

Developing sustainable energy efficient buildings – A transnational knowledge transfer experience between Norway and Kosovo

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Abstract

As transnational institutional development programs are often advocated as a knowledge transfer opportunity between the partner universities, this case study “Sustainable Energy Efficient Buildings – Knowledge Transfer Between Norway and Kosovo” investigated the knowledge transfer (KT) processes from Norwegian University of Science and Technology to College ESLG in Kosovo. An inter-organisational knowledge of transfer theoretical framework from the business sector was applied to guide the present study. The data was generated through semi-structured interviews with key university officers, professors, and students in continuous education programs from College ESLG and documentary evidence analysis from two partner universities. Based on the thematic analysis of the data, the findings demonstrated that the curriculum mapping process, joint lectures between Norwegian and Kosovar professors, joint research, and joint study visits facilitated the knowledge transfer. While the transfer of knowledge most evidently resulted in institutional capacity development for the Kosovar College unit, that managed the transnational institutional development program, the dissemination of knowledge to other units within the college was more challenging due to communication problems between the Real Estate Department and other units within the college. Hence, other universities seeking to conduct knowledge transfer through transnational institutional development programs need to understand each partner university’s intention in establishing the partnerships, identify the beneficiary institutions’ needs before seeking knowledge input from the partner university and improve the communication between and within the universities for sustainable benefits. The study has been part of the SEEB project supported by the HERD/Energy 2013-2015.

Keywords: transnational institutional development program, knowledge transfer, case study, Norway, Kosovo

1. Introduction

The Kosovo higher education industry includes 7 public universities: University of Prishtina, University of Prizren, University of Peja, Faculty of Islamic Studies, University of Gjilan, Kosovo Academy of Public Safety, and University of Gjakova (Kosovo Accreditation Agency, 2014). Beside this, the Kosovo Accreditation Agency (KAA, 2014) provides only a list of the evaluations of institutions (around 34) without formal decisions and there is no valuable information on the Ministry of Education, Science and Technology (MEST, 2014a). From the report published by Education, Audiovisual and Culture Executive Agency of European Union (2012) it is understood that there are 23 private higher education institutions. Most of the private and public higher education institutions in Kosovo are involved in a number of international cooperation projects supporting the establishment of new study programs or teaching improvement.

While much of literature speaks positively of the value of transnational programs in assisting institutional capacity development for universities in developing countries, there is a scarcity of empirical research that informs how these transnational programs actually facilitate actual knowledge transfer (Vincent-Lancrin, 2007; Leung and Waters, 2013). There has been limited or no research at all focusing on knowledge transfer, particularly from foreign universities to Kosovar universities through transnational institutional development programs. Therefore, it is timely to investigate the Kosovar College's perspectives about knowledge transfer from Norwegian University of Science and Technology to College ESLG through the transnational institutional development program. The uni-directional knowledge transfer from Norwegian University of Science and Technology, Norway to College ESLG took place as part of Programme in Higher Education, Research and Development (HERD) of Ministry of Foreign Affairs of Norway. Both institutions decided to cooperate in the field of energy because Norway leads in Europe in sustainable and passive buildings. In this regard, the Norwegian Parliament in January 2008, passed the law to consider imposing the passive house level for all new buildings by 2020 (Haase, 2010). In a less wealthy country such as Kosovo, households spent on average 1,210 Euros for electrical energy bills. According to the data of the Agency of Statistics of Kosovo (ASK) for 2012, around 30 percent of household expenses are spent on accommodation, a category in which electrical energy costs are included and covered. Also, Kosovo is faced with an increasing demand for electrical energy. Only during the second quarter of 2013 Kosovo used 857,7GW/h electrical energy of which households are the largest consumers of electrical energy with 56.4 percent (Efficiency for Development, 2014). The energy consumption in Kosovo homes for space heating is estimated at over 80% of total home energy consumption (Bowen et. al, 2013).

The present study focuses on the following research question:

How does knowledge transfer occur in the context of a transnational institutional development program "Sustainable Energy Efficient Buildings/HERD" from NTNU to College ESLG, Kosovo?

In attempting to answer the research question, the present study focuses at first on an inter-university knowledge transfer theoretical framework, adapted from business sector literature to guide the study, and then subsequently discusses the research methodology employed to generate the research results. After outlining the results, the discussion and implications of the study conclude the article.

2. Knowledge transfer

The theoretical framework, which is relevant to the present study, is composed of inter-organisational knowledge transfer theories developed in a business setting and complemented with the literature review on knowledge transfer in the tertiary education (Courtney and Anderson, 2009). Although the term knowledge transfer is used extensively in the modern literature, it is very important to explain what is meant by knowledge transfer as used in the present study. The knowledge transfer is defined as “the process through which one unit is affected by the experience of another” (Argote and Ingram, 2000, pp151).

According to Bauman (2005), the transfer of knowledge means the modification of existing knowledge from a sender organisation (for instance Norwegian University for Science and Technology) for the purpose of addressing issues that a receiving organization (in the context of this research College ESLG) faces. Inter-organisational theories of knowledge transfer argue that knowledge transfer takes place in four stages such as: 1) intention to engage in knowledge transfer through expressing of intention either from the sender organisation or receiving organisation to engage in transnational institutional development program; 2) the structured process of knowledge transfer; 3) the unstructured process of knowledge transfer and 4) the institutional capacity development (Chen and Mc Queen, 2010).

The inter-organisational theories of knowledge transfer argue that at the inter-university level, knowledge transfer begins with the intention of either party to engage in a transnational institutional development program, which explicitly results in a formal agreement or application for a donor-funded program. Robertson and Jacobson (2011) argue that research in the business sector shows that the expression of the intention to either acquire (receiving organisation) or share knowledge (the sender organisation) is critical to knowledge transfer. Both authors argue that the intention to engage in knowledge transfer must be mutual. The receiver organisation must explicitly exhibit the intention to acquire knowledge, whereas the sender organisation also must have the intention to share knowledge (Easterby-Smith et al. 2008). Eldridge and Wilson (2003) further argue that both institutions of higher education must show a genuine interest to engage in knowledge transfer. Huang (2007) argues that for any knowledge transfer to be successful in any transnational institutional development program, both partners must clearly specify the types and scope of knowledge transfer.

A structured process of knowledge transfer includes four phases (Szulanski, 1996). There are: initiation, implementation, ramp-up, and integration. The initiation phase usually takes place by identifying the knowledge gaps in the beneficiary institution. The knowledge gaps must be identified clearly in the partnership agreement. If the knowledge gaps are clearly identified at the initiation stage, then the implementation takes place much more smoothly. During the implementation phase, both institutions work together to ensure that the knowledge shared is what was shared between two universities and that it is also appreciated and valued by the receiving institution. The ramp-up phase follows with the staff members of the receiving university applying the acquired knowledge and resolving the knowledge gaps. Finally, at the integration phase, the acquired knowledge is institutionalized through the production of documents such as course syllabi, teaching methodology manuals and dissemination of the produced documents to other units of the university (Flores et al. 2012).

The knowledge transfer process may also be unstructured, which takes place in a spontaneous, informal, and unplanned manner (Chen and McQueen, 2010). The unstructured process of knowledge transfer depends on arising situational demands and individual dispositions. The unstructured process of knowledge transfer includes copying pre-existing knowledge products from the partner university and adapting that knowledge to the new context of the receiving university, independent of the sender university. In the unstructured knowledge transfer process, lecturers exchange knowledge without formal agreements, and the knowledge acquired can be applied individually or collectively by the lecturers (Chen and McQueen, 2010). In order for the knowledge which was acquired through the unstructured process to be retained and further shared within the institution, the recipient university must institutionalise the knowledge gained through production of documents at the institutional level. Then the knowledge gained through unstructured process has to be merged with the knowledge transfer that takes place through a structured process. This takes place during the integration stage (Argote et al. 2003). Whereas the theoretical framework proposes the unidirectional flow of knowledge usually from the sender to recipient university, authors such as Courtney and Anderson (2009) argue that the knowledge transfer takes place in a bidirectional way and requires interaction between the partner universities to fully appreciate the knowledge being transferred.

3. Methodology

A qualitative research method is used to explore the real interest of complex situations in the planning, which cannot be easily quantified. The qualitative research approach enables us to find reliable answers for research question posed. The qualitative method can provide the intricate details of phenomena, which can't be derived through quantitative methods (Strauss and Corbin, 1990). The qualitative research technique is a more intrusive technique and less structured as the quantitative method, which enables the interviewer to gain in depth insight regarding the research topic (Jarratt, 1996).

The present study uses qualitative research method, which includes semi-structured interviews and consultation of documents as two data sources. In total, 120 participants were invited to respond to semi-structured interviews. Out of 120 participants, 108 responded successfully. The successful respondents were: T3 professors from Kosovo participating in the Sustainable Energy Efficient Project, the chancellor of the College, 3 master students who spent one semester at NTNU as students and later, upon graduation, became teaching assistants at ESLG, 10 students who participated in the study visit in Norway, 60 master students who attended lectures that were jointly held by NTNU and College ESLG professors, and 31 participants from the ranks of other stakeholders that participated in conferences and symposia organised by both institutions. The respondents were selected from the ranks of those that were directly involved in the project and knowledge transfer. Although four professors from ESLG were foreseen to participate in the SEEB project according to initial application, only three were involved in all phases of knowledge transfer and throughout the duration of the project. Ultimately, ten students participated in the study visit in Norway and all of them were selected as respondents. These ten students include also three students that took place in a semester exchange, however, the three students participating in two different categories were asked two sets of questions (one regarding knowledge transfer achieved through study visit and the other one regarding knowledge transfer achieved through spending one semester). Also, sixty students were selected from two

generations of students that attended lectures and courses with NTNU professors. Forty students were selected from the group of forty students enrolled in the master program of Real Estate Management in academic year of 2013/2014 and twenty students were selected from the class of twenty students enrolled in the master program of Real Estate Management in academic year 2014/2015.

Finally, thirty one respondents that were selected from the stakeholders group were selected from the group of two hundred people who took place in conferences and symposia organized jointly by NTNU and ESLG. Thirty one respondents were selected in the way that they represent main stakeholders such as Kosovo institutions (Ministry of Energy and Ministry of Environment and Spatial Planning), local government (directorates of urbanism of Kosovo municipalities), private sector (construction companies), professional associations in the field of energy efficiency, and various international donor agencies. The names of the participants were coded. The students were grouped into three categories: 1) students that completed one semester at NTNU and upon graduation were promoted to teaching assistants at the recipient university and who also did the master theses with Norwegian professors; 2) students that participated in a study visit in Norway and 3) students who attended lectures with NTNU professors in Kosovo. Table 1 describes the types of respondents, code numbers and their characteristics.

Table 1: Types of respondents, their code number and characteristics

<i>Respondents type/category</i>	<i>Code number</i>	<i>Characteristics</i>
<i>Professors</i>	<i>PROF</i>	<i>Only planners with ten years of experience that worked in municipality of Prishtina immediately in the period after the war</i>
<i>Chancellor</i>	<i>CHAN</i>	<i>Chancellor of the College as part of executive of College</i>
<i>Students that completed one semester at NTNU</i>	<i>STUD₁</i>	<i>Only students that completed one full semester at NTNU and completed their theses with Norwegian professors.</i>
<i>Students that participated in study visit</i>	<i>STUD₂</i>	<i>Only students that participated in a study visit at NTNU</i>
<i>Students that attended lectures with NTNU professors in Kosovo</i>	<i>STUD₃</i>	<i>Only students that attended direct lectures by Norwegian and Kosovar professors jointly in Kosovo for a full course</i>
<i>Other stakeholders involved in the project</i>	<i>STAK</i>	<i>Other stakeholders that attended the transfer of knowledge through organisation of conferences and symposia</i>

The categorisation of cases is presented in Table 2.

Table 2: Categorisation of cases

<i>Category code</i>	<i>Category description</i>	<i>Case identification code</i>
<i>PROF</i>	<i>Professors of ESLG</i>	<i>C1, C2, and C3</i>
<i>CHAN</i>	<i>Chancellor</i>	<i>C4</i>
<i>STUD₁</i>	<i>Students that completed their semester at NTNU</i>	<i>C5, C6, and C7</i>
<i>STUD₂</i>	<i>Students that completed their study visit in Norway</i>	<i>C8 to C 17</i>
<i>STUD₃</i>	<i>Students that attended lectures with NTNU professors in Kosovo</i>	<i>C18-C77</i>
<i>STAK</i>	<i>Other stakeholders that attended conferences and symposia</i>	<i>C78-C108</i>

The interviews were conducted in Albanian and translation by a certified translator from Albanian into English was provided. The second source of data was the selected recipient college documents pertinent to the transnational institutional development program “SEEB”. These documents consisted of an application for the SEEB project funded by the HERD program of Ministry of Foreign Affairs of the Kingdom of Norway, annual reports from the SEEB project, curriculum documents such as course syllabi, conference agenda, filled student survey forms, conference participant’s feedback, and transcripts of meetings of the Steering Committee of the SEEB project. In the present study, the documents were categorised as secondary data used to corroborate the primary findings from the interview data.

The key constructs of intention to engage in knowledge transfer were; 2) the structured process of knowledge transfer; 3) the unstructured process of knowledge transfer and 4) the institutional capacity development were examined as specific themes used to investigate the date. Excerpts from the interviews discussing those thematic areas were compared and carefully examined. While there are excerpts relevant to these predetermined thematic areas, there are also excerpts from interviews that do not support the predetermined themes. In the end of analysis of interviews, the themes are determined as dominant if they show up in more than 50 % of the responses of semi-structured interviews. Furthermore, the dominant themes were used to analyse the secondary source of data such as documentary evidence. In order to enhance the credibility of qualitative studies, the triangulation technique was used (Guba, 1981). In order to ensure the triangulation, parts from the documents in line with the dominant themes were grouped together in order to support the dominant themes, which enabled triangulation of the findings from the semi-structured interviews and the findings from the documents.

4. Research results

The present study shows how College ESLG responded to the knowledge transfer processes generated by the Sustainable Energy Efficient Buildings Project (SEEB)/HERD program. College ESLG was a good partner for this project, as the first faculty in Kosovo teaching and researching in the field of Real Estate Management, and with tradition of cooperating with international institutions from Slovenia and

USA. Both institutions were interested to develop creative cooperation in the field from research and teaching perspective.

The study found that the Norwegian University for Science and Technology and College ESLG were involved in a structured knowledge transfer process, which means that both parties began negotiations at the initiation stage to apply for a joint project of institutional development of the college in the Western Balkans. Within College ESLG, the project coordinator C3, who is responsible for initiation of international projects within ESLG expressed the following:

“Yes we engage in a structured process of initiation of collaboration projects with foreign universities. It all begins with the letter of intent and then a memorandum of understanding is signed. Before signing any agreement, we at ESLG identify the areas in which we need support from the foreign universities. It is in our vision to engage in collaborative projects with strong universities that come from the developed countries, from which we can benefit in terms of gaining the necessary knowledge”.

Also upon negotiations between College ESLG, NTNU and Multiconsult, the parties signed the memorandum of understanding and also the application for an institutional development project entitled “Sustainable Energy Efficient Buildings” funded by the HERD program of the Ministry of Foreign Affairs of the Kingdom of Norway. As can be seen from the extract below, institutional development, curriculum development, and research capacity development were identified as key areas for knowledge transfer. A two-way interaction was needed to prepare the application for the SEEB project.

Main objectives of the project Sustainable Energy Efficient Buildings are to develop the institutional capacity of ESLG on energy efficient buildings and sustainable refurbishment. This include development of a master study program energy management in Buildings, develop research capacity at ESLG on energy efficient buildings and sustainable refurbishment, and building a network among academia, the construction industry, and authorities in Kosovo (Application for SEEB project, pp4). While the written application for project SEEB documented the jointly agreed intentions to engage in knowledge transfer on both sides, the views expressed by participants (case 1 to case 3) through interviews were not consistent with the written documents. For case 1 to case 3, establishing transnational institutional development program was unidirectional and seen as a way to seek and develop the institutional capacity of ESLG in the area of energy efficient buildings and sustainable refurbishment, as exemplified by the following excerpt.

C1 notes the following: “From the very beginning although the application for SEEB project provided for bi-directional knowledge transfer, we as ESLG were hoping to have more uni-directional knowledge transfer in the field of curriculum development, teaching methodology, research capacity development, and grading standards in the area of energy efficient buildings and sustainable refurbishment, where Norwegians lead in the world. It was our intention to acquire as much knowledge as possible from Norway in order to transfer it further to other stakeholders such as students, authorities, and construction industry”. In the above excerpt, we can see the expectation of College ESLG to engage in knowledge transfer that was clearly seen from expressions like “unidirectional transfer of knowledge” and “transfer it further to other stakeholders”. For participants at the school level, as represented by

College ESLG Lecturer 1 above, the way to engage in knowledge transfer and development of institutional capacity was through curriculum collaboration with Norwegian University of Science and Technology. From the above excerpt we can see the expectation of College ESLG to have the knowledge transfer through curriculum development collaboration, development of teaching methodology through joint teaching and development of research capacity.

Nevertheless, in the application for the SEEB project we see that the knowledge transfer was planned to take place bi-directionally because also three Kosovar professors were planned to teach at NTNU so students and professors of NTNU also gain some insight about the teaching methodologies that are practised in Kosovo.

Following the initiation stage, the universities moved to the implementation stage. Regarding the teaching methodology collaboration, professors of ESLG that were involved in the project reported positively that they learnt a lot with regards to transfer of knowledge in teaching methodology development.

“The focus of Norwegian professors on practical methods “learning by doing” has facilitated my teaching process with students of ESLG later. I introduced the same teaching process that Norwegian professors used in the courses I teach” (Case 2).

In the development of teaching methodology through co-teaching and teaching collaboration, all respondents both professors and students think that the same effect would have not been achieved had the professors from Norway stayed only as quality assurers and not as co-teachers too.

C2 noted the diversity of teaching methodologies enriches the experience in the classroom, whereas C3 stated the following: “The methods of co-teaching are not a method of teaching in our country, and I think that this method should become a practice in all our higher education institutions in order to improve the quality of studies. The co-teaching brings more transferable knowledge”.

From the category of cases STUD₁, C5 notes the following:

“Through co-teaching a comparative analysis between the situation in Norway and Kosovo was drawn. In this way we were able to acquire more knowledge that now we will be able to transfer it further to other students in our capacity as teaching assistants”

Regarding transfer of knowledge through curriculum development, the answers can be exemplified by the following excerpt:

“The curriculum development collaboration took place in a structured and unstructured way. The structured way was also foreseen by the application for SEEB project to develop together a master program in Energy Management. Due to requirements of Kosovo Accreditation Agency, the collaboration was focused on development of curriculum for the study program of Energy Management. Norwegian professors submitted us the course outlines and then we developed further the learning outcomes based on the needs of construction industry of Kosovo” (Case 1).

The knowledge transfer through curriculum development capacity is also foreseen in the original application for SEEB project, which states that one of main objectives is to develop the curriculum for the study program of Energy Management at master level (Application for SEEB project, pp5). Nevertheless, the transfer of knowledge in the curriculum development was not an import of everything from Norway. As C1 notes: “Not everything was copy pasted. We customised many of the course syllabi of the Energy Management program to the needs of Kosovo. In other courses of the Real Estate program we tried together to make comparative analysis between situation in Norway and Kosovo with regards to energy efficient buildings”.

In this regard nearly all respondents, both professors and students agree that they benefited a lot from the collaboration between Norwegian and Kosovo professors in curriculum development and they appreciate the comparative analysis between Norway and Kosovo. Students responded that they benefited from teaching techniques of Norwegian professors, course syllabi, updated suggested literature, and exercises with different software. In this regard, professors noted that they benefited from joint curriculum development, definition of course objectives and learning outcomes, discussion on literature list for courses, organisation of joint conferences, production of case studies for the courses, and joint assessment of students’ research papers and final examinations according to NTNU assessment methods and guidelines. The curriculum mapping process took place through exchange of documents and discussions between Norwegian and Kosovo professors. C2 notes: “We participated fruitfully in an exchange of emails and documents regarding curriculum of Energy Management study program”. This is corroborated also by a documentary evidence of transcripts of minutes of the Steering Board of Project SEEB (Minutes of Steering Board of SEEB project, June 2014 – October 2014).

With regards to transfer of knowledge through exchange of students for one semester at NTNU, C5 to C7 all agreed that they benefited a lot in transfer of knowledge especially through practical work in the laboratories of NTNU through involvement of people from the practice in the lectures of NTNU and lectures from practice work at Multiconsult in Oslo. The transfer of knowledge through study visits can be exemplified with the following interview excerpt from case 5:

“The study visits were a direct benefit for both students of ESLG and professors. The most important thing was to attend lectures in the company Multiconsult and hear people who are involved in direct practical projects. Also visiting the Zero Emission Building Power House in Oslo was a direct knowledge transfer. All the things we have learnt for one semester in theory in sustainable architecture we learnt through a two hour study visit in that facility”
(Case 5).

In terms of knowledge of transfer in research capacity development, the respondents do not think that the transfer happened successfully although it was one of main objectives of application for SEEB project (Application for SEEB project, pp4). All the cases from C1 to C3 stated that they did not have any opportunity to work together in research publications with Norwegian professors. C1 to C3 argue that the research capacity collaboration took place more in an ad-hoc way rather than in a structured manner.

With regard to knowledge transfer through joint conferences and symposia, respondents from the construction sector categorised with the code STAK agree that they learnt a lot from presentations of Norwegian professors. C88 noted the following: “I learnt a lot from the presentation regarding design of zero emission buildings and design of climate adapted buildings”. Nevertheless, few of the cases were critical of the content of conferences because as they say they wanted to hear more about sustainable building materials and technologies rather than general concepts of refurbishment.

In the integration stage, the extent of knowledge was rather limited to the level of program of real estate. Regarding integration stage C1 noted the following: “We worked very well in other stages but we did not work together to produce documents that would serve as manuals or documents that we could use college wise. We were supposed to establish a Center of Energy Efficient Buildings, where all the acquired knowledge during the SEEB project would have been transferred to, but we failed to establish the center properly due to lack of funding, although the application for SEEB project provided for the establishment of such a center within ESLG. We were able to develop and accredit a study program in Energy together but failed in the establishment of the center”.

5. Discussions

The discussion of the present study centres on main findings. Firstly, the present study found the partners’ main intentions in establishing the transnational institutional development program were clearly understood by each other. On the other hand, the study found that knowledge transfer occurred through curriculum development collaboration—a structured knowledge of transfer process which was mandated by the application for SEEB project. The study found that also the knowledge transfer occurred through joint teaching of Norwegian and Kosovo professors and although the original role of Norwegian professors as foreseen by the application for SEEB project was to serve as quality assurers, the deviation from the application in ensuring higher teaching collaboration between Norwegian and Kosovo professors turned out to be positive.

ESLG and NTNU had similar aspirations, as presented in the project application for SEEB, which upon project implementation resulted in solid knowledge transfer to Kosovo professors and students. In this regard Leing and Waters (2013) argue that contrasting aspirations between partnering universities in a joint project are the main cause for termination of the partnership and elimination of further knowledge transfer opportunities within the partnership. Mercer and Zhegin (2011) argue that universities must comprehend what each partner university seeks in the joint project or program in order for mutually beneficial activities to be developed and sustained. It is noted that this mutual comprehension took place between ESLG and NTNU and third partner Multiconsult.

On the other hand, although the research capacity development was foreseen to take place according to the application for the SEEB project and annual reports from the SEEB project, the study found that the research capacity development was not properly achieved. Contrary to this, the transnational programs can be seen as one of the main means for knowledge transfer from the foreign university but not the only means available (Gilbert and Gorlenko 1999). In the integration stage, the study found that there was no dissemination of knowledge transfer beyond the level of real estate program to the other units. Omerzel et al. (2011) argues that one way to ensure the retention, documentation, and

accessibility of knowledge beyond individual lecturers' knowledge base, is the development of a knowledge management system. The study found that this did not happen as part of the project where all knowledge transfer would be documented.

6. Conclusions

The present research, with the focus on the knowledge transfer in the context of a transnational institutional development program SEEB from NTNU to College ESLG, shows a positive correlation between two institutions. From the findings, all four stages of knowledge transfer were covered: intention to engage in knowledge transfer, the structured process of knowledge transfer; the unstructured process of knowledge transfer and the institutional capacity development. The cooperation was as bi-directional knowledge transfer; however the present research focuses only on the uni-directional knowledge transfer from Norwegian University of Science and Technology to College ESLG. With the help from NTNU a new study program was developed, customised to the needs of Kosovo. Joint teaching of Norwegian and Kosovo professors in Kosovo and students study experiences in Norway was evaluated as a very positive case of knowledge transfer. Both professors and students enriched the College ESLG with their academic and research experiences.

To conclude, knowledge transfer occurred mainly through a structured process which was arranged in the application for project SEEB. Although one of the tasks to establish a Centre for Energy Buildings did not materialise due to the lack of funding, research activities were provided through different ways. The SEEB project has contributed to an institutional development and knowledge transfer for education and research in the field sustainable energy efficient buildings in Kosovo.

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