

INTERNATIONAL COOPERATION AND UNIVERSITY AGREEMENTS: NEW OPPORTUNITIES FOR SUSTAINABLE DEVELOPMENT

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Sommario

Il processo di internazionalizzazione delle Università rappresenta un'opportunità di sviluppo per quanto concerne le tematiche ambientali e sociali. Questo articolo esplora un caso studio in cui gli accordi tra università di paesi a alto e medio-basso livello economico e lo scambio di studenti hanno permesso di iniziare un processo di cooperazione diretto per lo studio di problematiche ambientali. Gli accordi, firmati nel 2015 tra due università italiane e due boliviane, includono la cooperazione tra imprese private, governo locale e organizzazioni-non-governative. Questo processo di cooperazione prova l'importanza delle Università per l'implementazione di programmi di sviluppo in paesi a medio-basso livello economico, aprendo nuove opportunità per uno sviluppo sostenibile.

Abstract

Internationalization of higher education institutes is becoming a real opportunity of development in environmental and social subjects. This paper explores a case study where university agreements and student exchanges between low-middle income and high-income countries have started a process of international cooperation about environmental themes. The agreements, signed between two Italian and two Bolivian Universities, started formally in 2015 and include the cooperation through local authorities, private companies and non-governmental organizations. This case study proved the importance of Universities for implementing international programs concerning environmental issues in low-middle income countries, opening new opportunities for sustainable development.

Keywords: International Cooperation, university agreements, environmental management, sustainable development

Introduction

Globalization is becoming a reality always more emphasized by the phenomena of migration, exportation of goods, internationalization of industries and common environmental issues. International objectives developed by the United Nations about economic, social and environmental concerns led to the implementation of new international partnerships with the aim to introduce new plans for sustainable progress (Undp 2017). In this framework, the cooperation through low-middle income and high-income countries is becoming more popular and of interest in order to spread social equity and environmental sustainability. Indeed, International Cooperation between different communities, Governments and companies is the most important form for increasing the number of new projects in low-income countries, where the lack of economic sustainability and political will are barriers which cannot be overcome merely by local communities.

Usually, the international cooperation is introduced by collaborations through National Ministries or international Non-Governmental Organizations (NGO) which start new projects by the support of economic funds invested for specific topics such as sanitation, water supply, education and hygiene, among others. Such supports are underlined in the 17th objective of the sustainable development goals (SDGs) with the scope to enhance global partnerships between Governments, civil society, the private sector, the United Nations and other actors, especially for improving the least developed countries (Undp 2017).

Nonetheless, one important role could be taken by the University. This institution is useful to start new agreements able to implement new programs for future project-development. Indeed, Universities are considered as strategic institutions in the processes of social inclusion and the enhancement of public awareness (Stefanini 2013) while the cooperation through international Universities has a key role in global markets since graduates most likely to deal with people from different cultural background (Chan 2004). The cooperation through scholars and the activities structured by University agreements, like students exchange and sensitivity campaigns, could be of utmost importance for improving the public awareness about ecological topics whereas the ability of higher-education institutions to contribute to international researches and sustainable-development-project can be a valuable strength point for future sustainable programs encouraged by the Governments (Koehn et al. 2011). The most relevant management issues could be represented by the lack of budgets, the different culture and the unclear or unreliable exchange of information (López et al. 2011). Anyhow, such problems do not represent a real barrier for implementing new agreements which continuing to be a real benefit for higher education institutes.

The aim of this work is to introduce a case study where Universities play the most important role

for the implementation of new international agreements. In particular, the partnership between two Italian and two Bolivian Universities is reported in this study, highlighting main roles of the actors involved and the steps applied for introducing an integrated process for future development programs. The activity introduced by these academies' institutions allows implementing new alliances between NGOs, private companies and national stakeholders for developing integrated tools for enhancing the environmental sustainability of La Paz, a developing city inserted in a low-middle income country (Ferronato et al. 2016). The aim of the work is to underline the important activity introduced by the Universities into the international framework for the environmental protection and sustainable development. Students exchange, agreements signature, collaboration with the Bolivian authorities and with NGOs is reported as example of multi-stakeholder approach useful for mutual advantages.

The study area, the time required, and the actors involved

Bolivia is the country where the research took place, specifically in the city of La Paz. The city, at an average altitude of 3,600 m a.s.l., counts about 900,000 inhabitants and is subjected to worrisome environmental issues which, in a future perspective, will become dangerous for the life of local citizens. For instance, solid waste management, lack of land-use administration, river contamination and air pollution are issues which are not fully considered by the local policy. Moreover, lack of potable water during the dry season and the miss of clean water for agricultural use are topics which should be addressed for a sustainable development in future programs.

In this framework, University agreements were signed by two Italian Universities (University of Trento – Department of Civil, Environmental and Mechanical Engineering; University of Insubria - Department of Theoretical and Applied Science) and two Bolivian ones (Major Universities of S.Andrés – Department of chemical Engineering; Salesian University of La Paz), in order to develop environmental plans for anecologicalprogress.

Preliminary interactions took places in 2015, for implementing a thesis about environmental engineering. The subscription of the first agreements occurred in September 2015 by the University of Trento for allowing the first field work about solid waste management, developed from February to May 2016. Thanks to the good implementation of the study, a PhD study led to implementing future programs and introduced a second agreement (with University of Insubria) and the work of other two students about water treatment and supply. The schematic representation of the time required for introducing the process of internationalization is depicted in Figure 1.

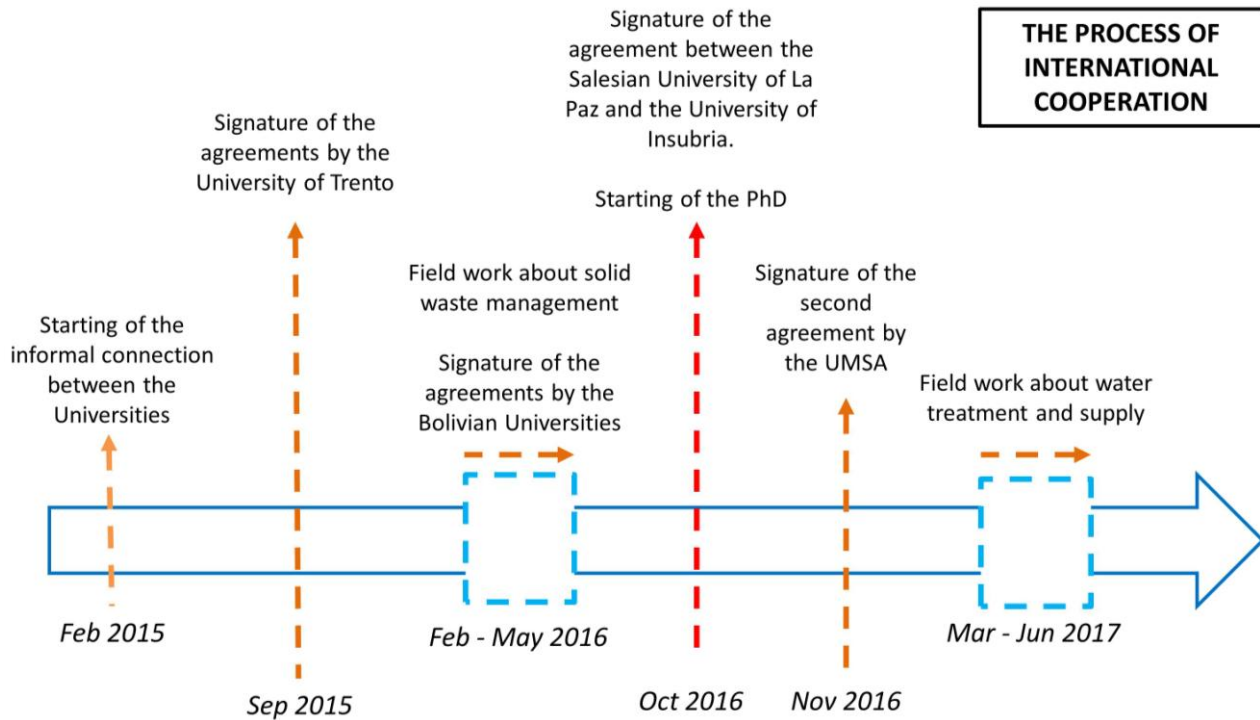


Figure 1 – Timeline of the starting process for developing the international cooperation between the Italian and Bolivian Universities

The local Universities of La Paz were interested in introducing new relations with European Higher Education Institutes, since, over the last years, NGO from Spain, Germany, Netherland, Italy and Switzerland, among others, were involved in local development activities about environmental topics, while the University of Trento was organized for implementing these kinds of agreements due to a dedicated master degree in environmental engineering for international cooperation. As a result, the international cooperation between scholars of European countries has been viewed as an opportunity for improving the network between the municipal authorities and the NGO which are operating within the country, and in the city of La Paz. So, NGO, local authorities and Universities started a strong connection thanks to the students who dedicated the whole period (three month) to a specific research. Moreover, the future inclusion of the private sector can be viewed as an opportunity in order to engage new form of investments able to create new jobs and enhance the environmental state.

The role of the universities and the researches involved

Differently with the usual objective of the international cooperation which is the implementation of projects about water treatment and management, the agreements between the Bolivian and Italian universities started thanks to the implementation of a thesis about solid waste management. The aim

of the work was the introduction of a circular economy approach useful for allowing new economic advantages by waste valorization. In particular, interviews to the local stakeholders, social surveys to the students of the universities, participation to the conferences and lessons about the topics and visits to the main solid waste management facilities were the main activities included in the study (Ferronato et al. 2016; Ferronato et al.2017). As a result, the inclusion of the university allows building a report about the current solid waste management practices of the city, providing suitable information for introducing a recycling company within the city and a management tool advantageous for planning future activities. The work has been developed thanks to the aid of an NGO, the local Municipal Government and a private Italian company (Ferronato et al. 2016). In particular, the Italian company provided the most important information for researching the needs for introducing a recycling activity into a new area without selective collection; the local NGO gave reliable previous studies about local issues and the activity of the informal sector; the local Government provided the information which were not accessible and confirm some hypothesis that were made. As a result, these dealings led to start an integrated and multi-stakeholder cooperation for the development of programs about municipal solid waste.

So, the commonly approach of international cooperation, which considered water supply as the most important subject to address, has been inverted: solid waste, like resource which should be valorized, became the most important topic into the agreements. Moreover, university has a central role in developing new researches, holding the contacts with the local government, private companies, NGOs, citizens and mass media (Figure 2).

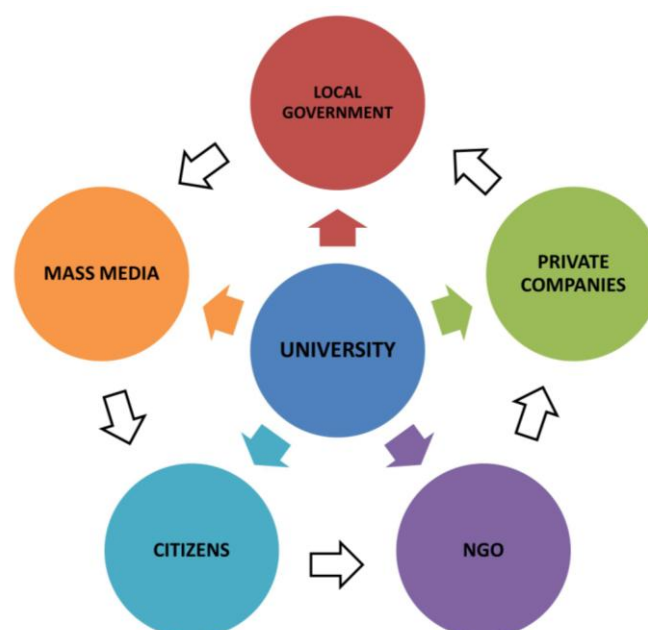


Figure2 - Actors involved into the international cooperation and main linkages between each other

As mentioned before, two other master degree thesis are implemented in 2017 for introducing new systems of water supply and wastewater treatment and supporting the local government and NGO. As applied in the first experience, other two students were involved in this international cooperation introduced, developing two different topics. The first project concerns the rain water harvesting, for answering to the lack of potable water during the dry season, while the second regards a project about wastewater treatment at household level. These works follow the same approach presented for the case introduced about solid waste management and according with Figure 2.

Future perspectives for improving the international agreements

The experiences introduced until now are encouraging for expecting future relevant results in environmental topics. The waste management program is going to be deepened by the enlargement of the team work and the inclusion of other private companies and NGO. In particular it is carried on by a PhD student, supervised by Bolivian and Italian professors, and will be focused on the sustainable management of municipal and special solid waste, including the activity of the informal sector and the behavior of local citizens. In this framework, private and public sectors, universities and NGOs are working in the same topics into an integrated management perspective and considering local issues, international requirements, social inclusion and future economic investments.

Other researches will be implemented mainly by Italian students of environmental engineering within their thesis work, including other subjects and environmental issues (i.e. air pollution, renewable energy, urban planning), as well as Bolivian students will support the activities too. Hence, in this context, the network of universities' students is not viewed as a secondary actor, as stated by the classical vision of international cooperation, but is the most important form of bilateral relation which could develop new plans about environmental programs, useful for the local government and the city. Anyhow, attention needs to be paid to the cooperation process in order to maximize benefits and avoid failure (Spencer-Oatey 2012) since the relation between each stakeholder must have an equal importance and each requires specific attention.

Conclusions

International cooperation is addressed by University strategies as a way for promoting internationalization and students exchange. In addition, the globalization and the sustainable development encouraged by international authorities transform these practices as an important tool for spreading awareness in environmental topics. Moreover, Universities can become a central actor for including other stakeholders into development processes.

The main objective of the international cooperation here presented is the implementation of applicable projects for improving the La Paz current environmental state. La Paz, as developing city inserted into a low-middle income country, can be considered an example for introducing other researches in more Bolivian cities for globally enhancing the welfare of the Bolivian population.

A project about solid waste management has been introduced as first point for addressing future plans in environmental concerns, including other studies in water, sanitation, air and sustainable energy. Results are encouraging since Universities help in spreading new environmental programs, in alliance with other stakeholders like NGO, local municipalities and the private sector.

The study here introduced can be considered an example of international cooperation started by University agreements and improved by the inclusion of all the stakeholders, able to implement projects about environmental and social sustainability. The deals between these institutions can provide an answer to current issues about conservation of the resources, the use of different form of clean energy, the management of the land surrounding the city and the improvement of social equity. Hence, “within this multi-stakeholder approach, technology and know-how transfer become a collective building for a real and mutual learning”.

Nomenclature

NGO	Non-Governmental Organization
SDGs	Sustainable Development Goals

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