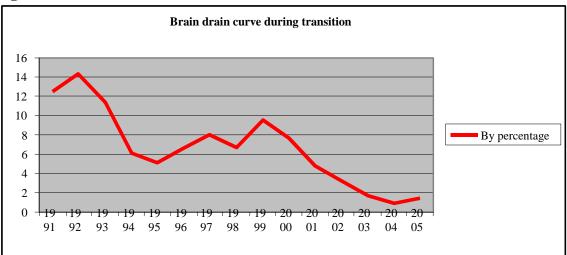
According to the CESS survey, during the period 1991–2005, more than 50 percent of the lecturers and research workers of the universities and research institutions of Albania,

 $<sup>^{2}</sup>$  Expression used for the first time in UK during 1960', when a great number of engineers and scientist aimed to emigrate to the USA, because higher salaries and more favorable conditions attracted them.

most of whom were young and had postgraduate degrees from Western Europe countries or the US, emigrated from Albania<sup>3</sup>. A total of 47.3 percent of them were aged 25-34 at the moment of emigration, and unlike much mass emigration, 71.4 percent of them emigrated with their families.

The dynamics of brain drain from the universities and research institutions reached its peak in the periods 1991-93 and 1998-99 (Figure 1). Several factors explain these peaks. For example, initial departures from 1991-93 reflect the sudden opening of the country right after a 45-year period of self-isolation, the economic, political and social crisis which emerged in the first years of transition, and the deep economic gap between Albania and the EU countries. In contrast, the situation of 1997-99 is largely explained by the economic, political and social chaos that overwhelmed Albania after the collapse of the pyramid schemes.



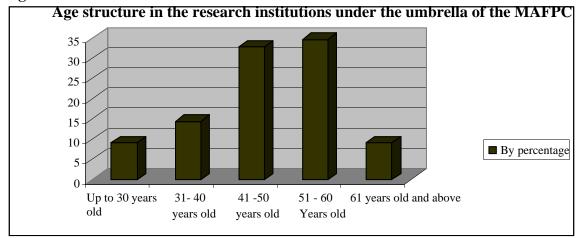


Source: CESS, January 2006

A report of the United Nations' Organization (UNO, 1992), based on south-north emigration experiences in the 1960s, estimates that gaps in the income per capita, unemployment rates and people's perceptions of their future, made up the key factors explaining the predisposition to emigrate. In the first decade of post-communist transition, all these factors developed at a higher intensity in Albania. In 2001, GDP per capita in Italy and Greece, some of the neighboring countries with the highest concentration of professionals from Albanian universities and research institutions, was respectively 16 and 8 times higher than in Albania (WB 2003). Unemployment in Albania was in double digits at that time (INSTAT 2001). Regarding the perception of people about their future, a survey realized in 2000 with 250 lecturers and researchers shows clearly that 46 percent of them, mostly youngsters and with post-graduate studies completed abroad were willing to emigrate (CESS, 2000).

<sup>&</sup>lt;sup>3</sup> Referring to the data provided by the Institute of Statistics, the number of lecturers and researchers from the surveyed public universities and research institutions, in 2005 was about 2500 persons.

The dynamics of the brain drain from universities and research institutions in Albania has been declining after year 2000 (Figure 1), due to the improvement of the economic and social situation in Albania, age structure changes in the universities and research institutions of the country and the increasing difficulty to emigrate to West Europe. A number of heads of research institutions interviewed stated that rising wages had had a strong impact on the decline of the "brain drain" outflow rates. The head of one research institution commented: "In the recent years, the emigration curve in the Academy of Sciences' Institutions has marked a decline, because the wages of the scientists, and of people engaged in research work, have been increased to a considerable extent". Others underline that the increase in the average age of the research workers has influenced the decline of emigration rates. The leader of one institution reported: "One of the major reasons explaining the decline of the emigration rates in the agricultural institutions, is the increase of average age. At the moment, it's over 45 years old". Additionally, according to the data of research institutions under the umbrella of the Ministry of Agriculture and Food, around 9 percent of the research staff of these institutions are aged under 30, whereas 14 percent belong to the group age 31-40 (Figure 2). Emigration often requires younger people, trained in the universities and laboratories of the west in new research knowledge, techniques and approaches. Edlira, a researcher at one of the institutes of the Academy of Sciences, recently returned from a long-time emigration in Canada tells: "To find a job there after my profile, it was very difficult. I submitted applications in several private institutions, but the programs (...) I was trained in, and had applied for many years in Albania were considered outdated. They used new programs, so I needed to go through a full course of re-qualification."





**Source**: The institutions' assessment chart, Ministry of Agriculture, Food and Protection of the Consumer, 2005

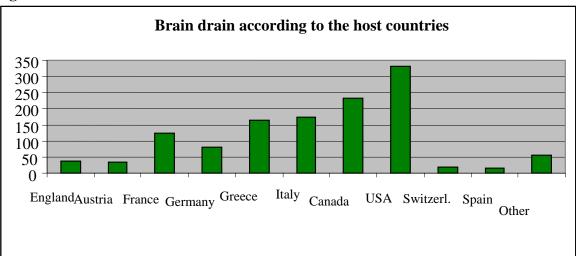
Despite the fall of the brain drain curve in the universities and research institutions, it still continues, as many of Albania's brightest students now succeed in studying elsewhere in West Europe and the US (King, 2005). It is estimated that every year 2,000 to 4,000 Albanian students leave to attend university abroad, mainly in Italy, France, Germany, England, Greece and USA (Tafaj, 2005; Nazarko, 2005). In Italian universities alone, some 12,000 Albanian students are enrolled (AIIS, 2005). This figure is likely of be much

higher if we bear in mind that thousands of Albanian households have emigrated to Greece, Italy, England, Germany, the US, Canada, etc., and a larger contingent of their children enroll each year in the universities of these host countries.

Furthermore, a survey realized in year 2000 with 835 university students studying in the US, Italy, France, etc., indicated that only 45.5 percent of them were willing to return to their country of birth after their graduation (CESS, 2000). Later, another survey realized in 2004 with 181 PhD holders and PhD candidates revealed that only 56 percent of the surveyed were willing to return in Albania (CESS, 2004). The non-return of the successful university and post-university students will be in the longer-run, the major way of brain drain from Albania. This process will be further accelerated by the policies of several European countries, USA and Canada, to stimulate the flow of foreign students.

## 2.2. Geographical distribution

Late in 2005, the main host countries for the Albanian lecturers and researchers (Figure 3) were the US (26.3 percent), Canada (18.4 percent), Italy (13.7 percent), Greece (12.9 percent), France (9.7 percent), Germany (6.3 percent), England (2.9 percent) and Austria (2.6 percent).



### Figure 3

Source: CESS survey, January 2006

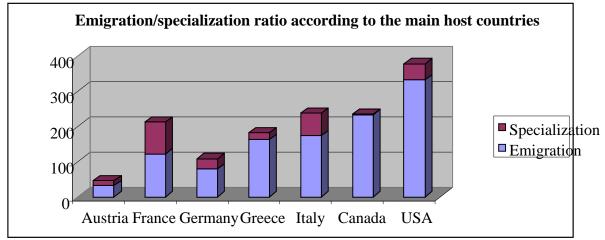
Unlike other Central and East European economies, the intellectual emigration from Albania is concentrated in three groups of countries (Ditter et Gedeshi, 1997):

a) neighbouring countries such as Greece and Italy. Regarding these two countries, the number of emigrants is high while the number of qualified emigrants, especially in the case of Greece, is low. Geographical proximity, and economic, cultural and historical links are some of the factors that have affected the brain drain rates toward these countries; b) countries where Albanian intellectuals have carried out university studies at undergraduate, Master and PhD levels, such as France, Germany, Austria, etc. In this group of countries, the correlation "specialization-emigration" is stronger; and

c) countries at a long geographical distance – like the US and Canada - and where the correlation "specialization-emigration" is again weak (Figure 4).

In the first group of countries, the brain drain acquires the features of mass emigration, and is perhaps better described as a process of "brain waste". Italy is an intermediate country, where the factor of specialization and that of geographical vicinity are intermingled. Emigration in the context of the second group appears more as a brain drain. The third group includes countries which from the geographical and cultural viewpoint are far way, but still with attractive immigration policies.

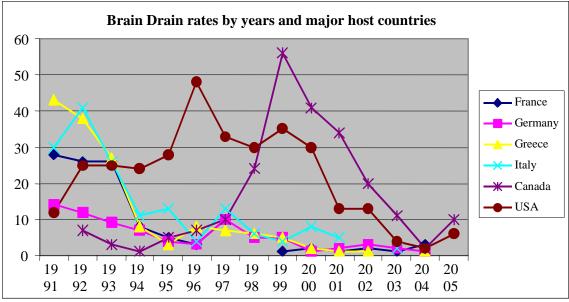




Source: Our survey, January 2006

The destinations to which people have moved have changed from year by year. Early in the 1990s, Albanian professionals were concentrated mainly in Greece, Italy, France and Germany. In the middle of the 1990s, the intensity of emigration toward these countries decreased to a considerable degree, and developed more and more towards the US and Canada. Emigration to the US intensified in the period 1994–95 and currently, the US is the top destination for Albanian professionals. Furthermore, emigration to Canada started to increase notably in the period 1997–99 (Figure 4). A passionate researcher in one of the country's agricultural research institutions reported: "In the recent years, emigration to Canada developed rapidly. This country offers plenty of opportunities, especially for researchers. Canada has a higher standard of living, better working conditions in terms of safety and dignity". Other emigrants with a PhD move on from Europe to US and Canada. The amplification of these tendencies suggests that **brain drain from Albania is acquiring more and more the features of a long-term or permanent emigration, simultaneously accompanied by the departure of financial capital.** 

### Figure 5



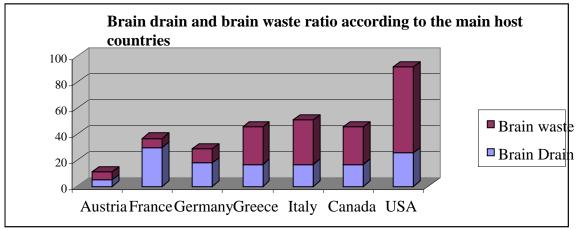
Source: CESS survey, January 2006

#### 2.3. "Brain drain" or "brain waste"?

From the conceptual point of view, this form of emigration is not necessarily in all the cases a "brain drain." This phenomenon is considered as such when skilled emigrants move to professional, research or pedagogical jobs in the laboratories, research institutions, universities and higher schools of the host country. Otherwise, what is occurring is more a *misuse* or *waste* of intellectual potential. Unlike the experience of manual laborers, the knowledge and experience gained through professional work wastes away very quickly unless they are exercised regularly. Besides, interim results of surveys by CESS suggest that as many as 60 percent of Albanian intellectuals abroad are not working in their profession. This concern is stressed from one of the leaders at the Institute of Oil and Gas in Fier: "only 5 to 10 percent of the emigrant-employees of the institute are employed in their area of competence in the host country. Others are doing common jobs". If this is true, and there is independent evidence from surveys in host countries that it is<sup>4</sup>, we can conclude that the "**brain drain**" from Albanian universities and research institutions is more a process of "brain waste", and in this case the loss for the country may be considerable, and irreversible (Figure 6).

<sup>&</sup>lt;sup>4</sup> See King, R. et al. (2004) *Exploding the Migration Myths?* 





Source: CESS survey, January 2006

# 2.4. Factors determining the brain drain

Available studies demonstrate that a diversity of factors determine the emigration of highly qualified professionals, whilst it is difficult to encompass separate migrant flows under a common theory. Nevertheless, some broad explanatory schemes have emerged. Thus it is widely accepted that there are two groups of stimuli - "push" and "pull" factors, which are obviously deeply intertwined and combined in the actual decisions to emigrate taken by individual professionals.

# a. "Push" factors

Studies show that a major factor in the brain drain is the unappealing nature of educational, economic or intellectual conditions in developing countries. In the case of the migration of academics and researchers, this includes poor salaries; lack of suitable advanced training and career development opportunities; difficulty in becoming accredited as fully qualified academic; lack of freedom of research; lack of resources for research; lack of career progression; isolation from international academic debates; and/or a perception that conditions are not going to improve. However, not all higher education professionals that emigrate (or intend to emigrate) are in search of educational, economic or intellectual opportunities. According to Cernates and Guellec (2002), sometimes they are obliged to leave their countries as a result of political instability.

b. "Pull" factors

The shortage of the skilled professionals in the developed economies is also a key element in driving the level and extent of the brain drain from developing countries. The technological revolution in developed countries has resulted in huge growth in specific industries and as a result in a rapid growing demand for highly skilled professionals to work there. As a consequence of this unforeseen demand spike, many developed countries have been feeling significant shortages for skilled people in these fast-growing industries. As a result, the developed countries have turned to the developing countries to meet their labor demand needs by applying a number of attractive visa schemes.

Another factor is the demographic situation in the developed countries. Many of these countries have populations that are progressively aging, and are thus facing scarcity of labor some sectors of the economy. Because of this reason, these countries try to recruit individuals from the developing countries (Bhorat et al., 2002). Statistics show that all the OECD countries except for the US have deficit fertility rates today. That means that the statistical fertility rate of women is lower than the rate of 2.1 births per woman needed to maintain the population of developed countries, resulting in a shrinking and aging population. Ageing is further exacerbated by the current rise in life expectancy, which will probably continue to grow. Meanwhile, studies suggest that current population age structures in European countries like Italy, Greece and Germany, - those that are quite attractive to Albanian emigrants - can be maintained until year 2050 only through immigration. Germany, for example, by means of the recent projections of the Federal Statistics' Office, anticipates absorbing 300,000 emigrants every year, starting from 2010, in order to maintain the current population age structures (Oberndorfer, 2004). Maintaining the age structure of the population is important, since it has implications for the ability of these states to maintain pension and other social welfare arrangements.

Two additional pull factors need to be mentioned: the existence of migration networks in the developed countries which help to reduce the adjustment problems in moving to a new country (Meyer, 2001) and the existence of safe and socially stable environments in developed countries which contribute to a more secure, stable and certain present and indeed future.

# 2.5. Consequences of the 'brain drain'

In practice, the 'brain drain' involves both positive and negative consequences for both countries of origin and countries of destination. Available literature upholds the opinion that host countries, which are mostly developed countries, benefit rather more than they lose. The migration of skilled people enables them to hire highly-skilled specialists, saving money (since at least part of the training of these professionals was paid for by the sending countries), and maintaining a comparative advantage in the progress of science and technology (Straubhaar and Wolburg, 1999).

In the case of untrained human capital, the export of education services (through the importing of foreign students) has become a major money earner for many parts of the industrialized world. This not only qualifies education as one of the best selling "exports", but also means that, in effect, these highly developed countries are experiencing either a net "brain gain" or "brain exchange". These two new phenomena have consequences, not just for the "education business", but also for the future of the economy. As a result of this openness towards foreign students a large number of jobs are created, directly and indirectly.

In contrast, the country of origin, according to the traditional brain-drain literature, considers the emigration of highly qualified professionals as destructive for the economy.

Indeed, the shrinkage of human capital shrinkage may produce a negative impact on the long-term economic growth and welfare of the country.

For example, in the period 1991-2005, due to the emigration of lecturers and research workers, the universities and research institutions of the country lost at least 4,500 months of training courses to institutions abroad, mainly in France, Italy, Germany, Greece, Austria, England and the US. This figure is twice the number of training months that Albanian higher education institutes were allocated during the period 1992–2005, through the TEMPUS 1 and 2 Projects.

As a result of this movement, Albanian universities and research institutions are suffering a decline of competition capacity and a weakening of the work quality. For example, a university rector complained:

"The consequences from the brain drain are evident. We notice degradation in the quality of the work. The level of lecturing is quite poor, since a newly graduated lecturer cannot have the same level of know-how as an experienced one. Often, to address certain problems, I need to order the creation of ad hoc commissions, as the experts are missing. Those who used to be best have already emigrated and those ranked behind are hired from the private sector. If the rector faces difficulties in this respect, how can a student find the expert to consult or argue a thesis?!"

Another important impact of the brain drain is the effect on the breakdown of research teams. In many research institutions, the implementation of projects is carried out in teams, with each member covering a certain segment according to their area of competence. Qualified professionals impart their knowledge and skills directly or indirectly to the other members of the team. The emigration of some of the experts incorporated in teamwork can lead to project failure, decomposition of the teams and loss in terms of the additional skills that would have been indirectly imparted to other individuals in the team.

Additionally, the high scale of the brain drain and the desire to emigrate amongst many young people in universities and research institutions all over the country has negatively affected **the long-term motivation** of research workers. It is well known that for someone engaged in research work, the benefits are often only experienced in the long term. For example, a historian may need to work for many years in libraries and archives to produce important findings. Yet the brain drain encourages people to think in the short-term, as an academic at the Polytechnic University of Tirana stated:

"Thinking in the short-term, has become "a modus viventi". Young people are predisposed to program in the short-term. Many of them consider the university as trampoline to reach another country or win a scholarship. They are always in the hope of something better to follow. I do fear these deformations, which inhibit them to mature as researchers/scientists".

In many of research institutions, the research "memory" of the many years' work is getting wasted and there is no transmission of experience and knowledge from one

**generation to the other**. This concern was also emphasized by the heads of one institution under the umbrella of the Ministry of Agriculture and Food: "Because of the brain drain, our institutions are suffering the loss of a part of their research memory. We have made efforts to create a register of the research results or a database accessible for all of us. But, it's not at all easy". The head of another important research institution commented: "One of the research workers' emigration peculiarities is the emigration of the middle-aged and highly qualified people. As a result, in our institute have remained just the extreme age groups; the oldest and the youngest contingents. Given that the young-aged professionals do not possess the adequate experience, the transmission of know-how becomes difficult".

Another negative impact of the "brain drain" is that it does not produce positive signals for the country of origin. If professionals are leaving their country, potential investors are likely to view this as a negative reflection of the country. This means that foreign investors may begin to question if the country that is experiencing outflow of professionals is a good location for their funds, if they perceive the emigration of professionals as a sign that the economic and political future of the country is uncertain.

Finally, in the long run, with the emigration of qualified professionals, the sending country loses not only the current but also the future stock of human capital. Professionals who emigrate are more likely than other groups to leave the country with their dependents, specifically their children. Yet, the latter have a high probability of also becoming educated and qualified professionals in the future. This future cohort of professionals is then also lost to the economy of the sending country.

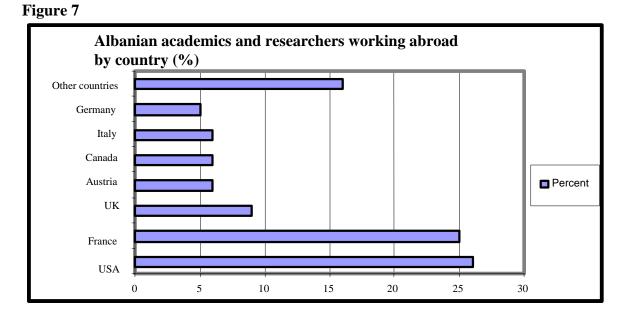
# 3. From "brain drain" to "brain gain"

# 3.1. From "brain drain" to "brain exchange"

One initial and efficient way to limit the brain drain, would be to seek its conversion to "brain exchange". This would require the intensification of the scientific cooperation with universities, laboratories and research institutions in Western Europe and North America. Another alternative would be to seek membership of international institutions such as CEI, ESF, COST, EUREKA, etc., as well as larger organizations such as OECD, EU, NATO, etc. The intensification of this cooperation could increase the mobility of the Albanian academics and researchers within the international scientific community for joint projects, temporary employment on a contractual basis in universities and research institutions, etc. from a base within Albania. For example, in late 1990s, Hungary had signed inter-governmental agreements for scientific cooperation with 24 countries (Andreff W, 1998).

### **3.2.** Cooperation with Albanian emigrant-academics/researchers

Evidence from the CESS Data Banks 1 &  $2^5$ , suggests that some 106 Albanians holding a PhD are currently working in universities, laboratories, research institutions, and research departments of OECD countries. Taking into account that the Data Bank 1 & 2 do not contain a record of *all* Albanians with a PhD, and that many others have either started or completed PhD studies and became integrated in the universities and research institutions after the finalization of this Data Bank, we can estimate that the pool of Albanian academics and researchers comprises at least 200 persons. This pool is concentrated in a few host countries: within the current Data Bank, 26 percent are working in the USA, 25 percent in France, 9 percent in England, 6 percent in Austria and 5 percent in Germany. Other countries, including Canada, Italy, Switzerland, Holland and Greece represent the remaining 29 percent of the total (Figure 7).



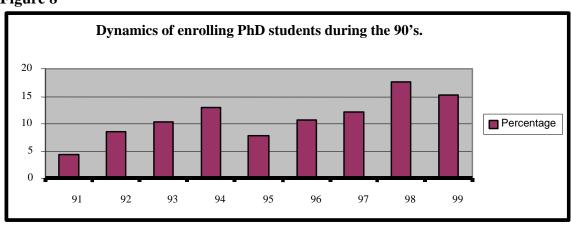
Source: CESS., Updating the database of overseas graduates, 2004

For a small country like Albania, this pool of researchers is not insignificant. Other Albanians with a PhD, not integrated in the universities or research institutions, are also working in line with their professional training. For example, the CESS survey shows that almost 91 percent of those who responded, and who had achieved a PhD abroad, had obtained jobs that matched their level qualification<sup>6</sup>, although clearly there may have been some self-selection of more successful graduates in the sample. Besides, additional sources suggest that this pool is likely to grow deeper and expand in the future. Thanks to their hard work and dedication, many Albanians have been awarded the highest scientific degrees, have won international prizes, have been promoted, have made speeches at international conferences, or have published articles in scientific bulletins and magazines. The number of persons completing university and post-

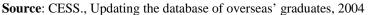
<sup>&</sup>lt;sup>5</sup> CESS., Updating the database of overseas graduates, 2004

<sup>&</sup>lt;sup>6</sup> CESS., Updating the database of overseas graduates, 2004

university studies in the industrialized countries – Masters and PhD – has also grown progressively during the 1990s. It is estimated that over 25,000 young Albanians are currently studying abroad and many hundreds are attending Masters or PhD programmes at universities within industrialized countries<sup>7</sup>. Furthermore, figures from the Data Bank 1 & 2 show that the number of Albanians who enrolled for a PhD in industrialized countries during the period 1991 - 2000 has also risen (Figure 8).





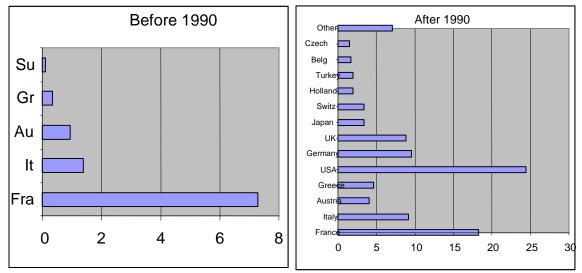


Over the 1990s, we notice a diversification of countries where Albanian students carried out their PhDs. Until the late 1980s, the majority of Albanian students tended to study in France (72 percent), followed by Italy (13 percent), Austria (9 percent), and Greece (3 percent). However, during the 1990s, the largest destination of those who had completed or were in the process of doing a PhD, was the US (24 percent), followed by France (18 percent), the UK (9 percent), Germany (9 percent), Italy 9 percent, Greece (5 percent), and Austria (4 percent) (Figure 9).

<sup>&</sup>lt;sup>7</sup> Master plan on the higher education and science, Concept-Paper, 2005

<sup>&</sup>lt;sup>8</sup> The data in this chart should be considered with caution since they represent the number of enrolled PhD students. The chart indicates the increase in the number of PhD students during the 90's based on the available data.

Figure 9. The share of PhDs according to the countries in which they are carried out, before and after 1990



Source: CESS., Updating the database of overseas graduates, 2004

#### **3.3.** The role of scientific Diasporas

Many countries, including Hungary, Romania, Poland, Slovakia, India, China, South Korea, Singapore, Taiwan, Tunisia, Morocco, Chile and Columbia are nowadays paying more and more attention to their emigrant academics, researchers and engineers that can be mobilized and organized to the benefit of the country of origin. These countries have developed various forms of scientific Diasporas, where emigrant academics and researchers have established links with scientific circles in the country of origin (Box 1). Since the beginning of the post-socialist transition, Hungary has made attempts to activate the network of emigrant scientists (which is estimated at 12 percent of its global potential). At the same time, the Polish of Chicago, the Czech of Montreal, the Slovakians of New York, and the Croatians of Sydney are all getting mobilized for their country of origin (Portnoff A-Y, 1996). This new tendency is so strong that some of the most fanatical contesters of the brain drain seem to have changed opinion. For example, Bhagwati, who in the 1970 demanded the taxation of host countries in order to compensate the losses from brain drain for the countries of origin, wrote in 1994 that the developing countries have changed their mind by hoping to benefit the skills/talents of their citizens abroad. To cut it short, the approach in use is not the one of brain-drain, but that of Diasporas". So, if certain conditions exist, the emigration of skilled people, instead of impoverishing the country of origin, could lead it to prosperity.

#### Box 1

Like most developing countries, Columbia, too, is faced with the brain drain problem since the early 1960s. It is estimated that some 2,000 Columbian scientists and engineers are abroad, i.e. nearly half of the active scientists and engineers' community present in the national territory. (...) Early in the 1990s, the Columbian authorities started to think that the solution to the brain drain problem didn't consist in the physical return of the emigrant scientists, but that each Columbian scientist living abroad should be considered as having the potential to contribute to the progress of science in Columbia. In this context, Colciencias (The Columbian National Council for the Development and Coordination of Activities S&T) in November 1991

established a network of Columbian emigrant scientists and engineers named the Caldas network. (...) The globalization of the scientific and technical policy of Colciencias and improvements in communication helped in the creation and expansion of the Caldas network through a list of electronic communication on the Internet. Still, the Caldas network would not work without the will and interest of emigrant scientists in working for Columbia. A survey realized in the period 1994-1995 showed that this network had in 1995 some 1,000 people. The network members were present in 25 countries, with the highest concentration in the US. (...) Electronic communication was one of the main activities of the network (...) The implementation of joint projects between the international community and emigrants (and their laboratories) was one of the major objectives of the network (...)

Source: Gaillard J., Gaillard A M., Fuite des cerveaux, retours et diasporas. *Futuribles*, Fevrier 1998, Numero 210

In recent years, Albanian emigrants have also created some networks such as Alb-Shkenca Forum, Albstudent (International Network of the Students' Associations), the Albanian Forum, etc. One of the biggest networks is Alb-Shkenca Forum with 850 members, most of them scholars from Diaspora. A leader of this forum states:

"Over the whole three-year period from the creation of Albshkenca, we have tried all the means and ways to enable first of all the establishment of links within the Diaspora of scientists and scholars, actually living and working in the Albanian areas of the Balkans. As a matter of fact, this has been the primary goal of creating Alb-Shkenca. To a certain extent, our efforts have resulted fruitful" (Alb-Shkenca Bulletin, February 2006).

The members of Alb-Shkenca discuss among themselves many of the current problems in their country and many of them express their commitment "in offering a volunteer contribution" for the progress of science and technology in Albania (Alb-Shkenca Bulletin, February 2006).

The Albanian Government needs to **identify and localize the Albanian students and scholars in the developed countries, by creating a Data Bank**. This Data Bank, to be constituted perhaps from an autonomous institution, requires a continuous updating in order to reflect the fast quantitative and qualitative changes of the Albanian academic and scientific elite in the industrialized countries. It must serve for the universities, research institutions, public administration, think tanks, etc., as a pool out of which we can attract in case of need, temporarily or in the long-term, the Albanian academics, scientists and experts working in the developed industrialized countries. These latter - due to a higher efficacy in mastering the advanced research methods; the ability to assimilate the new research technologies and approaches; the higher self-confidence and the international contacts, - would significantly contribute in the consolidation of the scientific and academic standards of our universities, research institutions, public administration and think tanks.

Based on the experience of the other countries, the Albanian government needs to assist in the creation and consolidation of the Albania scientific Diaspora. Parallel with a political will and administrative capacity, this would also require the reformation of the universities and research institutions in order to create a more efficient scientific community, capable of implementing joint projects or research exchanges. In the today's conditions, thanks to new communication technologies and especially email, it iss relatively easier to establish a network to connect the scientific and academic elite in the host countries with the national scientific and academic community. This cooperation can help, on the one hand, in obtaining information of a scientific and technical nature; and on the other in the globalization and consolidation of the national academic and scientific communities.

Supportive to this cooperation with the Albanian academics and researchers in emigration, should be our diplomatic embassies also, particularly in SHBA, France, UK, Germany, Italy, Austria, Greece, Switzerland, etc. They could keep regular contacts with them, invite them to formal ceremonies or whenever the high-ranking personalities of social and political life visit these countries, and they could inform them about new developments in the homeland, etc (Bulletin Alb-Shkenca, February 2006).

## **3.4.** Developing a 'Diaspora Policy': Learning from Other States

It is not only in Albania that there is growing interest in the potential to reach out to scientific and other Diasporas abroad, as a way to tackle the issue of 'brain drain'. For example, the Global Commission on International Migration argued that:

"Countries of origin can gain considerable advantage by harnessing the talents and resources of Diaspora populations, which have grown significantly in size and scope as a result of the recent expansion of international migration."<sup>9</sup>

For example, whilst some care is needed in drawing too much from a country of vastly greater scale and which is culturally very different, the Commission noted that investments by the 30-40 million expatriate **Chinese** living in 130 countries around the world account for some 45 per cent of that country's total FDI, whilst saying that both remittances and return hold out prospects for a positive impact on development. However, it also cautioned governments against making "undue demands on the financial and other resources of the Diaspora", noting that migrants and members of the Diaspora "must be left to make their own choices concerning the way and the extent to which they engage with the development of their countries of origin".<sup>10</sup>

Of concern here is whether Albania can reach out to its Diaspora in ways other than simply promoting remittances, investment or return. In particular, this paper reviews policies that other states have put in place to attract the interest of skilled migrants living abroad, not necessarily to return or send money, but to engage in other ways with development, economic growth or social advancement in their countries of origin. These policies coalesce around the idea of creating a 'transnational partnership', which builds, and draws upon social and human capital in the Diaspora. Such an 'Albanians abroad' policy might include, *inter alia*:

- acknowledging the contribution of Albanians abroad
- providing systematic support, protection and/or advocacy for Albanians abroad
- promoting Albanian culture abroad

<sup>&</sup>lt;sup>9</sup> GCIM (2005). <u>Migration in an interconnected world: New directions for action</u>. Geneva, Global Commission on International Migration., p.29

<sup>&</sup>lt;sup>10</sup> Ibid., p.31

- facilitating or promoting dual citizenship and/or overseas voting
- promoting philanthropy, either individual, or through home village/town, alumni or religious associations
- developing knowledge networks and databases of skills, building on expatriate professional associations
- promoting short-term return to engage in specific projects (e.g. TOKTEN, MIDA)

Of the above range of options for policies, the latter is an obvious starting point, as the TOKTEN (Transfer of Knowledge Through Expatriate Nationals) programme has been implemented by UNDP over a number of years. However, other issues need to be taken into account either before such programmes are launched, or at least alongside them, if they are to be successful. Promoting a sustainable partnership with Albanians abroad will require more than finance for short-term visits and skills databases – it needs to involve a long-term multi-dimensional strategy of social, economic and political inclusion.

## 3.5. Linking with Albanians abroad: relationship-building

Before a programme of short-term return or knowledge transfer can be initiated, a first requirement for Albanian policy makers is to have reliable links with Albanians abroad. This needs to go beyond identifying where skilled Albanian professionals are currently living and working, to establish the trust and sense of common purpose that is essential for a meaningful partnership. As Newland and Patrick have noted in a study for DFID, "The initiative for successful involvement of Diaspora in development must come from within the Diaspora"<sup>11</sup>, but for this to happen in a way that is consistent with government policy, there needs to be a bedrock of common goals and values that are shared between government and the Diaspora.

A number of governments have worked on the issue of relationship-building with their Diasporas in a general sense – through, cultural and social links, as well as to promote their own expatriates' interests abroad. For example:

• Countries such as the **Philippines**, **Pakistan** and **Sri Lanka** have for a long time developed a range of consular and other services for migrant workers, with a view to encouraging their continued engagement with the home country. Although not specifically focused at highly-skilled workers, one particularly interesting initiative involves the establishment in the 1970s and 1980s of 'Welfare Funds' for migrant workers, which are financed through fees paid by those going abroad, and deliver death and disability insurance, health insurance, education for children left at home and/or credit.<sup>12</sup> The point here is that by offering a service to migrant

<sup>&</sup>lt;sup>11</sup> Newland, K. and E. Patrick (2004). Beyond Remittances: The Role of Diaspora in Poverty Reduction in their Countries of Origin: A Scoping Study by the Migration Policy Institute for the Department of International Development. Washington DC, Migration Policy Institute: http://www.livelihoods.org/hot\_topics/docs/MPIDiaspora.doc.

<sup>&</sup>lt;sup>12</sup> Tan, E. A. (2005). Welfare funds for migrant workers: a comparative study of Pakistan, the Philippines and Sri Lanka. <u>Labour mobility in Asia: protection of migrant workers, support services and enhancing development benefits</u>. IOM. Geneva, International Organisation for Migration: 153-217.

workers, these countries have a basis for engagement with migrants on other issues.

- Some governments have made a particular point of highlighting the role played by the Diaspora. **Mexico**, for example, describes those abroad as 'heroes', whilst the **Philippines** has a 'national hero month' and confers awards on particularly industrious expatriates.
- In several African countries, such as **Sierra Leone**,<sup>13</sup> **Ghana**<sup>14</sup> and **Nigeria**<sup>15</sup>, "homecoming summits" have been organised, which although generally orientated towards promoting permanent return, have sought to encourage (e.g. through provision of cheap charter flights and special entertainments) a temporary visit during the holiday period which can then allow discussion of opportunities for partnership between the Diaspora and home country;
- Cultural links are also important. In the period after the Dayton Peace Accords, the **Bosnian** government participated in the promotion of Bosnian cultural events abroad, although these have had a limited effect in promoting wider cooperation between Bosnian communities abroad and the Bosnian government<sup>16</sup>
- Some countries have also sought to develop and fund emigrants' associations, although these often exist already.

What is common to the above initiatives is that they are not on the whole orientated towards asking those abroad to contribute: on the contrary, they are initiatives where the government seeks to contribute something to the Diaspora, without a specific commitment in the opposite direction.

### 3.6. Making relationships count: Diaspora and development

In going beyond the establishment of a relationship with the Diasporas, to make this relationship count for development, a number of routes are open to government. Amongst those perceived as having developed more successful policies in this area are China, India and Taiwan– all have business-orientated models to involve their Diasporas in development activity in a multi-dimensional way.

One interesting contrast is between **India** and **China**, both of which have provided special investment arrangements for non-resident or expatriate nationals, but where in practice, levels of Diaspora engagement and investment have been much higher in China than in India. This contrast was reviewed in 2000 by a High Level Committee on the Indian Diaspora, which concluded that one reason why Indian expatriates have sent

<sup>&</sup>lt;sup>13</sup> http://www.sierraleonehomecoming.com/overview.htm

<sup>&</sup>lt;sup>14</sup> http://www.internationalspecialreports.com/africa/01/ghana/tourism/

<sup>&</sup>lt;sup>15</sup> http://www.arewa-online.com/NDregistration.html

<sup>&</sup>lt;sup>16</sup> Al-Ali, N., R. Black and K. Koser (1999). Mobilisation and Participation of Transnational Exile Communities in Post-Conflict Reconstruction: Interim Report. Swindon, Economic and Social Research Council.

money to families, but have not invested, is because the Indian government has systematically ignored the Diaspora's concerns.<sup>17</sup> The committee's recommendations included not only the cutting back of bureaucratic obstacles to investment and engagement of expatriates, but also efforts to strengthen pride and faith in their heritage amongst Indians abroad. Concrete measures have included the establishment of a government body to liaise between India and the Diaspora<sup>18</sup>; the creation of an Investment Information Centre; the dedication of a national public holiday to celebrate the contribution of eminent expatriates; the holding of a major Diaspora conference attended by the Prime Minister; and the opening of dual citizenship with certain countries.

In contrast, **Taiwan** has focused less on investment, and more on making use of expatriates' skills, both through networking and return.<sup>19</sup> In addition to establishing a database of skilled migrants, the Taiwan government has systematically invited scientists, professionals and technicians to visit Taiwan to teach and network, including paying for their attendance at government-sponsored national development conferences. Taiwan has also built business and industrial parks that include high quality housing and schools aimed at attracting emigrant investors and professionals to return with their families.

It is not just government that can promote networking between diaspora and the home country. In **India**, there are a number of business networks that link entrepreneurs in India and the US and elsewhere<sup>20</sup>, whilst similar networks exist for **Armenian** expatriates working in IT<sup>21</sup>, **Afghan** engineers<sup>22</sup>, and **Lebanese** working in business<sup>23</sup>, to take just three examples. Indeed, Meyer and Brown have identified at least 41 such networks linking 30 countries to their skilled nationals abroad, including student/scholarly networks, scientific networks, and local associations of skilled expatriates.<sup>24</sup> In Central and Eastern Europe, organisations listed by Meyer and Brown includes the Forum for Science and Reform in Romania, and Polish Scientists Abroad. Such organisations exist in Albania also, although their effectiveness in relation to Albanian development has not been evaluated.<sup>25</sup>

In addition, in some countries, there are philanthropic networks that are geared towards encouraging and facilitating the flow of charitable investments by expatriates into public projects. One example is the Asian Foundation for Philanthropy, based in London, which

<sup>&</sup>lt;sup>17</sup> A review of this committee's conclusions is provided by Newland and Patrick. It could also be argued that members of the Indian diaspora have also systematically tried to bypass government initiatives, because of the perception of corruption and inefficiency.

<sup>&</sup>lt;sup>18</sup> The 'Non-Resident Indians and Persons of Indian Origin' Division of the Ministry of External Affairs <sup>19</sup> Newland and Patrick.

<sup>&</sup>lt;sup>20</sup> SiliconIndia, at www.siliconindia.com, provides an extensive directory of Indian individuals and companies abroad who are interested in 'outsourcing' their work to India.

<sup>&</sup>lt;sup>21</sup> For example, SiliconArmenia, at www.siliconarmenia.com.

<sup>&</sup>lt;sup>22</sup> For example, the Society of Afghan Engineers, at www.afghan-engineers.org/

<sup>&</sup>lt;sup>23</sup> The Lebanese Business Network; see www.linbusiness.com/LBN/LB\_LearnMore.asp

<sup>&</sup>lt;sup>24</sup> Meyer, J.-B. and M. Brown (1999). Scientific diasporas: a new approach to the brain drain. <u>Working Papers, 41, www.unesco.org/most/meyer.htm</u>. Paris, UNESCO-MOST. See also Vertovec, S. (2002). Transnational networks and skilled labour migration. <u>Transnational Communities Working Paper no.</u> WPTC-02-02. Oxford, Transnational Communities Programme, University of Oxford.

<sup>&</sup>lt;sup>25</sup> See for example the National Albanian-American Council, at www.naac.org/index.php

provides philantrhopic advice on how to set up charitable trusts, promotes volunteering opportunities for Asians in the UK to work in India, and raises awareness of philanthropic opportunities more generally.

### **3.7.** Temporary return programmes

Another area in which it is possible to involve Diasporas in development is through the promotion of skills exchange programmes – either through temporary return, or, possibly, through 'virtual' return. Since the 1970s, UNDP has promoted 'TOKTEN' exchange programmes in countries such as **China**, **India**, **Lebanon**, **Nepal**, **Pakistan**, **Palestine**, **Philippines**, **Turkey**, and **Vietnam**, whilst the similar and more recent IOM programme 'Migration and Development in Africa' (MIDA) has also started to promote the engagement of diaspora professionals in Africa, notably in **Rwanda**, **Burundi**, **DR Congo** and **Ghana**. There is also a TOKTEN-style programme in Somalia, called 'Qualified Expatriate Somali Technical Support' (QUESTS), which is aimed at those in education, health and agriculture, and which demonstrates that the existence of a strong government is not a prerequisite for such a programme.

TOKTEN involves the placement of highly-skilled expatriate professionals in short-term projects where there is a skill shortage in their country of origin. It is a 'volunteer' programme, although generous subsistence allowances are usually paid for the duration of the placement, along with reimbursement of expenses. Yet although it is one of the larger schemes of its kind, TOKTEN is not the only such scheme. For example, the International Organisation for Migration has developed its 'MIDA' programme partly in response to difficulties in promoting permanent return as part of its earlier 'Return of Qualified Nationals' programmes. These RQN programmes tended to be very expensive, and yet produce relatively few permanent returns; in contrast MIDA does not expect permanent return (although it is arguably still quite expensive, given the number of 'missions' completed (see box below).

Box 2: MIDA Great Lakes

Started in November 2001, this programme targeted health, education, law and engineering professionals living in Belgium, and aimed to allow them to return to their home countries for up to 2 months to provide short-term assistance and expertise. Within the first year, 219 men and 43 women had been included on a professional roster, with missions being undertaken by 28 Burundians, 21 Congolese and 1 Rwandan. By the end of 2004, 115 expatriate professionals had undertaken 163 missions, and a further 80 missions were scheduled in 2005, including 5 lasting 6 months to 1 year, and five permanent returns.

In addition to a roster of professionals, available assignments are now listed on the project's website. In the first year, those undertaking missions received an average of 5,000 Euros, to cover air ticket, subsistence (at 1,200 Euros/month) and technical support. In all, 38 out of 49 participants went to universities, mostly to teach. However, currently advertised vacancies suggest that opportunities have expanded, notably amongst health and social affairs ministries, and within local government.

In addition to MIDA, another similar scheme highlighted by Newland and Patrick is a programme run by a private company called 'Interims for Development'<sup>26</sup>, founded by UK nationals of African origin and focused on placing volunteer managers in short-term projects in Africa. The innovative feature here is encouragement for UK companies to

<sup>&</sup>lt;sup>26</sup> www.interimsFD.com

sponsor their African-origin staff (and others) to spend time to in an African company, either out of a sense of social responsibility, or indeed to expand their own markets and networks in Africa.

# 4. Conclusions and the way forward

'Brain gain', rather than 'brain drain' is a process that could help to accelerate the scientific and technical progress of Albania, and contribute to the globalization of scientific activities. This implies re-engaging with the large number of professional Albanians who have left the country since 1990. However, this process is not straightforward. Up to the end of 2005, less than 10 percent of those Albanian lecturers and researchers who emigrated from the universities and research institutions of the country after 1990, have returned to the homeland<sup>27</sup>. Amongst this contingent there are experts who hold doctorates from Western European or US universities, who after working a few years in universities, laboratories or research institutions abroad, have returned to contribute to their home country. However, of this group, almost 75 percent are no longer working in universities or research institutions, but are in the private sector or elsewhere in the public administration. A proportion of returned emigrants have not been integrated in the host country, and have therefore gone into jobs far from their profession. In this context, they belong more to the group of "brain waste". In this case these questions arise: what are the conditions favoring the return of a part of the academic and research elite to Albania, and what determines whether they will be productively employed on their return?

Based on the experience of the other countries (Box 2), we can sum up that the return of a part of the academic and research elite in Albania will be determined to a considerable extent by the economic and social development of the country and the sustainable progress of an efficacious national research system, so that the gap with the industrialized countries where this elite is working grows smaller. Furthermore, the process of brain or competences' gain is closely linked with the density and quality of exchanges taking place between the country of origin and the scientific Diasporas. As a general rule, the more linked are the potential candidates with the national research community and the more information they receive on the employment opportunities in their field of expertise, the more feasible will be for them to take the decision of return.

### Box 3. Brain gain: the example of South Korea

At the start of the 1960s, South Korea, like many other Asian countries, faced the problem of brain drain. A considerable number of students, especially scientists and engineers, remained abroad (mainly in the US) after finishing the university studies.

In 1960s and 1970s, the South-Korean government took some measures pushing the new scientists and engineers to return to the homeland. From early 1968, the government offered to cover all expenses for those willing to return in their homeland, the costs of accommodation for those who returned in the short term, and scholarships for students on condition that they returned after their studies. However, all these measures proved to be relatively inefficacious. During this period, only 10 percent of the youngsters graduated abroad returned to the homeland. But the situation changed at a later phase, and in 1980s, no less than two thirds of the holders of an American doctorate returned to Korea. This return is explained with the sustainable and fast economic expansion of South Korea, leading to a narrowing of the gap in the standard of living between the developed countries and the country of origin. In addition, the growth of industry and

<sup>&</sup>lt;sup>27</sup> CESS, The survey on real emigration, 2005

the scientific and technical system made it possible for young Koreans to find a job linked to their professional background, without causing a worsening of their standard of living.

As a result, in 1990 the Korean government cancelled the subsidies for the return of emigrants, judging that they didn't seem to play any significant role in decision taking about whether to return to the homeland. In 1994, the subsidies were substituted with a program named *brain pool*, which allowed Korean research institutions to invite for short periods of time (typically a one year period) Korean scientists and engineers working abroad. In addition, the Korean government intensified the support for the associations of Korean scientists and engineers abroad, who had created Data Banks serving to balance the national demand for expertise in science and technology with the Korean researchers working abroad, hence consolidating the links between the national and international science and favoring the brain gain.

Source: Gaillard J., Gaillard A M., Fuite des cerveaux, retours et diasporas. *Futuribles*, Fevrier 1998, Numero 210

#### The necessary conditions for the sustainable return

By means of a survey, 108 PhD holders or candidates in universities in Western Europe and the US were asked about the conditions that should be created in Albania, so that a 'brain gain' process becomes possible. The answers were varied, but focused on two main aspects (Figure 10) concerning overall economic and social circumstances. Just over 30 percent of respondents said that higher remuneration was necessary to justify the many years' investment to get a PhD and enable them to have a decent standard of living; a further 15 percent said that their potential return would depend on the economic and political stability of the country and a reduced level of corruption; just over 10 percent consider their return to be linked with the improvement of public order, employment prospects and social security; some 5 percent demanded an improvement in infrastructure leading to a good quality of life, whilst nearly 5 percent viewed their return as linked with a change in mentality and a better social life.

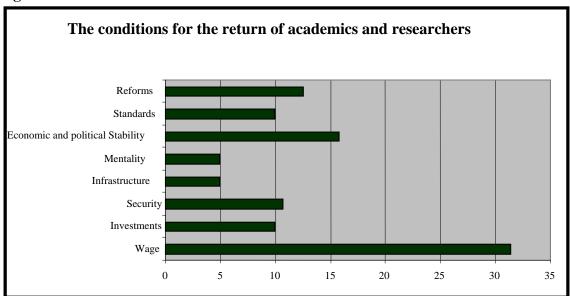


Figure 10

Source: CESS., Updating the database of overseas graduates, 2004

However, a second set of answers were linked to the working conditions in universities and research institutions in Albania. A total of 12 percent of respondents called for a radical reform of universities and research institutions. They want these institutions managed by individuals selected according to professional rather than political criteria, individuals that appreciate and motivate the research work and maintain the gender equality at all the levels. A further 10 percent stated that to improve quality in the universities and research institutions, it is necessary to attract more and more people that have studied in Western Europe and the US, by applying international and fair selection standards. The condition they set for their return to Albania was the security of a job adequate for their level of qualification. Another 10 percent highlighted that investments in academic and scientific infrastructure from both public and private sector should increase.

Many of the quoted conditions can hardly be met in the short or middle run. One of the factors likely to work out in the short run might be the **material motivation through competitive wages for the persons with a master and particularly a PhD**, who return in their homeland and want to work in the universities or research institutions. There are previous experiences in this respect. In the period 1998–2004, the Soros Foundation funded a Fellowship Program, the main aim of which was to attract to Albania those Albanian students who had graduated from universities abroad. This program financed 150 persons, who were employed in the public administration and played an active role in the drafting of policies and implementation of reforms in the sector they were working for a period of 2-3 years. The program awarded these persons 1 - 4 supplementary wages, at an average payment of 350 USD on monthly basis (Nazarko M., 2005).

According to the Data Bank 1 &  $2^{28}$ , nearly 89 percent of the persons with a PhD working in the industrialized countries are willing to collaborate with Albanian universities and research institutions (Table 1).

Nr	The will for cooperation with the Albanian institutions	By percentage
1	Yes	89.3
2	No	1.8
3	It depends	0.9
4	NA	8.0
	Total	100

 Table 1. The will for cooperation with the Albanian institutions

Source: CESS., Updating the database of overseas graduates, 2004

### Possible ways of cooperation

The cooperation of Albanian universities and research institutions with Albanian academics and researchers working in industrialized countries can be realized in various forms. Still, this cooperation has as a prerequisite the reformation of the universities and research so that the quality of research work is improved. In many research areas, the quality is far from international standards. This is reflected in the poor quantity and

<sup>&</sup>lt;sup>28</sup> **CESS**., Updating the database of overseas graduates, 2004

quality of the publications in local journal and the negligible number of publications in the international journals (Luçi E., 2004).

Based on the interviews with the management of universities and research institutions in Albania on one hand, and with Albanian academics and researchers in emigration on the other, some of the forms of cooperation could be:

- Invite Albanian academics and researchers working in the universities, laboratories and research institutions of industrialized countries to deliver a few weeks' or months' cycle of lectures in Albanian universities, depending on their expertise.
- In the long run, with the establishment of the computer centers within universities, it might even be possible to organize lectures by "video-conference" (Tafaj M, 2005). In this way, emigrant Albanian academics and researchers could become part of the university and research staff in Albania without having to return.
- Joint supervision with Albanian colleagues of Masters and PhD students abroad;
- Training and consultancy, especially for the government;
- Invitation to Albanian academics abroad to act as peer reviewers for research works published in scientific journals in Albania.
- Those who are enrolled for a Masters or PhD abroad could be encouraged to conduct their thesis on a field linked to Albanian issues. In addition, when they complete their dissertation on Albanian issues, the same students could be encouraged to put into practice their findings in Albania.
- Participation in joint research projects. Based on their international experience, Albanians abroad could be brought into teams to draft project-proposals for grants allocated by international institutions. They can also be invited to participate in the assessment of the efficiency of projects implemented in Albania and which require international expertise.
- Use of Albanian skilled expertise from abroad in the establishment of new academic and research institutions.

The Albanian government, with the contribution of the international institutions, should establish a special program, in order to offer financial possibilities for the universities and research institutions to invite for short periods emigrant Albanian academics and researchers. It is important that universities should be part of these initiatives in order to ensure a certain interest and long term approach to bringing back and utilizing these capacities in the form of curricula formulation and education projects.

Despite the fact that wage supplements are no longer considered as the only method of attracting highly qualified people in the country, there may be other related incentives that can pave the way for the engagement of these people in Albania. Such initiatives might consist of the establishment of quotas in the public administration and universities that through legal provisions are given to highly skilled Albanians from abroad based on a well-defined set of criteria. For instance people with degrees and postgraduate degrees from reputable western universities could be given a special status ensuring their engagement in areas where such expertise is needed the most. A current initiative at the university hospital in Tirana aims to award the status of European Specialist to people

that have a degree from any G8 countries and are in possession of a professional practice license. Such people can benefit from a certain pool of incentives that recognizes their expertise and market value. This initiative can be expanded and elaborated for many other areas through the establishment of a National Steering Committee of Brain Gain that can be tasked with researching and mapping of Albanian expertise as well as proposing particular government decisions in terms of involving Albanian expertise from Diaspora.

Finally, it is clear that there is a considerable range of possible policy provisions that might provide incentives to skilled Albanians living abroad to either return, or to reengage with professional life in Albania in a way that would be positive for the development of the country. However, firm evidence is still lacking in other countries as to which measures are most effective and why; in this context, some consideration could usefully be given to monitoring the effectiveness of different measures in Albania – perhaps for example by offering different incentives in different research institutions, and then comparing their success in attracting talented people back to Albania. Such evaluation would need to be over the medium term – 3-5 years – to give a clear picture of the effectiveness of policy, but could in turn be highly valuable to draw lessons not only for Albania itself, but also for other countries in the region and elsewhere that are confronting similar issues.

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# Annex 1. List of the surveyed institutions and universities

#### I. Academy of Sciences

- 1. Institute of Popular Culture.
- 2. Institute of hydro-meteorology.
- 3. Institute of Biological Researches.
- 4. The Arts' Research center.
- 5. Institute of Nuclear Physics.
- 6. Institute of Informatics.
- 7. Seismic Institute.
- 8. Institute of Linguistics.
- 9. Institute of History.
- 10. Institute of Archaeology.
- 11. Institute of Geography.
- 12. Institute of Hydro Works' Research.
- 13. Institute of Economy.

### II. Ministry of Agriculture, Food and Protection of Consumer.

- 1. Veterinary Research institute.
- 2. Land Research institute.
- 3. Zoo-technical Studies' Institute.
- 4. Plant Protection Institute, Durrës
- 5. Fishery Research Institute, Durrës
- 6. Vegetables-potatoes' Institute.
- 7. Agricultural Research Institute, Lushnje.
- 8. Olive Institute, Vlorë.
- 9. Institute of Maize and Rice, Shkodër.
- 10. Institute of Fodder, Fushë-Krujë.

- 11. Institute of Food.
- 12. Institute of Beet, Korce

#### III. Institutions under the umbrella of other ministries

- 1. Institute of Urban studies and designing
- 2. ITNPM
- 3. Institute of Statistics.
- 4. Institute of Oil and Gas, (Fier)
- 5. Institute of Public Health
- 6. Institute of Pedagogic Studies
- 7. Institute of Geological Studies and Designing
- 8. Institute of Construction Technology studies
- 9. IKPK
- 10. Institute of Culture Monuments
- 11. Institute of Geological studies
- 12. Institute of Transport
- 13. Institute of chemistry
- 14. The mechanic and wood studies' and designing institute.
- 15. Institute of Metallurgical studies, Elbasan

### IV. Universities and higher schools

- 1. Polytechnic University, Tiranë
- 2. University of Tirana, Tiranë
- 3. Agronomic University, Tiranë
- 4. Academy of Arts, Tiranë
- 5. Institute of Physical Culture, Tiranë
- 6. "Fan Noli" University, Korcë
- 7. "Ismail Qemali" University, Vlorë
- 8. "Eqrem Cabej" University, Gjirokastër
- 9. "Luigj Gurakuqi" University, Shkodër
- 10. "Aleksandër Xhuvani" University, Elbasan

# Annex 2. List of interviewed people

- 1. Prof. Ylli Popa (Academy of Sciences)
- 2. Prof. Hekuran Mara (Academy of Sciences)
- 3. Prof. Jorgo Bulo (Academy of Sciences)
- 4. Prof. Tamara Eftimi (Polytechnic University)
- 5. Prof. Floresha Dado (University of Tirana)
- 6. As. Prof. Naxhi Mamani ("Eqrem Cabej" University, Gjirokastër)
- 7. Dr. Lindita Lati (University of Tirana)
- 8. As. Prof. Petrit Nathanaili (University of Tirana)
- 9. Prof. Salvatore Bushati (Academy of Sciences)
- 10. Prof. Elmaz Shehu (University of Tirana)

- 11. PhD. Erjon Luci (Bank of Albania)
- 12. Prof. Përparim Hoxha (Polytechnic University)
- 13. As. Prof. Lulezim Hana (Academy of Sciences)
- 11. Prof. Ylli Manoku ("Fan Noli" University, Korcë)
- 14. PhD. Edvin Prifti
- 15. PhD. Etleva Gërmenji (University of Leuven, Belgium)
- 16. PhD. Entela Shehaj ("Eqrem Cabej" University, Gjirokastër)
- 17. PhD Candidate. Arsena Gjipali (University of Tirana)
- 18. Prof. Frederik Premti (Academy of Sciences)
- 19. Prof. Vaso Qano (TEMPUS)
- 20. Prof. Aleko Miho (University of Tirana)
- 21. Znj. Mimoza Gjika (Soros Foundation)
- 22. Eno Ngjela (UNDP)
- 23. As. Prof. Fatmir Mema (University of Tirana)
- 24. Znj. Tatjana Dishnica (Ministry of Agriculture, Food and Protection of Consumer)
- 25. Prof. Dashamir Xhaxhiu (Institute of Veterinary)
- 26. Prof. Myqerem Tafaj (Premier's Counselor)
- 27. Dr. Lekë Sokoli (Sociologist)
- 28. Filloreta Kodra
- 29. Prof. Myzafer Korkuti (Academy of Sciences)
- 30. Prof. Xhelal Gjeçovi (Academy of Sciences)
- 31. Prof. Bilal Shkurtaj ("Ismail Qemali" University, Vlorë)