

Rinforzare Il Capitale Umano Nei Paesi A Risorse Limitate: Health And Wealth For All By The Year 2030
Proceedings of the IV Congress



Rinforzare il capitale umano
nei Paesi a risorse limitate

**RINFORZARE IL CAPITALE UMANO NEI PAESI A RISORSE LIMITATE:
HEALTH AND WEALTH FOR ALL BY THE YEAR 2030**

Proceedings of the IV Congress of the University Network for Development Cooperation (CUCS)

Brescia, 10 – 12 September 2015



UNIVERSITÀ
DEGLI STUDI
DI BRESCIA

In collaborazione con



UNIVERSITÀ
CATTOLICA
del Sacro Cuore

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Proceedings of the IV Congress

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P: parallel session

co: oral communication

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FOREWORD

The University of Brescia and the Brescia pole of the University of the Sacred Heart are happy to host the IV edition of the Italian University Network for Cooperation for Development (*CUCS – Coordinamento Universitario Cooperazione allo Sviluppo*), 10-12 September 2015, after the previous editions of the Congress that took place in Pavia (2009), Padua (2011) and Turin (2013).

The location of the Congress is of particular significance for us. The Province of Brescia is, indeed, particularly renowned in Italy for being a land of generosity and cooperation. In any remote part of the world and among the most disadvantaged communities it is not uncommon at all to encounter people from Brescia working in cooperation activities.

The timing of the Congress is also of particular relevance for at least two different reasons. Firstly, the new Sustainable Development Goals will be officially launched at the United Nations Headquarter in New York at the same time, replacing the expiring Millennium Development Goals that have guided the global development efforts during the period 2000-2015. Secondly, the Congress takes place in the Lombardy Region, exactly during the Universal Exhibition EXPO 2015, whose leitmotif is “feeding the planet”, a key development topic.

As a university network, we strongly believe that, apart from technology transfer and global economic strategies, women and men, girls and boys living in a given territory are its true treasure and represent the genuine engine for development. Not by chance, the main focus of the Congress in Brescia will be the “**strengthening of human resources**”, as the true key component of development at any level and in any discipline. Not by chance the introductory keynote speech will be addressed by the Assistant Director General for External Relations and Public Information of UNESCO, the United Nations specialized Agency for Education and Research. This Congress is therefore dedicated to all men and women in the developing world struggling to make the life of their children better through education and research.

Long ago, in 1978, the pivotal Conference organized by the United Nations in Alma Ata (former URSS) launched the slogan “Health for All by the Year 2000”, to be achieved using the Primary Health Care Strategy. As we still believe that bottom-driven strategies are still now, after 37 years, the winning strategies of development, we have also given our Congress the slogan “**Health and wealth for all by the year 2030**”, echoing the thematic mission that the University of Brescia adopted in 2014.

The Congress’ aims are threefold: (i) to reiterate officially and with responsibility the role of Italian Universities in the increasingly important international topic of the development of equity, (ii) to promote research and didactic synergies among the various Universities and other actors involved, among whom the Non-Governmental Organizations (NGOs) play a major role and, last but not least, (iii) to expose our students to the wider possible range of scenarios of cooperation activities, from medicine to anthropology, from law to engineering, from economics to social sciences in the most possible interdisciplinary way. With reference to the latter point, a specific session has been organized by the students themselves in the view of offering their contribution to ameliorating research and teaching in Cooperation for Development in our Universities.

The Local Organizing Committee, composed by professionals from the University of Brescia and the Brescia pole of the University of the Sacred Heart, has tried to offer the best possible scientific program, also trying to preserve a holistic approach in order to put all involved disciplines into value. We thank them for their efforts.

Finally, we would like to thank the Municipality of Brescia, that has freely offered the prestigious location of the final session and the Conservatorio Luca Marenzio for kindly agreeing to share the expertise of its younger musicians with the Congress attendees. Equally, we would like to thank the following Foundations: *Berlucchi*, *Museke*, *Malattie Infettive e Salute Internazionale* and *Tovini* for financially supporting our Congress, thus permitting to waive any conference attendance's fee, and the *Collegio Universitario San Giorgio* and *Famiglia Universitaria Bevilacqua Rinaldini* for freely hosting a number of students.

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Rector's Delegate for Cooperation for Development
University of Brescia

SEMI-PLenary SESSION T1

**FROM MILLENNIUM DEVELOPMENT GOALS TO
SUSTAINABLE DEVELOPMENT GOALS: A NEW ROLE FOR
UNIVERSITIES**

ENGINEERING FOR SUSTAINABLE DEVELOPMENT: AN HONOURS PROGRAMME WITHIN A TECHNICAL UNIVERSITY

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The role of academia in sustainable development (SD) is currently quite debated at the international level. Universities and other higher education institutions are increasingly recognized to be key players, as innovation and new knowledge, capabilities and skills are needed to deal with today's global challenges, such as those addressed by the complex post 2015 agenda and its seventeen SD Goals. The dichotomy between the Newtonian and Cartesian approaches has promoted two different perspectives in the academia [1, 4]. On one side, some universities have contributed to the transformation of society by educating generations of decision-makers, leaders, entrepreneurs, and academics to serve the public good. On the other side, others have kept to the traditional engineering paradigm, sometimes advocating unsustainable development models. The issue of Sustainability has only recently been introduced in universities and therefore it will take some time for Higher Education Institutions (HEIs) to become true leaders of SD [1, 2, 3, 4]. Anyhow, the current societal call for a sustainable and inclusive growth, and more particularly for a more efficient use and equitable distribution of natural resources, represents today a big challenge, which cannot be overcome without the proactive role of academia [2]. Indeed, at the global level, a number of international initiatives has been launched to mobilize the scientific community towards this goal [5, 6]. Despite this clear and growing attention, the path toward a full introduction of SD programs in standard curricula of Technical Universities is still long and complex. In this paper we will highlight the rationale of the approach followed by Politecnico di Milano, where Engineering Schools have promoted education in SD via the activation of a dedicated special Honours Programme.

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LA SALUTE COME PERCORSO DI RICERCA E FORMAZIONE TRANSDISCIPLINARE PER LO SVILUPPO SOSTENIBILE

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Gli Obiettivi di Sviluppo del Millennio (OSM), pur avendo inaugurato un'ondata di impegno senza precedenti da parte della comunità internazionale, hanno presentato non pochi limiti. Tra quelli riconosciuti, la strutturale settorialità, un quadro pensato avendo in mente solo i paesi in via di sviluppo, nonché l'istituzionalizzazione quasi ideologica del ruolo delle partnership tra settore pubblico e privato nell'agenda per lo sviluppo. Benché tra loro interdipendenti, gli otto OSM sono stati perseguiti individualmente attraverso iniziative verticali e altamente settoriali. I nuovi Obiettivi di Sviluppo Sostenibile (OSS) ambiscono a essere indivisibili e universali. Purtroppo, molti dei collegamenti tra i diversi obiettivi non sono esplicitati. Mete e obiettivi sociali, economici, ecologici e politici sono analizzati -ancora una volta - individualmente senza considerare le esistenti interazioni e sinergie, e senza mettere in luce alcune importanti contraddizioni.

Per un'agenda di sviluppo realmente integrata il raggiungimento di un obiettivo deve essere necessariamente perseguito e misurato in relazione agli altri, con approccio di sistema, interdisciplinare e intersettoriale.

Purtroppo anche nell'università sembra mancare ancora la visione di sistema e la preparazione alla lettura della complessità che la sfida di uno sviluppo realmente e integralmente sostenibile richiede.

Nuovi percorsi transdisciplinari integrati di ricerca e formazione per lo sviluppo potrebbero agilmente organizzarsi intorno all'obiettivo salute.

La salute infatti, probabilmente più di ogni altra condizione, offre la migliore prospettiva per interpretare in prospettiva interdisciplinare l'obiettivo generale dello sviluppo, e potrebbe rappresentarne il principale indicatore di successo, quale rilevatore drammatico e precoce dell'andamento di altri indicatori.

PER UN SAPERE DELLO SVILUPPO

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Negli ultimi quindici anni vi sono stati grandi cambiamenti nelle concezioni e nelle pratiche di sviluppo. Nei rapporti tra i paesi coesistono e si confondono strategie aggressive e collaborative. La cooperazione allo sviluppo tradizionale è inadeguata ma fatica a trovare nuove strade. Il dibattito sull'Agenda Post 2015 mostra le nuove direzioni in cui sembrano voler andare i governi e le organizzazioni internazionali. Molte indicazioni vengono dalle concrete esperienze di base che, in tutti i paesi, cercano nuove soluzioni ai problemi della povertà, della disgregazione sociale, della violenza e del degrado ambientale. Si profila una profonda trasformazione culturale e politica, ed emergono nuovi bisogni e nuovi approcci. Le università e i centri di ricerca hanno un grande lavoro da fare per adeguarsi a un processo che sembra voler superare i limiti imposti dalle visioni correnti, troppo frammentarie, troppo conflittuali, poco capaci di conciliare gli interessi privati con il bene comune, troppo dipendenti dalla misurazione delle quantità e poco capaci di aprirsi rigorosamente alla soggettività e alla ricerca delle qualità. Questi limiti si trovano anche nelle discipline che s'insegnano e nelle tecniche che si usano. Non è un caso che lo sviluppo venga spesso considerato un'appendice poco importante delle discipline che s'insegnano correntemente, invece che un obiettivo fondamentale per orientare tutte le discipline. Si apre una grande stagione per le università che, con un profondo cambiamento nell'approccio tradizionale, si collegano al territorio, aiutano le migliaia di buone esperienze a sistemare il sapere che nasce dalle pratiche e usano gli scambi di esperienze come strumenti innovativi per formare gli attori dello sviluppo e della cooperazione internazionale del futuro.

ENGINEERING EDUCATION IN AFRICA FOR SUPPORTING LOCAL DEVELOPMENT CHALLENGES AND BARRIERS WITHIN THE POST 2015 AGENDA

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The MDGs were a cornerstone of development policy and an overarching framework for core development activities of all stakeholders around the globe since their adoption in 2000. In African countries, national development priorities were aligned to achieve MDGs. Since some key MDGs could not be achieved, the African Union took a keen interest in the process of consultations on the Post 2015 global development agenda as it provided an opportunity to voice the concerns of African countries and their people on a global development agenda that could define their future. Recalling the African Union [2] (within the Head of State conference and AMCOST meetings in 2007-2012) has identified that:

- institutions have mainly grown up in isolation, not considering “networking” a means for effective enhancement of performance;
- very little attention (in terms of investments) has been paid to technology and engineering;
- very little attention on assuring quality in academic staff;
- shallow activities for reviewing curricula and developing market-driven programs;
- research activities are minimal and have low impact in term of innovation rate; and
- involvement of stakeholders, especially representing the labour market, has been largely ineffective.

among others contributed to poverty and inequality that led to un-equitable economic growth and wealth distribution.

The contribution is based on the consciousness that the way to reduce poverty and inequality is by long-term sustainable economic growth, which addresses equitable income and wealth distribution. In this vision, access to resources and services are instrumental to assure fundamental human rights, political participation and equity. Affordable, clean and secure availability of natural resources (energy, water, food) are therefore mandatory to the process.

The issue of access to resources is critical for Low Income Countries and even more critical in the rural areas. In the last few years African countries have experienced good growth and reasonable stability but nevertheless most of the population lives in poverty, with the most desperate situations in the rural areas. Periodic droughts, soil degradation, high population density, high levels of taxation, depreciation and inflation rates, youth unemployment rates, poor infrastructure and low competitiveness are the main obstacles to sustainable growth.

In these countries, endowed with a variety of resource not yet fully exploited, the key implementation strategy emerging from the governmental plans is focus on capacity building in energy development and resource management coupled with dissemination of efficient technologies in agriculture, transport, industrial and residential sectors. To promote such strategy and solution, as it is recognised by the international community (UNESCO and UNIDO, WORLD BANK, AfDB) a critical mass (quantity), the quality and the right attitude of specialised engineers is mandatory to design, implement and maintain appropriate and sustainable solutions for equitable access to resources.

Nevertheless only few high quality curricula in the energy field are currently running in sub Saharan Africa out of South Africa and some of them experience shortages of adequately qualified teaching staff. Local HEIs are not currently ready to deliver such a course in a stand-alone mode and the discussion will highlight barriers and opportunities.

SEMI-PLenary SESSION T2

EMERGENCIES AND DEVELOPMENT: LINKS, CHALLENGES AND THEIR MANAGEMENT

EMERGENCIES AND DEVELOPMENT: LINKS, CHALLENGES AND THEIR MANAGEMENT

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A humanitarian emergency is an event or series of events that represents a critical threat to the health, safety and it is characterized generally by critical environmental situations, like large-scale natural disasters (earthquakes, cyclones, hurricanes, floods, lightning, fire, tsunami, etc.). Therefore, it is often necessary to apply specific interventions addressed to reduce the environmental critical events. Environmental intervention in emergencies can be defined as the mean of assuring safety in water supply, the mean of controlling and managing excreta, solid waste, medical (health care) waste, vectors, dead bodies and wastewater, and promoting best hygiene practices, in order to create a safer environment and minimise the spread of disease.

But a critical question is “**Are appropriate technologies**” really appropriate for **interventions in emergencies**? “Appropriate technology is the mean to promote technical changes that are effective in enabling people with few resources to work their own way out of poverty”. Appropriate technologies are low-cost solutions, based on the use of local materials, and socially acceptable. These are not typical characteristics of technologies appropriate in emergency that should, first, be of immediate response, effective in short time, easy to implement, immediately ready to use, and of secure effect.

The main typical issues of environmental emergencies are connected to water and solid waste management. The typical problems are that the technological infrastructures are compromised, the alteration of chemical and microbiological water quality, the faeces and urine disposal in refugees camp and huge amounts of special waste (debris, human bodies, etc.).

An emergency response is addressed to provide immediate assistance to maintain life, improve health and support the morale of the affected population. This phase often attracts the most attention and resources of course. As the emergency is brought under control, the post emergency starts, and in this phase the affected population is capable of undertaking a growing number of activities aimed at restoring their lives. After post-emergency the development phase starts with the recovery period that is addressed towards long-term improvements. **Another important question is: how the interventions in emergency can be coordinated with post-emergency and development phases?**

TRA EMERGENZA E SVILUPPO: QUALE IL PUNTO DI INCONTRO?

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One of the most relevant keywords in the future of international cooperation is “sustainability”, since the definition of the complex and ambitious project actually defined as “Sustainable development goals”.

Sustainability, by definition, cannot be pursued in a situation of emergency, aiming this one to cope with immediate and (hopefully) transient problems due to natural disasters or, unfortunately much more often, by situation of conflict. The fall of Berlin wall, October 1989, marked the end of the so-called “terror equilibrium”, that was a terrific period but actually an “equilibrated” one: in the 90’s the world was ravaged by not less than 108 conflicts, some 20 of them being “traditional” wars, all the remainder being internal civil conflicts. Thus the world of cooperation was sadly forced to move from “cooperation for development” to “cooperation for emergency”, a sort of international civil protection system called to reconstruct old structures destroyed by war rather than to build something new and more efficient.

In this same period the University cooperation went exactly in the opposite way: started in 1991 from an emergency operation, the PEACE project aiming to help the reconstruction of Palestinian universities, it slowly moved towards a more and more structured intervention aiming to increase the “human capital” of the partner Countries through the activities an University best knows, teaching and research, in fundamental fields such as public health, education, management. University cooperation today is therefore called not to build structures but human capital, a fundamental step in the transition from emergency to development: actually, it could represent the most efficient meeting point between the two.

For this abstract, I’m deeply indebted to the work of Marco Missaglia in the book published for the 25th anniversary of CICOPS-Pavia.

DEVELOPMENT AND IMPLEMENTATION OF SANITARY SURVEY FOR SMALL WATER SUPPLIES IN DEVELOPING COUNTRIES: THE EXPERIENCE AFTER A POST-TSUNAMI FLOODING EVENT IN SRI-LANKA

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Safe drinking-water is one of the most important public health needs in most emergencies and natural disasters. WHO encourages the development and implementation of Water Safety Plans (WSPs) as the most effective approach for assuring drinking water hygiene. Actually, the experience of applying WSPs to small community-managed systems is not diffuse, particularly in developing countries.

Sanitary inspection is a pivotal on-site fact-finding tool that can effectively support WSP implementation. In particular, it can be useful in accurately identifying potential risks and harmful events in the risk assessment process.

An effective sanitary inspection is finalized to: assist in identifying potential contamination sources that would be unobserved by water quality analysis; support adequate interpretation of water quality laboratory results; provide information about known, immediate and ongoing contamination; offer a longer-term outlook on causes of contamination; improve knowledge of the water supply system; evaluate the efficiency of operation and maintenance procedures. Sanitary inspection usually adopts harmonized “*sanitary inspection forms*” containing an efficient checklist of a limited number of specific questions, which can be replied by the evaluator by visual observation and interviews onsite.

The development and implementation of a broad sanitary survey on *ca.* 160 community drinking water supplies after a severe flooding event in Sri Lanka is also reported.

Sanitary inspection and microbiological and chemical water quality analyses were performed according to specifically-designed procedures established on the WHO guidelines.

Significant hazards and critical points were identified in almost all the investigated water supplies.

The overall results showed a considerable level of microbiological and chemical risk associated with drinking water consumption within the inspected areas.

The approach adopted in this case study is proposed as a model to assure an effective and reliable monitoring in post-emergencies involving possible deterioration of water quality and to identify health priorities related to water consumption.

RESPONDING TO HEALTH EMERGENCIES: ISSUES AND REQUIREMENTS FOR HEALTH DEVELOPMENT

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Health emergencies are defined by their health consequences as well as their causes: a situation becomes a health emergency when its “scale, timing, or unpredictability threatens to overwhelm routine capabilities.”ⁱ They may be caused by natural disasters, conflict, disease outbreaks, food contamination, or chemical or radio-nuclear spills, among other hazards.ⁱⁱ Preparing for and responding effectively to such emergencies are among the most pressing challenges facing the international community. An increasingly common variety are “complex emergencies” where “the capacity to sustain livelihood and life is threatened primarily by political factors, and in particular, by high levels of violence.”ⁱⁱⁱ During a complex political emergency, health systems are often severely compromised, health needs increase, along with morbidity and mortality rates, and humanitarian actors often step in to substitute for a government unwilling or unable to provide essential services. In this situation, it is rare that a joint health policy and strategy framework is developed to provide some sort of leadership to the various agencies. This lack of inter-agency co-ordination leads to a patchwork of activities, with different agencies using different strategies and health care models. No single agency with the required resources and influence is usually available to compensate for the absence of local health authorities to monitor and guide the various activities. One of the obvious consequences is the inception of a spiral of chronicity that makes increasingly difficult the creation of a meaningful health policy framework, an essential condition to promote sustainable health development. Drawing from his direct experience in a variety of geo-political scenarios, the speaker will discuss the main issues linking the management of complex health emergencies to sustainable health development.

ⁱNelson, C et al. Conceptualizing and defining public health emergency preparedness. *American Journal of Public Health*, 2007, Vol 97, S1.

ⁱⁱ Emergency response framework (ERF), WHO 2013.

ⁱⁱⁱ Burkle Jr, Frederick M. “Fortnightly review: Lessons learnt and future expectations of complex emergencies.” *BMJ*, 1999, 319, 7207: 422.

TRANSITION FROM EMERGENCY TO DEVELOPMENT: CHALLENGES AND OPPORTUNITIES

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The UN humanitarian funding requirements of USD16.4 billion to meet the needs of more than 57 million people in 2015 is the largest request to date and is not the final figure for this year. This is a major escalation from the initial USD12.9 billion requested for appeals in 2014 -an increase of 27%. It includes appeals for Ukraine, Central African Republic (CAR), South Sudan, Syria and Iraq, totaling USD 11.3 billion (69% of global requirements). The crisis in Syria alone accounts for 44% of the total amount requested globally. The world-wide financial crisis, exploding demography, scarcity of resources (energy and water), climate change and conflict contribute significantly to increase the number of people becoming more vulnerable to natural disasters. As a result, chronic acute vulnerability spread on an unprecedented scale, increasing poverty, hunger, malnutrition, displacement and death. Recent experience in emergency contexts where humanitarian and development programs coexist highlights the importance of disaster risk reduction as a major adaptation strategy that combines prevention, mitigation, and resilience-building measures. Well-coordinated assistance efforts and strategic coherence between humanitarian, recovery, reconstruction and development assistance is an issue debated since years. The debate concerning the effectiveness of development aid exists since the very beginning of this story, opinions are diverging and often argue on political and strategic considerations for the beneficiary countries on the part of donor countries. According to UNDP, humanitarian aid has mostly stayed on the sidelines of this discourse, mainly because of its intrinsic nature, however, the institutional split-up model characterizing the relief and development sectors has largely failed in the past. According to Catherine Bragg, former OCHA Deputy Emergency Relief Coordinator "... efforts to ensure lasting recovery should take place during a crisis as well as when it is winding down ...". Transition from relief to development is almost never a linear process, each transition is different, the only way to ensure coherence between humanitarian and development strategic frameworks relies rather in having the actor working together than trying to coordinate them.

SEMI-PLenary SESSION T3

**DEVELOPMENT COOPERATION'S NEW GEOGRAPHY.
THE DISTRIBUTION OF POVERTY TODAY**

RICHNESS IN DATA, POVERTY IN REPRESENTATIONS: SEARCHING NEW GEOGRAPHIES FOR COOPER-ACTION AND PROXIMITY

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World changes faster and faster, progress, technology and richness concentration go further, but poor are always with us. Old metaphors of development and underdevelopment that inspired international cooperation are no longer able to orientate aid: Third world, North-South are meaningful but still used in everyday language and also in scientific and political ne. Even if we have an increasing amount of more accurate data about poverty and development, even if the definition of MDGs and SDGs indicators is very rich (may be too) our capability to build new representations, new geographies of poverty and development are quite poor. Are there new, effective and veritable representations of poverty capable to re-orientate future efforts of development cooperation? We need a tran-scalar and a multcentred approach to catch world complexity without reducing it, understand and accept new geographies of proximity to poverty. This session through the keynote of Emma Mawsdley and the notes of Gianni Vaggi and Guido Sali will try to go ahead in this action-oriented reflection.

LOCATING THE POOR IN A COMPLEX DEVELOPMENT LANDSCAPE

Mawdsley Emma, *Department of Geography, University of Cambridge, emma.mawdsley@geog.cam.ac.uk*

The MDGs installed “poverty reduction” as the central analytic of development. In theory at least, poverty reduction was the ideational hub around which other principles and practices were organised - economic growth, good governance, sustainability and so on. By 2015 much has changed. Whatever the content and aims of the SDGs, development realities appear to show a reversion to “growth” as the central analytic of development. This represents a confluence of agendas and interests between post-financial crisis DAC donors, Southern partners, and the growing footprint of private sector partners. This communication will critically examine the implications for the world's poor. In what ways might this growth be harnessed to progressive development outcomes, and in what ways might it neglect the poor, or indeed, produce poverty.

A NOTE ON THE INCOME THRESHOLDS AND THE SDGs

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It is now well established that most of the poor are in middle-income countries and in particular in the Lower Middle Income ones. This is largely due to three big countries belonging to this group: India, Indonesia and Pakistan. I show that this is largely due to a statistical convention. As a matter of fact since 1989 (data for 1987) the World Bank Income per capita thresholds have not been increased at the same rate as the average income per capita of the developing world. Had the thresholds been increased according to the world average growth of income per capita, India and Pakistan would still be in the Low Income group.

Ending poverty is the first goal of the new SDGs, but the real problem with them is their number, 17, and that of the sub-goals, 169. In the second part of the note I discuss how international cooperation can try to make sense of all these goals in the coming years. In particular I focus on global partnership, the topic of SDG 17, and on how to progress in its implementation.

A NOTE ON “WHAT RELATION IS THERE BETWEEN POVERTY AND AGRICULTURAL LAND?”

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This note start from an evidence emerging from the evolution of agricultural land area in developed and developing countries. In the last 20 years the yearly average rate of variation in agricultural land between 1995 and 2009 compared to pro-capita GDP in 1995 shows that agricultural land has increased in countries with a low GDP, while it has lowered in high income countries.

This phenomenon equates to 36.5 million hectares of cropland generated in low and lower-middle income countries, and to a loss of 29.4 million hectares in high and upper-middle income countries. This corresponds, at global level, to a transfer of agricultural land from countries with high income levels to those with low ones. The trends have different origin: in developed countries agricultural land is converted in urbanized and infrastructural areas, while in developing countries new agricultural land is got from forestry areas.

It appears quite obvious to connect this phenomenon to that of land grabbing, through which developed countries get agricultural land in developing countries. This connection will be discussed in order to propose a key to understanding the global process of management of agricultural land.

SEMI-PLenary SESSION T4

**MEETING UNIVERSITIES IN NORTHERN AND SOUTHERN
AREAS**

CULTURE IN COOPERATION: ITALY –ROMANIA

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Immigration is a relatively new phenomenon for Romania, which largely increased in the past decade especially during the times of economic growth following the European Union expansion in 2007, and as a result of the national policies on education that encouraged immigration for study purposes. The phenomenon of internationalization of higher education is considered a political, diplomatic, cultural and economic instrument. Universities and other higher education institutions in Romania can autonomously carry on their development policies. There are 56 state universities, 30 private universities and 20 accredited private universities. Since 1990, Romania has signed bilateral agreements with many countries, in order to set up student exchanges. In 1996, Romania joined the “Socrates” program and the “Erasmus” sub-program. Academic mobility is managed through the Jean Monnet and CEEPUS programs. Many universities are members of the International Association of Universities (IAU), the European Association of Universities (EUA), the Observatory of the Magna Charta, of the Utrecht Network and of the Coimbra Group. In 2009, the International Students Division was created in order to promote the image of the Romanian university system, to foster collaboration, and to attract foreign students. In Italy the process of internationalization of higher education, which is considered a strategic priority in terms of teaching and scientific research, is encouraged by the international exchange of teachers and students through the conclusion of bilateral agreements. International cooperation relationships have been established with universities and institutions in different countries. In February 2013 11,608 university agreements were in force: 57.6% with other European countries, 24.1% with American countries, 13.6% with Asian and Oceanic partners and the remaining 4.7% with African nations. This report takes into account the different aspects related to international cooperation between the Catholic University of the Sacred Heart and the University of Bucharest.

UNIVERSITÀ NEL NORD E NEL SUD A CONFRONTO

Casella Paltrinieri Anna, *Facoltà di Scienze della Formazione, Università Cattolica del Sacro Cuore, Brescia e Milano, anna.casella@unicatt.it*

This speech will focus on the role that Universities have in the students' international and multicultural training, especially that of students preparing to work in international cooperation projects. University teaching will in fact allow students to approach situations, experiences and researches in various areas of the world and on different problems and emergencies. Social sciences studies, specifically the study of development anthropology, allow students to develop a critical point of view, rather than an ethnocentric and a collaborative one. I would like to expose some observations on contents and teaching, and on the aims and possible synergies with other Universities both in the Southern and in the Northern countries, based on my own teaching experience in several University courses, University masters and PhDs.

ACADEMIC COOPERATION IN THE SOUTH. EXPERIENCES AND CHALLENGES FOR THE UNIVERSITIES IN BRAZIL

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Brazil, a great country in the southern hemisphere, is currently going through a special moment, being at the end of a period of relative economic growth but still within the international crisis, experiencing a remarkable process of social mobility that interests a part of the Brazilian population. The current political situation, the institutional crisis, the worsening of social conflicts and the economic problems, suggest difficult perspectives for the immediate future. Consequently, the universities in Brazil for the first time are receiving groups of students with a low socioeconomic background that formerly would have been excluded from this possibility. Nevertheless, the access to higher education faces the challenge, not yet overcome, of renewing the structure of teaching/learning and research, inherited from the past. Investments are still needed to make sure that educational mobility will be accompanied by an improvement of the population's quality of life. In this sense, international cooperation with other universities in the North will be decisive.

The Brazilian universities are developing academic cooperation programs with other Southern countries, especially in Africa and in Latin America. Enjoying a more favorable economic condition, Brazil plays a crucial and supporting role in the higher education of foreign students in its national universities. Two new federal universities have been created: the Unila (Universidade Federal da Integração Latino-Americana), in the city of Foz do Iguaçu (on the border with Paraguay and Argentina), and the Unilab (Universidade da Integração Internacional da Lusofonia Afro-Brasileira) in the North-East. The presence of African and Latin American students represents another important challenge for their integration in the Brazilian societies, and even if only for a temporary period, it is linked to the need to widen their access to health and social services and to improve the relationship between native and foreign born students.

UNIVERSITY COOPERATION AND SOLIDARITY: A SOCIAL WORK EXPERIENCE BETWEEN TANDIL AND TRIESTE

Lazzari Francesco, *Università degli Studi di Trieste, lazzariunits@hotmail.com*

Empirical research shows that contacts and interactions between different groups are the best way to positively change possible negative prejudices, and to help cooperation. This is particularly effective when the groups involved can have an equal status both inside and outside the contact situation, can have a common purpose, and can be in a simultaneously interdependent and cooperative context and can act in the presence of positive social sanctions. To support this thesis we will present an university cooperation experience involving Italy and Argentina in a particularly critical moment for the Latin-American population. Beginning from the actual needs, expressed by the population and detected by Argentinean colleagues of the Universidad Nacional del centro de la provincia de Buenos Aires (Unicen) during their extension activities (third mission of the University), a University cooperation project has been set up: the socio-food Network for Tandil, with the involvement of the Region Friuli Venezia Giulia, of the Centre for Latin America (csal) of the University of Trieste and the Grupo de investigación y acción social (Giyas) of Unicen Tandil.

Once the cooperation between Italy and Argentina had stopped, the project could continue as institutional Unicen Food Programme with the support of the various faculties of the local University (Social Services, agriculture, veterinary, medicine ...). The achievements have been: 1) immediate and satisfactory response for those who were hungry; 2) opportunities for the students of the local undergraduate degree in social work to get into the situation; 3) setting up mutual help actions where the people actually experiencing difficulties have been able to become part of the solution; 4) establishment and development of individual and/or community based productive activities able to provide an income.

PARALLEL SESSION P1

UNESCO CHAIRS IN ITALY

co1.01

UNESCO CHAIR “TRAINING AND EMPOWERING HUMAN RESOURCES FOR HEALTH DEVELOPMENT IN RESOURCE-LIMITED COUNTRIES”, UNIVERSITY OF BRESCIA

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Matteelli Alberto, *University of Brescia*

Rodari Paola, *University of Brescia*

The UNESCO Chair “Training and Empowering Human Resources for Health Development in Resource-limited Countries” has been established at the University of Brescia in 2014.

To report the activities of the UNESCO Chair of the University of Brescia in the field of cooperation for development during 2014.

According to the working plan, the following activities have been carried out: Elective Courses in Tropical Medicine and International Health - The UNESCO Chair, together with the Chair of Infectious Diseases of the University of Brescia, has run a cycle of 5 seminars for undergraduate medical students; Graduate Course in Tropical Medicine and International Health– Core Course of the European TropEd Master in International Health. The Course has taken place over 13 weeks and was attended by 26 Students. The Chair has offered a scholarship to a Burundian Doctor to attend the 2015 edition of the Course; Seminars and Symposia: “Tuberculosis today and tomorrow”, co-organized with the WHO Collaborating Center for TB/HIV co-infection and the Italian Branch of Doctors without Borders; “Poverty related diseases”, held by Prof. E. Gotuzzo, from the University C. Heredia, Lima, Peru; “Ebola epidemic”, open to students, professors and the general population, was attended by over 600 persons; Overseas activities - Funding the mission of an expert to Burkina Faso to train health personnel in the preventive measure to avoid nosocomial Ebola transmission.

In 2014, the activities carried out by the Brescia UNESCO Chair were in agreement with the plan agreed by UNESCO Headquarters. Activities in 2015 will follow the same line, trying to explore as much as possible synergistic collaborations with other Italian UNESCO Chairs and NGOs.

Keywords: training, resource-limited settings, international cooperation

co1.02

INTEGRATING SUSTAINABLE DEVELOPMENT GOALS INTO ENGINEERING EDUCATION AND RESEARCH: THE CASE OF POLIMI

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Mattarolo Lorenzo, *Politecnico di Milano*

The current claim of society towards sustainable development represents today a challenge which must encounter the proactive role of universities, since they may contribute to the transformation of society by educating generations of decision-makers, entrepreneurs, academics and serving the public good. In line with the international claim, the challenge of promoting sustainable development has become a mission at Politecnico di Milano where some specific activities have recently been activated within the Department of Energy, under the UNESCO Chair in Energy for Sustainable Development.

The Chair has given primary attention to teaching and education. One of the main achievements has been the implementation of the new track 'Energy for Development' within the MSc in Energy Engineering. Research activity is addressed to: analysis and assessment of energy scenarios, planning and designing methodology for off-grid renewable-based electric systems and modern cooking devices, multi-criteria impact evaluation of energy projects on local development.

University partnerships with developing and emerging countries have been fostered through the promotion of joint researches and staff exchanges. Three projects have received the grant by the European Commission: two in Egypt under the TEMPUS program and one in Kenya, Tanzania and Ethiopia under the EDULINK program. The Chair is also partner of a project funded by the DG ECHO on refugee camps.

Advisory activity and joint projects with NGOs and private companies have also been conducted. In this technological cooperation, the Chair focuses on research and is oriented to promote local capacity building and native innovations to identify, together with local partners, the most appropriate solutions to fit within different contexts.

Keywords: sustainable development, engineering education

co1.03

A TRANS-DISCIPLINARY UNESCO CHAIR TEAM IN ENVIRONMENTAL ENGINEERING: OPPORTUNITIES AND CHALLENGES FOR ACADEMIC EMPOWERMENT

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UNESCO Chairs are typically given to a group of professors, researchers, students, active on a particular topic or thematic area with a special focus on capacity building, empowerment, North South partnerships, international cooperation. During its four years of existence, the UNESCO Chair in Engineering for Human and Sustainable Development of the University of Trento has passed through a strong learning experience that is based on the trans-disciplinarity of its members, who belong to different research groups within the Department of Civil Environmental and Mechanical Engineering, instead of being part of the same, discipline-based, research group. Such transversal dimension has fostered interdisciplinary studies, intra-academic dialogue and finds its roots in the cooperation among scientists in hydraulics, river science and engineering, remote sensing, land and urban planning, sustainability sciences, wastewater and solid waste engineers, forest ecology and environmental law. A recent EU project, “Global Dimension in Engineering Education” represents a paradigmatic expression of our academic vision. We review the key success factors and the present challenges that academic cooperation for development is facing by revisiting our experience in human and sustainable development programs through such “academic empowerment” perspective.

Keywords: environmental engineering, trans-disciplinarity, academic empowerment

co1.04

GLOBAL BIOETHICS AND THE CHALLENGE OF CONVERGENCE IN CULTURAL AND RELIGIOUS DIVERSITY

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In contemporary bioethics some secular scholars and politicians claim that global bioethics should ignore religious convictions since religion, through history, has been cause of conflicts, wars and misunderstanding. We claim that in a multicultural and multireligious world, to foster convergence and cooperation in global ethics is a moral and political demand entailing to assure democratic participation of the different cultures in bioethical debates.

A global bioethics ignoring religious beliefs would cause that “universal” principles established by international organizations be challenged as illegitimate, being rejected or disobeyed, invoking freedom of conscience. Its Declarations, even though formally supported by State representatives, would be essentially antidemocratic.

Those claiming that bioethics should be rooted in a particular religion and that “only their God” or “tradition” is the only source of moral behavior would deny freedom of conscience and religion of others believers as well of non-believers. They should learn from moderate positions within their own religious traditions and respect reasonable secular approach.

A spirit of dialogue and mutual understanding should help to foster the art of convergence and cooperation in bioethics. Theological reflection might help to understand, through faith, ultimate sense and foundation of life and moral behavior according to different religious beliefs, but only science and reason should illuminate bioethical debate in a globalized world. Human dignity and human rights/duty language might be helpful to facilitate this understanding in global ethics.

Our UNESCO Chair (www.unescobiochair.org) has been promoting the art of convergence and cooperation in global ethics by creating an international forum of experts of different cultures and religions (Bioethics Multiculturalism and Religion) to discuss about bioethical issues in the light of human rights and duties. Jerusalem (2009), Rome (2011), Hong Kong (2013) and Mexico (2014). In the same spirit we have cooperate in the field of neurobioethics and in the promotion of art and bioethics (www.bioethicsart.org).

Keywords: multiculturalism, interreligious dialogue, global bioethics

co1.05

POPULAR SOVEREIGNTY AND COOPERATION

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The Document “Popular sovereignty and cooperation”, drafted by the UNESCO Chairs of the Universities of Bergamo (Italy) and Fribourg (Switzerland), is the result of a research which has developed the human rights based approach (HRBA) in the field of international cooperation. This approach is defined as a *political approach* since human rights are considered as political norms, and their legal formulation is at the service of their effectiveness in all its dimensions. A human rights based approach differs from an approach based on needs and transfers. On one hand, the aim of a HRBA is to develop human capabilities and to promote autonomy while respecting different identities. On the other hand, the purpose of an approach based on needs is to fill gaps and deficiencies through materials/money transfers and through loans based on conditionality. ‘The fight against poverty is very often understood as the satisfaction of needs by the reduction of deficiencies, whereas poverty is the result of the violation of several human rights: indeed, poverty is a synonymous of violence’. This document highlights in particular the role of cultural and economic rights and the role of governance for an ‘inclusive’ development, in which the notion of inclusion concerns people, stakeholders and different fields (educational, health, nutritional, environmental, economic, civil, social and political, ...). “Sovereignty” and “cooperation” appear to be opposed concepts but there cannot be any sovereignty without a democratic governance of all forms of cooperation. Popular sovereignty is guaranteed by all human rights that are indivisible and interdependent; they constitute indeed a ‘democratic grammar’ of development. This document proposes the notion of *Common Good* that calls for a real and concrete participation in the definition of development policies based on the respect of human dignity of each person and on the balance, at *macro* and *meso* level, of different fields and powers.

Keywords: human rights, cooperation, sovereignty

co1.06

THE ROLE OF UNESCO CHAIRS IN CULTURAL HERITAGE CONSERVATION FOR URBAN SUSTAINABLE DEVELOPMENT

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The paper gives a contribution to make more sound and comprehensive the approaches to urban heritage conservation introduced by UNESCO in the 2011 “Recommendation on the Historic Urban Landscape” and re-stated in 2013 in the Hangzhou Declaration “Placing culture at the heart of sustainable development policies”. A number of theoretical, and methodological issues are examined and operative suggestions are developed.

Issues related to conservation actions are examined in three cases chosen because 1) they illustrate problems to be faced in different contexts, and 2) the UNESCO Chair “Urban and Regional Planning for Local Sustainable Development” is directly involved in them. The cases are:

1. The Jericho Master Plan as a model of heritage conservation policies which can play a strategic role in the sustainable development of the most ancient town of the world.
2. The restoration and revitalization of the “Addizione estense” of 1386 in the historic centre of Ferrara (a UNESCO WH site) severely damaged by the earthquake of 2012.
3. The survey of heritage conservation practices and policies in Latin America and Caribbean countries for the preparation of the UNESCO “Global Report in the Role of Culture and heritage in Sustainable Urban Development” for the Third U.N. Conference on Housing and Sustainable Urban Development (Habitat III).

These cases show that UNESCO Chairs can play a relevant role both in developing better urban heritage conservation methods and tools and in increasing the capacity of local communities to design and manage conservation policies of their heritage.

Keywords: heritage, conservation, sustainability, HUL

co1.07

**TRAINING AND EDUCATING IN INTERNATIONAL COOPERATION:
A CASE HISTORY - THE MASTER'S DEGREE IN ENGINEERING FOR
THE ENVIRONMENT AND THE TERRITORY WITH SPECIAL FOCUS
ON "ENVIRONMENTAL INTEGRATION IN INTERNATIONAL
COOPERATION CONTEXTS"**

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After ten years of life, the Master's Degree in Engineering for the Environment and the Territory with special focus on "Environmental Integration in International Cooperation contexts" has become one of the most significant experiences of training in Development Cooperation's matters within UNITN. What makes this Degree quite interesting is the evolution of its two most characteristic courses (Methodologies of International Cooperation and participatory management of projects; Stage for projects) from an offer just for students in Engineering specialising in Environment and Territory to an opportunity for all University of Trento's students.

The objectives of this paper will be, in brief:

- 1) to explain what are the educational targets of the Degree, focused on theoretical competencies and practical skill, demonstrating that training and educating are both important in whatever kind of student and career;
- 2) to show the genetic link between technical-scientific and relationship-wise and intercultural competences and how we connect them through a multidisciplinary and interdisciplinary approach;
- 3) to tell the history of the two most characteristic course (above mentioned) and how they have become an academic training service of training and education for all students of UNITN and for a lot of practitioners, as a deep experience of long-life learning and/or professional update. The methodological approach will be the case history approach. A reasoned tale of a 12 years hard work.

As main result of our reflection, we intend to systematize this teaching model and this educational service in all positive and negative dimensions.

The conclusion will be a didactic proposal in order to spread such "educational service" in each university member of the network.

Keywords: international cooperation, environmental cooperation, initial learning, life-long learning, professional update

PARALLEL SESSION P2

**PUBLIC HEALTH AND COOPERATION FOR
DEVELOPMENT**

co2.01

EFFECTIVENESS OF DEMAND-SIDE INCENTIVES ON UTILISATION OF DELIVERY SERVICES IN OYAM DISTRICT, UGANDA: A QUASI-EXPERIMENTAL STUDY

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Skilled attendance at birth is indispensable in preventing maternal deaths, yet many pregnant women deliver at home in Uganda due to various barriers in accessing health care. We aimed to evaluate the effects of transport vouchers and baby kits on institutional delivery and other maternal health services in Oyam district, Uganda.

A quasi-experimental study involving purposively selected intervention and comparable control sub-counties was conducted in the Oyam District, over 12 months (2013-2014). Two interventions were evaluated: transport vouchers and baby kits. Transport vouchers were given to pregnant women attending ANC and/or delivering in Acaba sub-county, which has two health centre (HC) IIs, whilst baby kits were given to pregnant women who delivered at Ngai HC III, the only HC in Ngai sub-county. Baseline and end line data were collected in 2013 and 2014 respectively. Study outcomes included coverages of institutional delivery, ANC visit⁴ and PNC. The effect of each intervention on study outcomes was calculated using difference in differences (DID) analysis. A falsification exercise was performed based on outpatient services utilisation.

Institutional delivery coverage increased from 25% (407/1629) to 45% (734/1629) for baby kits, and from 13% (224/1689) to 48% (811/1689) for transport vouchers. Generally, transport vouchers had a greater impact on ANC 4 and PNC, whilst baby kits had a greater influence on institutional delivery. The absolute increase in institutional delivery coverage attributable to the baby kits was 22.1%. Similarly, transport vouchers increased ANC 4 and PNC coverages by 24.2% and 28.6% respectively. None of the interventions affected outpatient services utilisation.

Clearly, the demand side incentives were effective in increasing utilisation of delivery, ANC and PNC services and thus have the potential to improve maternal and neonatal health in this setting.

Keywords: demand-side incentives, maternal health, Uganda

co2.02

RODAM: RESEARCH ON OBESITY AND DIABETES AMONG AFRICAN MIGRANTS. THE ITALIAN EXPERIENCE OF THE RODAM PROJECT

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We hereby describe the Italian experience of the RODAM project conducted by CUSCOS (Centro Universitario Di Servizi Per La Cooperazione Allo Sviluppo) at the University of Modena and Reggio Emilia. RODAM is an EU project which aims to understand the reasons for the high prevalence of diabetes and obesity in Ghanaian migrant populations in Europe.

Ghanaian community was involved in a participatory process through engagement of community leaders and second generation of migrants, both in study participants recruitment at local churches and in the health empowerment, through the awareness and promotion of correct nutritional lifestyles.

118 Ghanaians living in Italy in the age range of 25-70 years were tested with questionnaire and interviews, physical examination and biological samples collection. Outcome measures were prevalence of obesity, hypertension, diabetes, peripheral vascular disease using ankle brachial index, proteinuria and multimorbidity, defined as the co-existence of two or more long-term conditions in the same individual.

72 males and 46 females Ghanaian migrants were recruited. Median age was 41 years. In 63% participants migration time was after 01/01/2000.

Prevalence of co-morbidities were: Obesity 23%, Hypertension 36%, Diabetes 6.78%, Peripheral Vascular Disease 29%, Proteinuria 5%, Multimorbidity 45%.

Independent predictors for multimorbidity were: male gender (OR=0.3, CI: 0.13-0.67), age >55 years (OR=8.55, CI: 1.53-59.05) after correction for age group categories and migration time.

Migrants health, particularly in women, is a difficult objective and public health intervention in this population are urgently needed. The collaboration with the mediators of second generation was successful to start a participatory approach in health screening and promotion.

Keywords: Ghanaians, obesity, diabetes, participatory process

co2.03

GENITORIAL EDUCATION PROGRAMS AND IMPACT ON THE PREVALENCE OF INTESTINAL PARASITOSIS IN A PAEDIATRIC POPULATION IN AN REMOTE RURAL AREA IN ECUADOR

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Infant malnutrition is the result of the combined action of infections and inadequate feeding habits. This is particularly true in resource-poor countries.

To assess the prevalence of intestinal parasitosis in a remote rural area in Ecuador and the impact of a genitorial educational program coupled with a sanitation intervention.

The study has been carried within a project by the NGO Medicus Mundi Italy, in the remote rural area named Manga del Cura in Ecuador, without access to sea. Internal routes are mostly interrupted during the rainy season. Children aged 0-10 yrs and registered in a social programme by the Archdioceses of Portoviejo were included. Two surveys (one fresh stool sample) have been carried out, at baseline (Oct. 2013, dry season) and after parental educational activities on the use of safe water/sanitation (May 2014, rainy season). Infected children have been treated (albendazole/metronidazole; 400/250 mg sd). Hb has also been tested to assess anaemia rates (Hb < 11 or 11.5 mg/dl for 0-5 and 6-10 yrs old groups respectively).

As many as 562 children (261 aged 0-5 anni yrs and 301 aged 6-10 yrs) – have been investigated:

	Baseline	After intervention
Pathogenic protozoa (<i>G. lamblia</i> , <i>E. histolytica/dispar</i>)	204/562 (36.3%)	65/562 (11.6%)
Non pathogenic protozoa (<i>E. coli</i>)	24/562 (4.3%)	25/562 (4.4%)
Negative	334/562 (59.4%)	472/562 (84.0%)
Anaemia	51/562 (9.1%)	88/562 (15.7%)

The prevalence of pathogenic protozoa is higher in the 6-10 yrs age group than in children aged 0-5 yrs both at baseline (39.3% vs 33.3%) and after the intervention (12.6% vs 11.0%). Prevalence of pathogenic protozoa is significantly reduced by an educational parental intervention coupled with Rx of infected children. Anaemia rate was not reduced by intervention, probably because of limited access to adequate food supply during the rainy season.

Keywords: malnutrition, intestinal protozoa, access to food

co2.04

UTILITÀ DELLA VALUTAZIONE ECOGRAFICA NEL PERCORSO DIAGNOSTICO E TERAPEUTICO PRESSO IL MOTHER TERESA HOSPITAL DI TURALEY IN SUD SUDAN

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L'ecografia clinica rappresenta la principale metodica diagnostica nei Paesi a risorse socio-economiche limitate (PVS), soprattutto nelle realtà con scarsa possibilità di accesso ai servizi di radiologia tradizionale.

Lo scopo del presente studio è quello di analizzare l'utilità dell'ecografia nella diagnosi e conseguente scelta terapeutica. L'obiettivo secondario è l'identificazione delle principali aree di criticità diagnostica per le quali realizzare un progetto di formazione ecografica specifica del personale sanitario.

Tra Aprile e Giugno 2014 è stato fornito un servizio continuativo di Ecografia Base presso il "Mother Teresa Hospital" Turalei, Twic County, South Sudan. Lo studio ecografico è stato realizzato con proiezioni sagittali e trasversali con unica sonda curvilinea.

I criteri clinici utilizzati per l'invio dei pazienti allo studio ecografico sono stati: dolori addominali ricorrenti, addome acuto, trauma toraco-addominale, emorragia in gravidanza, gravidanza extra uterina, aborto spontaneo, aborto interno, placenta previa, dubbia età gestazionale, gravidanza multipla, amenorrea, valutazione della presentazione fetale, pazienti con indicazione a parto cesareo urgente su indicazione del chirurgo specialista.

Nel periodo di studio considerato sono state eseguite un totale di 157 valutazioni ecografiche. 93 accertamenti (59,2%) effettuati come screening prenatale, peripartum e nei casi di infertilità 64 accertamenti (40,8%) eseguiti su pazienti con dubbio diagnostico per urgenze mediche e traumatiche.

Il presente lavoro conferma l'importanza dell'ecografia come elemento integrativo nella diagnosi in ospedali rurali dell'Africa sub-Sahariana, con conseguente esclusione di potenziali insuccessi terapeutici.

Keywords: chirurgia primaria, ecografia, ospedali rurali Africa

co2.05

IMPARARE DAI PAESI “EMERGENTI”: IL CASO DEL PROGRAMMA DI COOPERAZIONE INTER-UNIVERSITARIA CON IL BRASILE

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Nello scenario attuale, caratterizzato da una stretta interconnessione tra processi globali e locali, è importante formare professionisti sanitari capaci di agire nella complessità e implementare modelli tecnico-assistenziali innovativi secondo principi etici e di equità.

La cornice economico-politica a livello internazionale sta coinvolgendo tutti i governi aumentando la vulnerabilità sociale, le disuguaglianze e i bisogni assistenziali; diverse sono le strategie che i Paesi stanno adoperando per fronteggiare la crisi. Alla ricerca delle migliori pratiche applicabili nei differenti contesti, operatori di istituzioni brasiliane e della Regione Emilia-Romagna, mediati dal Centro Studi e Ricerche in Salute Internazionale e Interculturale, hanno avviato una collaborazione con l'obiettivo di comporre reti internazionali multi-locali di cooperazione, ricerca e formazione-intervento nel campo della Cure Primarie tesa al raggiungimento di una maggiore partecipazione sociale e presa in carico integrata dei bisogni di salute.

Questa relazione paritaria è stata ufficializzata nel 2014 con la firma dell'Accordo di Cooperazione tra l'Agenzia Sociale Sanitaria Regionale, la Regione Emilia-Romagna, la Rede Governo Colaborativo em Saúde da Universidade Federal do Rio Grande do Sul e il Departamento de Atenção Básica do Ministério da Saúde do Brasil, da cui è nato il Laboratorio Italo-brasiliano di formazione, ricerche e pratiche in Salute Collettiva, che oggi coinvolge anche altri partner. Obiettivo del percorso di cooperazione è sviluppare congiuntamente: strumenti trans-disciplinari di analisi e comprensione; prassi di lavoro integrate, tra università, servizi e comunità; nuove strategie di azione tra globale e locale attraverso attività congiunte di sperimentazione di modelli organizzativi in entrambi i Paesi.

Keywords: PHC, cooperazione interuniversitaria, Italia-Brasile

co2.06

CYSTIC ECHINOCOCCOSIS: A ZONOSIS GONE (EVEN MORE) GLOBAL

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Cystic Echinococcosis (CE) is a chronic, complex and neglected disease, caused by *Echinococcus granulosus*. CE has a worldwide distribution, with high prevalence in rural areas of China, Central Asia, North and Eastern Africa, the Mediterranean, and South America. In Sardinia, Sicily and southern Italy, CE is highly endemic, and as a result of increasing international mobility, immigrants coming from endemic countries are more frequently seen in the clinic.

In Italy, notification of CE is not mandatory de facto and reliable data are lacking. In 2012, we started tackling this problem by launching the Italian Registry of Cystic Echinococcosis (RIEC) in collaboration with Istituto Superiore di Sanità. In October 2014, RIEC expanded into the European Registry of Cystic Echinococcosis (ERCE), a prospective, observational, international registry of CE patients (www.heracles-fp7.eu/erce).

To report number and country of origin of immigrants with CE seen in our centre in Pavia.

Database search in RIEC/ERCE of patients registered in Pavia whose country of birth was outside Italy.

As of April 15th 2015, 269 CE patients had been registered in our centre. Of them, 111 (41.2%) were immigrants from 23 different countries, mostly from Morocco (32%), Romania (22%), Peru (7%), Tunisia (6%) and Albania (6%).

More than 40% of the CE patients in our centre were from endemic countries in different continents. The chronic nature of CE results in diagnosis, treatment and follow-up in countries different from that of origin or infection acquisition. This, in turn, results in considerable burden on the health system. International cooperation between clinicians, veterinarians and policymakers is needed to tackle this problem at the “One Health” level, and plan control programs in endemic areas.

Keywords: echinococcosis, migrants, registry

p2.01

NON-COMMUNICABLE DISEASES (NCD) IN PATIENTS WITH HIV INFECTION IN SUB SAHARAN AFRICA. A PROSPECTIVE STUDY CONDUCTED IN A RURAL AREA OF TANZANIA

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In Sub-Saharan Africa the high burden of HIV infection with the increasing scale-up of antiretroviral therapies (ART) and demographic and epidemiological changes, suggests a potential overlap between HIV and non-communicable diseases. The objective of the study was to assess the prevalence, risk factors and incidence of hypertension, type II diabetes, COPD, cardiovascular disease, renal failure and multimorbidity in HIV patients in a rural area of Tanzania.

In 2012 and in 2014, 265 HIV positive patients on antiretroviral therapy, were recruited at the Care and Treatment Clinic (CTC) of Usokami, Mufindi District-Tanzania, and 88 HIV negative controls were recruited among asymptomatic people attending the VCT service. A standardized data collection included a demographic questionnaire, physical examination and HIV variables.

Age was an independent risk factor for the development of renal failure, hypertension, COPD and multimorbidity.

Keywords: NCD, HIV, sub-Saharan Africa

p2.02

ULTRASOUND FINDINGS IN SCHOOLCHILDREN IN MADAGASCAR: FOCUS ON MALNUTRITION

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Childhood malnutrition contributes to high mortality rates and decreased educational and adult capacity among survivors, is closely linked to a high burden of infectious diseases, and increasingly recognized as a cause of chronic morbidity in later life. Ultrasound is a relatively low-cost, portable tool, that can identify pathologic conditions, some of which may contribute to malnutrition, and others which may be consequences of the child's malnourished state.

To explore bedside ultrasound as a tool for identifying specific pathologic findings in malnourished children in Madagascar, with the ultimate aim of improving the management of comorbidities.

Study population: (a) 5900 schoolchildren in Vohimasina (Zanantzika onlus) and (b) 1200 in Ambositra. Study protocol: 155 randomly selected cooperative school children underwent complete bedside abdominal sonography (Sonosite 180Plus, Bothell WA). Parameters assessed: liver and spleen size and liver echogenicity, focal lesions, enlarged abdominal lymph nodes, thickening of the gallbladder wall, other pathologic findings (e.g., massive helminth infection)

Malnourished children had hepatosplenomegaly (36% vs 18%) and fatty liver (41% vs 18%) more frequently than non-malnourished children. Hepatosplenomegaly was more common in the Antaimoro area, where malaria and sickle-cell anemia are more prevalent. Evidence of intestinal helminth infections were common in both groups, but in non-malnourished children were mostly associated with fever and acute diarrhea.

This pilot study suggests that point-of-care ultrasound evaluation of malnourished children is feasible and can aid in identifying co-morbidities. The high rates of fatty liver infiltration particularly deserves more attention, as a possible marker for the development of metabolic diseases and liver fibrosis in adulthood.

Keywords: malnutrition, infection, Madagascar, ultrasound

p2.03

A.P.P.A. PROJECT: STUDY OF SPECIFIC FORMULATIONS AGAINST MALNUTRITION

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The A.P.P.A. Project is the main activity of Aid Progress Pharmacist Agreement no profit association; the Project is the result of the cooperation between the Department of Scienza e Tecnologia del Farmaco (TO) and local Pharmacists and is part of the International Health Cooperation.

The Project is structured in six phases through which it is possible to realize a galenic laboratory: from a preliminary study of local needs up to the quality control of the galenics prepared by analysis in the lab of University of Turin.

In A.P.P.A. labs local technicians are trained to produce medicinal products starting from raw materials, these medicinal products are chosen by physicians according to the real needs of the local population.

Since 2005 several labs have been started and several Projects are going on: two in Cameroun, Madagascar and Angola, one in Tchad, Haiti and Zimbabwe.

Each lab is different from the others, for all of them a specific handbook has been studied according to the different local needs. The main products of A.P.P.A. labs are medicinal products prepared in different pharmaceutical forms but in ten years of experience A.P.P.A. received many requests to set up preparations suitable for food supplementation against the malnutrition. Then a formulation study started and specific galenic preparations have been introduced in some labs in order to satisfy the different needs especially of newborns, children and pregnant women. Galenic offers the possibility to produce supplementary foods with different dosages and appropriate pharmaceutical forms. As pilot project in the handbooks of Angola, Haiti, Madagascar and in Zimbabwe have been introduced food supplements with vitamins and minerals, they have been prepared in different pharmaceutical forms as capsules, solutions, drops, syrups, suspension and powders. Liquid preparations stability has been tested at the University of Turin to guarantee the quality of the food supplements prepared.

Keywords: galenic, food supplements, pharmacy

p2.04

ROUTINE HOSPITAL ACQUIRED INFECTION SURVEYS ARE FEASIBLE IN LOW INCOME SETTINGS AND CAN INFORM QUALITY IMPROVEMENT INTERVENTIONS

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Prevention of acquisition of infection in the health care setting is imperative for reduction in morbidity and mortality for patients and improvement health care quality. Data is scarce on prevalence and trends of hospital acquired infections (HAI) in low income settings. We instituted annual surveys to determine HAI prevalence and determinants in Lacor Hospital.

An external expert mentored local hospital staff at the request of the Board, to do HAI surveys for 2 years after which a local team continues the exercise. Using standard WHO checklists, a one-day survey is done, recruiting all patients admitted for 48 hours or more. Data is collected by doctors and nurses on demographics, new diarrhea, UTI, respiratory, wound and iv catheter infections that were absent during admission. Urinalysis was done to prove UTI. Results were analyzed using SPSS, reporting basic statistics and p values of chi square tests comparisons.

A total 1174 clients were surveyed in 4 years, average 293 per survey. There was a 56% decline in HAI prevalence from 28% in 2010 to 14.2% in 2011.

Keywords: hospital acquired infections, prevention

p2.05

COOPERAZIONE E RICERCA SCIENTIFICA NEI PAESI EMERGENTI PER UN FUTURO SOSTENIBILE

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In Africa occidentale, affacciati sul Golfo di Guinea, vi sono alcuni paesi come Cote d'Ivoire, Ghana, Benin e Togo dove, nelle zone lagunari, si sviluppa un insetto acquatico responsabile dell'inoculazione, tramite morsicatura, del mycobacterium ulcerans. L'OMS prevede la terapia a base di antibiotici (rifampicina e streptomina) per almeno 8 settimane.

Abbiamo trattato le piaghe di Buruli utilizzando l'ozono terapia presso due ambulatori (Costa d'Avorio e Benin). L'ozono è un battericida potentissimo e utilizzandolo localmente sulla piaga si ottiene la guarigione in tempi brevi. I campioni di tessuto sono stati analizzati in collaborazione con l'Istituto di anatomia patologica dell'università di Brescia.

Il corso da noi tenuto all'università di Abidjan e all'Institut Pasteur ha permesso di preparare dei medici locali che, attualmente, stanno portando avanti un progetto pilota nei vari distretti sanitari della Cote d'Ivoire. I risultati della ricerca sono stati pubblicati sul British Medical Journal e presentati all'OMS in Marzo 2015 a Ginevra.

Il coinvolgimento e la cooperazione di più attori (Università di Abidjan- Università di Brescia) resta il pilastro su cui poggerà la sostenibilità futura di questa ricerca, il cui fine è di creare collaborazione tra i paesi del sud del mondo e paesi occidentali, in un'ottica di sviluppo scientifico sostenibile per il benessere delle comunità africane.

Keywords: ricerca, ozonoterapia

p2.06

TB SCREENING AND DIAGNOSIS AT ANTENATAL CARE CLINICS IN BURKINA FASO

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Tuberculosis (TB) affected an estimated 9 million people and caused 1.5 million deaths globally in 2013. Worldwide, 6–15% of all maternal mortality is attributable to TB. In 2014 the NTP started a project to expand TB screening and diagnosis among pregnant women attending antenatal care clinics (ANC) in the Central region of Burkina Faso, with technical assistance from UNIBS and WHO financial support.

Women attending 55 ANC were screened for signs or symptoms of active TB, using a standardized WHO questionnaire. Women with presumptive TB were expected to give two sputum samples, to be analyzed at the National Reference Laboratory (NRL). At NRL samples were tested for TB and rifampicin resistance using the Xpert MTB/RIF platform. A two-day training course for health workers was performed in all selected ANC prior to the intervention. Data were recorded on ANC registers and collected during supervisory visits by NTP staff.

Between August 2014 and March 2015, 73 289 pregnant women were seen at intervention sites and 2 035 (2.8%) reported TB signs or symptoms. 31 samples had been collected and referred for Xpert MTB/RIF analysis. All tests were negatives for M.tuberculosis. The average time between sputum collection and analysis was 3.3 days. During the same period of time no case of TB was diagnosed in the intervention area, though 33 were estimated to occur.

TB is likely severely underdiagnosed among ANC clinic attendants in Burkina Faso. Questionnaire screening was feasible and identified a significant number of women with presumptive TB, however, ad hoc interventions are necessary to ensure appropriate diagnostic procedures in these cases, including training, supervision, and staff retention activities.

Keywords: tuberculosis, pregnant women, Xpert MTB/RIF

p2.07

THE MATCH PROJECT: A MULTI-COUNTRY INITIATIVE ON MATERNAL AND CHILD HEALTH IN SOUTH AFRICA, TANZANIA AND DR CONGO

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The long-lasting commitment and the experience, which derives from several initiatives in the field, have progressively led the Region of Tuscany to play a significant and renowned role in promoting and coordinating international and decentralized development cooperation interventions.

In 2011, the Region, in cooperation with the Meyer Children Hospital and the Regional Global Health Center, launched the MATCH project– Maternal and Child Health: local authorities and decentralisation of services in SADC area- targeting rural and marginalized regions of three African Countries: the OR TAMBO district in South Africa, the Kondo district in Tanzania and the Ville of Kananga in the DR Congo.

The initiative was conceived and specifically structured in order to reduce the effects which the HIV virus still produces in the mentioned countries, hereby making necessary a solid and articulated support to relevant local and health authorities so as to strengthen their role and capacities in the fight against the epidemic.

The main initiative's focus is set on the prevention of mother-to-child transmission, addressing indeed the following crucial aspects:

1. Strengthening capacities of local authorities and health staff.
2. Providing technical and functional assistance to basic healthcare facilities.
3. Raising awareness and education levels within rural communities also through building skills of community-based organizations.

The overall results displayed by the monitoring and evaluation framework indicate consistent improvements in the services' quality and coverage in the project target areas, hence progressively approaching targets set up by the UN Global Plan 2011-2015, which in some significant aspects have been successfully matched.

Keywords: maternal, child, Africa, PMTCT

p2.08

THE RIGHT TO MATERNAL AND CHILD HEALTH BETWEEN INTERNATIONAL STANDARDS AND LOCAL REALITIES: THE CASE OF THE REGION OF TIGRAY IN ETHIOPIA

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Ethiopia is under the international obligation to ensure its population enjoys the highest attainable standard of the right to Maternal and Child Health (MCH)[1]. The present study was conducted in the Tigray region, where the main implementing actor is the Tigray Regional Health Bureau (TRHB). The research was done in collaboration with Comitato Collaborazione Medica, which launched a capacity-building initiative in Tigray in 2012, aimed at increasing the quality level of the service.

The aim of the research is to evaluate the implementation of the Right to MCH in Tigray from a Human Rights perspective. The results of the study may be useful to the TRHB and other IPs engaged in MCH activities in Tigray, to monitor the impact of their projects and identify eventual gaps.

The study draws on desk-based and field research. It opens with a literature review of relevant sources, including academic articles, reports, Ethiopian Federal Ministry of Health releases, and online material published by international organisations.

Field research was conducted in Tigray from June to September 2014. Data collection was eased and guided by a Table of Indicators, purposely developed to standardise the analysis of the right to health [2].

Although Tigray can be considered a model region in ensuring the right to MCH, three main shortcomings emerged from the field investigation: i) the severe shortage of ambulances, which may seriously affect the access to health service; ii) the scarce or total lack of acceptability of the service for illiterate people, non-Tigrignia-speaking people and young beneficiaries; and iii) the quality of MCH services provided, in particular regarding the effective availability of BEmONC services and the secondary level facilities' appropriateness in giving high-quality MCH services.

Keywords: human rights, health

[1] UN General Assembly, International Covenant on Economic, Social and Cultural Rights, 16 December 1966, United Nations, Treaty Series, vol. 993, p. 3, art. 12.

[2] The selection of indicators was done on the basis of the four essential elements of the right to health and the sources of data were: i) reports adopted by the TRHB; ii) assessment at facility level; iii) interviews with HWs at facility level; iv) FGDs with beneficiaries of the MCH service; and v) interviews with Ips.

p2.09

HEPATITIS B VIRUS SCREENING IN HEALTHY IMMIGRANTS: A STRATEGY TO PREVENT THE SPREAD OF INFECTION AND TO IDENTIFY AND MANAGE HBV RELATED CHRONIC HEPATITIS

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Screening for hepatitis viruses is a form of secondary prevention aimed at early disease detection so antiviral treatment can be begun precociously and liver disease can be prevented. Globalization is radically changing epidemiology patterns and the way transmissible viral diseases are spread. The aims of this study were to assess the prevalence of HBV in immigrants residing in Padua (Italy).

Regular healthy immigrants were sent to our clinic by community leaders from March 2013 to October 2013, questioned about their sociodemographic characteristics, tested for HBcAb and, if positive, for HBsAg. HBsAg +ve subjects were studied for HBVDNA levels and enrolled for clinic controls of liver disease.

450 (264- M 58,7% - and 185 - F 41,3%) immigrants were screened. 39% were from Eastern Europe, 23% from Asia, 36% from Africa, and 2% from other areas. This distribution is comparable with immigrants residing in Padua. 144 (32%) were anti-HBcAg +ve, 31 (7%) HBsAg +ve, 4 (1%) HBeAg +ve. HBVDNA levels were over 2000 IU/ml in 11/31 (35.5%). The prevalence of HBsAg +ve in the Eastern European group was 11,4%, 7,9% in the Asiatic group and 1,2% in the African group.

Hepatitis B virus screening on healthy immigrants in our area is effective to identify HBsAg +ve subjects and seems to be able to define the number of the patients with HBV related liver disease. The management and the treatment of CHB in the identified subjects can prevent cirrhosis and HCC improving the natural history of HBV chronic infection.

Keywords: Hepatitis B, screening, healthy immigrants

p2.10

**UNA PROPOSTA DI COOPERAZIONE INTERNAZIONALE AD HAITI:
AZIONI PER IL MIGLIORAMENTO DELLE CONDIZIONI
IGIENICHE NELLA CITTÀ DI OUANAMINTHE**

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Nella nota si riferisce delle azioni che si intendono proporre per migliorare i servizi idrici della città di Ouanaminthe, centro abitato di circa 70.000 abitanti, sita a nord-est del territorio della Repubblica di Haiti, al confine con la Repubblica Dominicana.

Allo stato attuale, la città ha un limitato sistema di distribuzione d'acqua e manca del tutto di sistemi di collettamento delle acque reflue e quindi di depurazione delle stesse. Ciò comporta gravi conseguenze da un punto di vista sanitario per la popolazione.

La proposta descritta nella nota mira a migliorare i servizi idrici, cercando pure di garantire il rispetto della qualità dell'acqua ad uso potabile, e di mettere a disposizione in punti discreti della città servizi igienici, i cui reflui verranno smaltiti nel sottosuolo o avviati a sistemi di fitodepurazione.

Keywords: Haiti, acquedotti, fognature, depurazione, Ouanaminthe

p2.11

**ICT TO IMPROVE REMOTE HEALTH ACCESS IN GLOBAL SOUTH:
TECHNOLOGICAL AND PARTICIPATIVE KEY FACTORS FOR
SUSTAINABILITY AND LONG TERM EFFECTIVENESS**

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Medical care provision in rural and urban poorest zones, still remain a problem in many areas of the developing countries where technical and human resources are often insufficient to cover the health demand. Access to health facilities, can be improved by linking patients with specialists in metropolitan centers or peers in rural areas, through telemedicine. The WHO defined telemedicine as “the delivery of healthcare services, where distance is a critical factor”. Nowadays only few telemedicine projects reach the latter stages or eventually fail due to a lack of sustainability and community engagement.

This work wants to understand the possibility of an effective use of ICT in telemedicine actions, for real and long term improvements in health access within global south remote contexts.

Two case studies are discussed, in order to discover the appropriate technologies and the key factors for long term sustainability and effectiveness: the “Aravind Eye Care System”, a rural wireless telemedicine system for eye care in the Southern India, and the Participatory Action Research (PAR) approach applied to telemedicine health care delivery supported by Dhulikhel Hospital in rural Nepal.

As result, three important technological principles has been found to make telemedicine sustainable: the optimization of an existing system, the financial self-sufficiency, and operational self-sufficiency. Participatory approaches play a key role to ensure sustainability and effectiveness in the long run and are realized using combined, interactive models which provide access to communication and empowerment of the local communities.

A conceptual model made by the people layer at the centre, the organizational layer, the infrastructure layer and finally the telemedicine layer, is thus proposed.

Keywords: telemedicine, remote, participation, sustainability, effectiveness

p2.12

D.R.CONGO: TRAINING AND HEALTH EDUCATION TO BREAK DOWN NEONATAL MORTALITY

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Reduction of neonatal mortality caused by newborn's infections, asphyxiation and hypothermia in preterm and newborn Low Birth Weight.

Survey in 3 maternities in Kinshasa, based on the Reproduction Health Care National Program and literature reference. Training based on two observational studies and planning were realised on: hygiene, resuscitation support of the newborn and kangaroo therapy. Provision of medical equipment and training visual aid. Strengthening of the operators' skills through frontal lessons and training on the job activities and of women education and training through community health workers activities.

Out of the whole personnel of the 3 maternities (10 midwives, 4 nurses), 85% have been granted a certificate, hence causing an improved quality index of the health practices delivered. All the 70 community health workers have been trained and educated so they allowed a better dealing with the LBW and preterm newborns. Qualified personnel and community health workers trained LBW and preterm newborn's women to the kangaroo care.

In D. R. Congo the newborn mortality rate is 42 out of 1000 born alive. Increase of 2% of the chances of survival (even though this might not be an accurate figure, since difficulties have been faced during the data collection process), two months after the health personnel and community health workers training, due to the intervention on the main causes infections, asphyxiation and preterm delivery. Kangaroo therapy proved to be an acceptable and deliverable practice in the LIC. Better results in fighting newborn mortality have been recorded on a population of 160.000 inhabitants who had the possibility to access structures with a well-trained and instructed personnel

Keywords: neonatal mortality, low income country, guidelines, medical staff, training on the job

p2.13

FATTORI CLINICI ASSOCIATI ALLA MORTALITÀ IN UNA COORTE DI BAMBINI <5 ANNI MALNUTRITI SEVERI COMPLICATI RICOVERATI NELLE STRUTTURE DELLA REGIONE DEL CENTRO OVEST, BURKINA FASO

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Le NGO LVIA e Medicus Mundi Italia realizzano dal 2012 un intervento di lotta alla malnutrizione acuta severa (MAS) nei bambini <5 anni nella zona Sahel del Burkina Faso, finanziato dall'UE (ECHO). L'intervento si avvale di pediatri e tropicalisti che, nel corso della specialità, hanno effettuato stage in strutture sanitarie burkinabé partner di Università italiane, prestando assistenza tecnica per la formazione e la gestione dei casi di malnutrizione acuta severa complicata (MASC).

I casi di MAS sono identificati misurando il perimetro brachiale (<115 mm) e/o del rapporto peso/altezza (<-3 SD) sia in modo attivo (campagne trimestrali porta a porta) sia tra i bambini ricevuti nei Centri di Salute (CS). I MASC -caratterizzati da presenza di kwashiorkor, di anoressia e di ogni sintomo di infezione, anemia o avitaminosi A - sono riferiti a strutture ospedaliere, mentre i MAS sono seguiti ambulatorialmente al CS. I dati sono stati raccolti sotto la supervisione dei medici del Progetto e analizzati con Epi_Info 7.1.3.0.

Dal 01/07/2013 al 15/02/2015 sono stati ricoverati 2.053 MASC (età media 17,2 mesi; 1.071 maschi). I casi di decesso erano 133. Le complicazioni più frequenti erano anoressia (45,5%), anemia (40,8%), diarrea (39,6%), ipertermia >39(34,7%), pneumopatie (32,1%), vomito (27,2%), candidosi (26,0%) e disidratazione (21,2%). All'analisi multivariata, risultano associate alla mortalità coma (OR 4,7 CI95%1,5-14,7), letargia (OR 3,0; 1,8-4,8), edemi (OR 3,4; 1,9-6,0), disidratazione (OR 1,8; 1,1-2,8) e diarrea (OR 1,8; 1,2-2,8).

Il tasso di letalità (6,5%) è moderato. L'associazione della letalità alle manifestazioni cliniche suggerisce un ritardo nel ricorso alle cure da parte della famiglia o nel riferimento da parte dei CS.

Keywords: MAS (Malnutrizione Acuta Severa), MASC (Malnutrizione Acuta Severa Complicata), perimetro brachiale, rapporto peso/altezza, CS (Centri di Salute)

p2.14

HEALTHCARE SUSTAINABLE DESIGN IN KENYA. AN ON-GOING JOURNEY

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The paper presents the development of an on-going project developed at the Faculty of Engineering of the University of Pavia together with San Matteo Hospital in Pavia focused on the design of a medical dispensary in Adimaye, near Chakama, not far from TsavoPark as a result of a specific request by the local diocese. The project aims to give a response to the needs of Adimaye community, living in a village consisting of about 2500 people, almost isolated from other settlements.

Our effort is to provide a small rural dispensary for local assistance and to address the most serious cases to neighbouring largest hospitals such as the Malindi General Hospital in Malindi. The village of Adimaye is located in a rural area about 70 km west from Malindi, without existing transportation infrastructure and the obvious difficulties of moving during the rainy season, when unpaved paths become impassable. The hospital in Malindi is therefore the nearest health service, which, for geographical and climatic conditions mentioned above, it often becomes impossible to reach, especially by sick people, because of the almost total absence of private transport and adequate infrastructure.

The main idea is to design a modular, sustainable and expandable unit that could be used as a prototype to be implemented in different territorial contexts, as a possible answer to the needs of the community, settled in an area without health facilities. The project itself, developed with the scientific contribution of Prof. Gian Battista Parigi, relies upon a multidisciplinary and holistic approach aimed to control both the technical feasibility and the environmental and social sustainability of the intervention.

The paper will discuss the whole process developed in the last two years, since the very first help request from the local diocese, to the beginning of the construction site, in late April 2015. We will focus on the most relevant steps in the design process, starting from a synthetic summary of the general design approach to the first architectural and technological idea. We will also address the difficulties in the funding process in order to guarantee the financial feasibility of the idea and then we will summarize the main changes of the project itself in order to satisfy both local authorities requirements and the availability of construction materials and technologies.

Keywords: dispensary, health service, sustainability, Kenya

p2.15

MIGLIORAMENTO DEI SERVIZI PRIMARI DI HEALTH CARE E DELLA SALUTE DELLA DONNA NELL'AREA DI CONFLITTO DEL BAJO ATRATO, IN COLOMBIA

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Formare e capacitare in maniera continuativa i promotori della salute di oltre quaranta comunità indigene e afrodiscendenti ubicate lungo i sei fiumi affluenti dell'Atrato. Si tratta di uomini ma soprattutto di donne, scelti dalla stessa comunità, che offrono un servizio volontario e qualificato alla collettività occupandosi delle attività di cura e prevenzione.

Incontri di formazione e supervisione continua dell'equipe progetto

Attività e risultati attesi:

- implementazione del Centro di formazione per promotori di salute e ostetriche tradizionali accessibile sia per via fluviale che terrestre;
- implementazione delle attività comunitarie di prevenzione e promozione della salute: due campagne di igiene orale rivolte a bambini; due campagne per la salute della donna; due campagne antiparassitarie in tre comunità pilota con la distribuzione di albendazolo ai bambini tra i 2 e i 6 anni e alle loro famiglie; l'organizzazione di giornate di promozione della salute;
- implementazione delle attività comunitarie di cura, svolte dai promotori di salute sotto la supervisione dell'equipe progetto, presso il posto di salute comunitario o presso il domicilio del paziente se necessario: visite di medicina generale, controllo della crescita dei bambini sotto i 5 anni, controlli di gravidanza, assistenza al parto e puerperio in collaborazione con le parteras;
- attività di formazione continua per i 24 promotori di salute su temi decisi dai promotori stessi (patologie endemiche dell'area, malattie croniche non trasmissibili, odontoiatria, microscopia, moltiplicazione delle conoscenze, fisiologia e patologia dello sviluppo del bambino nei primi anni di vita);
- realizzazione di un corso di salute riproduttiva e sessuale per 28 ostetriche comunitarie (parteras);
- realizzazione di visite comunitarie da parte dell'equipe progetto finalizzate all'appoggio e alla supervisione dei promotori di salute ed alla formazione dei membri dei *comites de salud* su temi amministrativi, organizzativi, di salute pubblica e diritto alla salute.

Keywords: assistenza sanitaria di base, promotori della salute, formazione

p2.16

SALUTE PER TUTTI - PER UNA GOVERNANCE CONDIVISA DEI SISTEMI SOCIALI E SANITARI TRA LA TUNISIA E L'ITALIA

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Il Governatorato di Kasserine è situato nella parte centro-occidentale della Tunisia lungo il confine con l'Algeria, conta 432.300 abitanti di cui il 61% disperso nelle zone rurali.

L'obiettivo del progetto è migliorare lo sviluppo sociale e sanitario a Kasserine, valorizzando il contributo dei migranti e delle comunità tunisina in Toscana, utilizzando la seguente logica:

- 1) rafforzamento del sistema socio - sanitario locale, aumentando le possibilità dei cittadini di Kasserine di accedere a cure adeguate nella regione e nel paese di origine;
- 2) formazione qualificata del personale sanitario locale attraverso corsi in aula ed affiancamento di professionisti Italiani;
- 3) partecipazione e integrazione della comunità tunisina presente in Italia nella ideazione e nella creazione di una rete di sicurezza sociale e sanitaria a Kasserine.

Attività del progetto:

- 1) Azioni a sostegno dell'Ospedale Regionale di Kasserine;
- 2) Supporto ai centri di salute territoriale nelle zone rurali e Djedliene ed Haidra;
- 3) Iniziative di rinforzo alle associazioni locali che si occupano di educazione sanitaria e promozione della salute della donna;
- 4) Formazione in Toscana di un gruppo di migranti tunisini, ai quali affidare l'ideazione e la diffusione delle informazioni alle donne ed ai cittadini del Governatorato di Kasserine.

La metodologia è incentrata nella creazione di reti e alleanze per stabilire un inter-scambio efficiente e produttivo tra formatori e formati al fine di raccogliere e diffondere le buone pratiche sul tema della salute, connesse anche al fenomeno della migrazione.

Il progetto è coordinato tecnicamente dal Global Health Center della regione Toscana, finanziato da UNDP (migration for development) e sviluppato in partenariato con il Governatorato di Kasserine, la Ong COSPE, Pontes e Nosotras.

Keywords: migranti, cooperazione, rafforzamento sistemi sanitari

PARALLEL SESSION P3

WATER, ENERGY AND FOOD

co3.01

CHALLENGES AND OPPORTUNITIES OF ADDRESSING TECHNOLOGICAL INNOVATION IN “STANDARD” HUMANITARIAN PROJECTS: A DISCUSSION PAPER

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Humanitarian aid is used to apply standardized solutions, in order to meet people needs effectively and efficiently. The need of achieving immediate results, as well as working with limited funds are well-known constraints. However the interest towards innovative and research-based new technologies and approaches is spreading. Such a goal, already demanding and complex in development cooperation, may represent a real challenge in humanitarian aid. Projects within this domain are often characterized by instable context (e.g. protracted crises, conflict, relief after natural disaster), limited implementation period, and particularly difficult logistics. Universities and research centres are reliable partners for NGOs in technological innovation, but for humanitarian aid the approach to research methodologies and standard testing for any new solutions need to be tailored to a different perspective. Similarly, NGOs should adapt their way of implementation, including procedure application, for this specific type of projects. Politecnico di Milano and COOPI – COOPERAZIONE INTERNAZIONALE are partners in the “Sustainable Energy Technology for Food Utilization (SET4food)” project, funded by EU humanitarian aid, aiming at the identification of innovative energy solutions for refugees and internal displaced persons, and the enhancement of the response capacity of humanitarian actors. The implementation of pilot projects in Lebanon, Somalia, Central African Republic and Haiti highlighted the need of reshaping the design process of the proposed solution, and some gaps in the assessment phase, in the identification of adequate suppliers, and in monitoring systems for technologies. In particular the implementation of the identified innovative solutions requiring onsite activities (e.g. installation) and a certain level of customization resulted problematic. This paper points out the constraints and challenges faced, as well as the opportunities identified, in order to improve the university-NGO collaboration in technological innovation in humanitarian aid, while promoting a path to innovation that can give the most effective results for final beneficiaries.

Keywords: food utilization, energy, technology, innovation

co3.02

GENDER INDICATORS ON ACCESS AND WATER MANAGEMENT IN ETHIOPIA: A STUDENT MOBILITY PROJECT

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Data on water access, use and management disaggregated by gender on a geographic scale are often unreliable or incomplete. Moreover, there is a lack of meteorological and hydrological systematic measures, in spite of their growing relevance as a consequence of climate change and the global water crisis. A multidisciplinary approach appears necessary to define gender indicators to improve an effective water management. This research has been developed in the framework of a programme of student mobility promoted by the University of Torino involving three students with different academic backgrounds and their academic tutors. The main objectives are to analyse the dynamics of gender in relation to water access and management, to encourage women empowerment in water policies and projects and to ensure a more equitable and sustainable water use in about twenty villages of the Oromia region (Ethiopia), where the NGO LVIA (partner of this project) works since many years. After the analysis of the presence and/or absence of disaggregated indicators related to availability, management and use of water, the project continues with the mapping and the identification of the key stakeholders present in the selected villages. Afterwards some water gender indicators are discussed and tested in the field. Quantitative and qualitative data collection are presented. The aim is to achieve a comprehensive vision of the link between gender and water management, through the validation of disaggregated indicators, coming from the analysis of data related to different water uses (sanitation, agriculture, livestock). The indicators will then support the monitoring of the NGO partner of the project and will contribute to define water gender indicators for the Post2015 development Agenda.

Keywords: water, gender, indicators

co3.03a

WATER AND ENERGY NEXUS - A CASE STUDY EXAMPLE

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Water and energy are tightly interlinked: water is required to produce, transport and use energy, and energy is required for the extraction, treatment and distribution of water. Therefore, choices made in one domain can have multifaceted and broad-reaching impacts in the other. Freshwater and energy are crucial for human well-being and socio-economic development but are managed differently. In 2010, 768 million people lacked access to an improved water source and 1.3 billion lacked access to electricity. This while freshwater and energy demands are expected to further increase in the coming decades.

Keeping in mind the above projections as well as the importance of water for energy and food production, it seems indispensable to place water at the heart of decision-making. This may promote further cooperation between sectors, making it possible to manage trade-offs and maximize co-benefits. Practical examples range widely from water-savings through wastewater treatment and reuse, to exploiting synergies through wastewater energy recovery.

The Cultivating Good Water programme in the Parana River basin of Brazil is an example of a cross-sectoral and multi-level cooperation project with successful outcomes. This region was facing serious environmental and social issues due to intense agricultural activity and climate change effects. The programme catalyzed a shift to a more holistic approach based on sustainable agricultural practices, water conservation and climate change adaptation. In addition, governance reforms ensured a more participatory decision-making process along with better communication and education strategies. Altogether, this project halted environmental degradation and improved the lives of local communities, without sacrificing economic growth and stability.

Keywords: water-energy-food, nexus, development, sustainability, Brazil

co3.03b

WWDR 2015: WATER AND SUSTAINABLE DEVELOPMENT

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Water plays a fundamental role in poverty eradication and many other goals related to hunger, health and education. The international community recognized the fundamental role of water by on having a dedicated water goal in the Open Working Group First Draft of the SDG document. Every year, WWAP coordinates the production of the UN-Water Flagship report: the World Water Development Report (WWDR). The WWDR 2015, Water for a Sustainable World, aims to highlight the importance of water as the basis of any sustainable development policy. In this paper, an overview of the report will be provided along with a revision of the 2015 SDGs process. The WWDR 2015 underlines the interconnections between water and the three dimensions of sustainable development, and also how water can support healthier and more inclusive societies, a sustainable economy and environmental protection. The importance of water for facing societal challenges that will become more and more urgent in the next years is also highlighted, such as: provision of water supply and sanitation for a growing population, the acceleration of urbanization, the growing demand of water for industry, energy generation and food production, and climate change. Responses directed to all the stakeholders that share responsibilities in the water management were elaborated to provide guidance on how to address the challenges and the role of water governance, sound water management and equitable growth for the achievement and maintenance of economic, social and environmental sustainability.

Keywords: sustainable development, water, United Nations

co3.04

RESIDUAL BIOMASS RECOVERY TO IMPROVE ENERGY ACCESS AT HOUSEHOLD LEVEL: AN EXPERIENCE FROM MADAGASCAR

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Madagascar is a unique land in the world as biodiversity is concerned, due to the separation from the African continent occurred about 160 millions of years ago. However, the forests, that once covered most of the island surface, were dramatically reduced in last century, being confined in the coastline, whereas the highlands are almost completely deforested and are subjected to progressive drying up. Human activities severely impact on forests, as the energy needs are usually filled by firewood or charcoal, often used in inefficient ovens or stoves. “Tsinjo Lavitra”, a local association based in Antsirabe, in recent years developed an alternative fuel obtained by a mix of clay, residual biomass and animal dejections, that is fired in common cooking stoves. The aim of the present work is to evaluate this fuel in domestic use.

An experimental campaign was carried out for characterizing the performance of the stoves fed by the alternative fuel. Water boiling tests and controlled cooking tests were carried out on the stoves and higher heating power tests were carried out on the fuel, according to procedures recommended by international standards.

The heating power tests showed that the alternative fuel has lower energy content than traditional fuels; the water boiling tests showed that the stove performance is worse as well. However, the controlled cooking tests showed that the alternative fuel can be used for cooking.

Despite its lower energy content, the alternative fuel can be a valid alternative to traditional ones, as proven by the fact that presently is used for filling the whole energy need of a house of hospitality managed by the “Tsinjo Lavitra” that gives accommodation to about thirty people.

Keywords: deforestation, energy supply, household cooking

co3.05

ENERGY FOR WATER SUPPLY: A CASE STUDY IN THE SOUTHWESTERN REGION OF BURKINA FASO

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Nowadays, almost half population of Burkina Faso lives under the poverty threshold and faces considerable sanitation problems, among the causes of which is the difficulty of accessing safe water. Despite the efforts made to date, not enough water and sanitation facilities are in place or properly working, and the gap between rural and urban infrastructures is persistent.

One of the main challenges related to water pumping in large villages located in rural areas is the frequent unavailability of a stable energy source. Water supply systems for semi-urban municipalities require simple infrastructures that must rely on continuous energy supply. These municipalities are often not served by the national power facility network, thus generating the need of finding alternative energy sources.

A collaboration between the international NGO CISV and ISF (Engineers without borders) set the basis for studying the issue of energy supply for water pumping and distribution in rural Burkina Faso. In this work we present an applied case study in the village of Founzan (South-west of the country). A cooperation and development project operated in this area that was funded in the framework of the EU-call for water and sanitation facility.

Among the different energy sources analysed, solar power was found to best fit the local conditions. Adopting such technologies in developing countries is of fundamental importance. Renewable energy sources can have a key role in achieving the country's energy independence. All the more now that its political stability is precarious and its energy supply is becoming more and more unreliable. However, systematic feasibility analyses are often lacking when the choice of the technology to adopt is made.

Keywords: water, energy supply

co3.06

WHO WILL FEED AFRICA?

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The objective is to analyze various proposals for how to feed Africa in years to come.

The methodological approach is based on literature review and field data obtained by the Afrint research group (of which I was part) in 9 African countries 2001-2010.

The final goal is to analyze the pros and cons of abovementioned proposals.

Findings are discussed with an aim to assess realism of proposals in light of resource scarcity, generally adverse physical preconditions for agriculture, as well as climate change and an expected quadrupling of population in the 21st century.

Keywords: Africa, agriculture, resources, future

p3.01

FOG COLLECTION FOR WATER MANAGEMENT AND LOCAL DEVELOPMENT: ALTERNATIVE TECHNOLOGIES, METHODS AND PERSPECTIVES IN SOME COOPERATION PROJECTS

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The sea fog phenomenon is a local resource that can be used in some drylands by means of a simple technology called Fog Collector, providing drinking water for human consumption and irrigation.

The use of this technology and the development of participatory and cooperation processes could reach different objectives in a small local scale: to fulfil the water needs of rural isolated communities and allow them to develop productive activities; to support biodiversity and ecosystem services.

The outcome of a fog collection project depends on factors that are not to be taken for granted, like the communities' involvement and the presence in the territory of an active institution, like a University centre, a NGO or other organizations.

Past projects have shown their limits in the management aspect that led to the failure of the project. Therefore, the creation of an integrated management plan is a fundamental point: it is a strategic method that works through a participatory redesign and a continuous redefinition of objectives; this helps to have a long-term project and it is a tool of knowledge for the people involved.

Water production depends on the specific climate and fog features of the site. For example, an installation of ten large fog collectors (40 sqm each) can produce from 1200 to 12000 litres of drinking water daily. The water can be used for activities like proximity agriculture and reforestation, but also for sustainable tourism and biodiversity research.

By means of Fog Collection is then possible to develop interventions and technological models for the correct management of water resources. Different projects in drylands offer ideas for local development in agricultural production and sustainability, which need little funding and are environmentally friendly.

Keywords: water technology, local development, participatory process, productive activities

p3.03

THE ROLE OF LOCAL ACTORS IN AGRICULTURAL WATER MANAGEMENT IN WEST AFRICA: THE CASE OF AN INFRASTRUCTURE DEVELOPMENT PROJECT IN SENEGAL

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According to UN figures, 70% of the world's water consumption is destined to agricultural purposes. In many West African countries, where most of the population lives off subsistence agriculture, ensuring access to water for agricultural use becomes of utmost importance. Over the past decades, many West-African governments have financed the construction of water infrastructures to meet the agricultural sector's demand. However, such projects often yielded mixed results, as the socio-economic changes brought about by the new infrastructures have often been overlooked.

The objective of this contribution is to make an inventory of lessons learned and best practices of water infrastructures' management in West Africa, focusing on the roles played by the different actors involved in and affected by such construction projects. Based on this review, this paper will then analyze how such recommendations are informing current infrastructural development projects, which innovative strategies are being introduced and what challenges still lay ahead.

The discussion will be based on the review of existing literature, policy documents and reports related to this topic. In order to inform on current development initiatives, the case study of an ongoing bilateral development project aimed at building water infrastructures in Senegal will be presented.

To make these infrastructures sustainable, measures must be taken to improve the quality of the participation of all actors during each stage of the project. Moreover, such interventions need to be tailor-made to the specificities of different local contexts in order to understand how such infrastructures will change the lives of local populations, foresee potential negative consequences and thus elaborate strategies to prevent conflicts.

Keywords: water, agriculture, local actors, participation

p3.04

COMPOSTING OF ORGANIC FRACTION OF MUNICIPAL SOLID WASTE TO SUPPORT THE SOIL QUALITY. A PILOT PLANT IN MAXIXE DISTRICT, MOZAMBIQUE

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The monitoring of the composting pilot plant was carried out in order to guarantee a good compost quality, comparing the final compost chemical analysis of two heaps with the same initial characteristics.

The composting pilot plant was built considering 2 working hypotheses: a duration equal to 100 days for the biological degradation process and an heaps overturning with frequency equal to 10 days. Ten 1 m³ wood boxes were built to guarantee the respect of the predetermined hypothesis. Two heaps, named A and B, were considered to investigate how different heaps overturning frequencies influence the temperatures trend, the degradation process duration, and the compost quality.

Heap A and B were removed from the wood box after 79 days of biological treatment. The compost production ratio, that are the kilograms of final compost produced per each kilogram of organic waste launched at the process, was 44% and 42% for heap A and B, respectively. All the results of the heap A and B comply with Italian law parameters, except the organic carbon and humic and fulvic acids that are lower, while carbon-nitrogen ratio (C/N) and pH are higher than the prescribed value. All the analyzed heavy metals (Cu, Zn, Cd, Ni, Hg, CrVI) are below the Italian standard, and the good germination test results confirm the absence of uncontrolled heavy metal pollution. Moreover, the microbiological analyses confirm the complete deactivation of *Salmonella* and *Escherichia coli*.

The chemical analyses show good compost quality for both the heaps, especially due to the absence of heavy metals and microbiological contamination, which allow its further use for agricultural purposes supporting food security and safety in low and middle-income countries.

Keywords: composting, OFMSW, Mozambique

p3.05

METHODOLOGICAL APPROACH FOR AN APPROPRIATE PRELIMINARY DESIGN OF A PILOT BIODIGESTER FOR A UNIVERSITY CAMPUS

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The aim of this research is the proper treatment of the organic solid and liquid waste from the campus at the Universidade Eduardo Mondlane (Maputo, Mozambique), in order to reduce the environmental impact and the costs related to their disposal, and the supply of an alternative energy source.

A 6-week preliminary assessment will be conducted in order to evaluate the daily production of organic waste from the kitchens and the canteens in the campus. The biodigester study was carried out considering three main factors: the type of feeding, the operating conditions and the constructive characteristics of the plant. The preliminary volume of the digester was quantified as follows: maximum solids content of the feed mixture equal to 10; an hydraulic retention time equal to 30 days; the daily volume of solution for the digester feeding = biomass weight x (1 - % humidity)/(% solids in the solution).

The average amount of organic waste is 200 kg per day, and its average humidity, average content of ashes and average content of volatile solids (VS) were equal to 79%, 20% and 89% respectively. The useful volume of a digester able to use the entire production of food waste of the campus is 23 m³. The calculated value of OLR (Organic Loading Rate) is equal to 2.27 kg VS/m³ and the estimated biogas production is approximately equal to 25 m³ biogas/day.

The high prevalence of the organic fraction and the VS assure that the waste available daily is proper for the feeding of the designed pilot digester. This waste recovery through the anaerobic digestion would result in a biogas production, which could be reused in the kitchens in substitution to natural gas, and the almost reset of the waste production of the restoration service.

Keywords: anaerobic digestion, OFMSW, Mozambique

p3.06

ICT FOR RURAL WATER MANAGEMENT: AN ANALYTIC REVIEW OF THE CASE OF “COMMON-SENSE”

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According to the UN World Water Development Report, by 2050, at least one out of four people is likely to live in a country affected by chronic or recurring shortages of freshwater. Water directly impacts food, energy and economic growth security. This is a challenge that world economy will face in the future. Furthermore, to achieve the MDG goals for water, proper management and use of water resources are essential. In agriculture, for instance, it is extremely important to know when the right time to irrigate and the right volume of water that should be applied. ICT can bring enormous benefits in mapping and monitoring water resources using wireless sensor networks to automatize the irrigation systems. The sensing of water resources can be completed by “participatory sensing”, that stands for the use of data from a mobile sensor node gathered in collaboration with its user. Water Resources Management systems can take advantage of participatory sensing in several ways: collecting and validating data, complementing the analytic knowledge embodied in models with tacit knowledge from individuals and communities, using “community sensing” to monitor the variation of conditions at a fine grain and in real time. This work is an analytic review of case of “COMMON-Sense”, a sensor network for agricultural management. The case is targeted for resource-poor farmers in India, adopting both an iterative, participatory methodology and a rigorous technical approach. The results show the potential that environmental-related information might have for the improvement of farming strategies in case of highly variable conditions, in particular in the choice of crop variety, sowing and harvest periods, prevention of pests and diseases and efficient use of irrigation water.

Keywords: ICT, rural development, participatory sensing

p3.07

RECUPERO DELLA LOLLA DI RISO IN UNA STUFA MIGLIORATA PER GARANTIRE L'ACCESSO ALL'ENERGIA DOMESTICA E LA SICUREZZA ALIMENTARE. UN'ESPERIENZA NEI DISTRETTI SEMI- ARIDI DEL KENYA

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Questo progetto, svolto in collaborazione dal CeTamb LAB dell'Università degli Studi di Brescia e da Col'Or ONG, ha avuto come obiettivo la disseminazione della stufa migliorata MLC ("My Little Cookstove"), sviluppata in precedenza dal CeTamb LAB, in Kenya. La MLC consente di confinare il fuoco al suo interno e di allontanare i fumi grazie alla presenza di una ciminiera, rendendo più sicura la preparazione dei cibi. Essa ha la peculiarità di utilizzare come combustibili biomasse considerate solitamente di scarto. Nello specifico, è stata ottimizzata per la lolla di riso, che è presente in grande quantità nel distretto del Kirinyaga, in Kenya.

La MLC è stata modificata in loco sulla base delle richieste degli utenti. Sono state realizzate 13 stufe, sulle quali sono stati eseguiti dei test per verificare il funzionamento, l'efficienza e la produzione di inquinanti nei fumi di scarico del nuovo modello. Infine sono state raccolte le osservazioni delle famiglie che hanno utilizzato la stufa.

La stufa ha riscosso molto interesse da parte della popolazione ed è stata anche oggetto di articoli pubblicati su giornali nazionali in Kenya. L'accoglimento delle modifiche proposte ha permesso alla popolazione di ottenere un modello più adatto alle proprie esigenze, creando tuttavia dei limiti agli utenti stessi nella completa sostituzione delle tradizionali metodologie di cottura, essendo questo modello inadatto alla preparazione dei pasti di breve cottura. Inoltre si è registrata una riduzione dell'efficienza della stufa, in quanto richiede di utilizzare lolla di riso e legna contemporaneamente. Tuttavia, il risparmio in termini economici è comunque notevole, poiché la quantità di legna richiesta è pari a circa 1/7 di quella necessaria con un tradizionale braciere a tre pietre.

Keywords: lolla, Kenya, riso, stufa migliorata

p3.08

STRENGTHEN WATER SECURITY THROUGH THE DEVELOPMENT OF A WATER SAFETY PLAN IN A RURAL AREA OF SENEGAL

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In 2012, the Italian NGO G. Tovini Foundation, together with the Universities of Dakar (Senegal) and Brescia, started a cooperation project in the Rural Community of Patar (Diourbel, Senegal) aimed at improving water security and living conditions of the people by implementing the Water Safety Plan (WSP) approach.

The objective was to elaborate and implement the WSP approach in the Rural Community of Patar (RCP), where drinking water was characterised by both microbial and chemical contamination directly at the source level. A specific WSP was developed for the 3 different drinking water sources used by local people. Moreover, a WSP for the transport and storage steps was elaborated.

In order to guarantee the sustainability of the WSP, this has been elaborated by a local team, composed by 12 people: 2 representatives of ASUFOR (User Association of Rural Boreholes), 2 representatives of GIE (Association of local farmers and traders responsible for the management of protected wells network), 2 representatives of the Diourbel Hygiene Authority, the Responsible for the Patar Health Centre (RPHC) and 5 students of the University of Dakar, who lived in the RCP, as representatives of the Community. The WSP team, on one hand, elaborated the WSP and, on the other, was made aware on how manage and handle drinking water along the entire supply chain.

Local conditions did not permit to develop a WSP approach in strict conformity with the one suggested by WHO, thus a slightly revised framework was carried out. To guarantee the consumption of safe drinking water, the disinfection with chlorine, the use of improved water containers (cans with valve) and the installation of household water treatment technologies (bone char-based filtration systems) were promoted amongst the population.

Keywords: Water Safety Plan, water security, Senegal

p3.09

DESIGN OF A PARABOLIC TROUGH CONCENTRATOR (PTC) FOR DRINKING WATER SOLAR PASTEURIZATION IN RESOURCE-LIMITED COUNTRIES

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A cooperation project, conducted by ADA Onlus (Brescia) and CeTAmb LAB, was aimed at improving the drinking water access in a secondary school of Baboné, a village in a rural area of Cameroon where safe drinking water was limited and not guaranteed.

The designed and developed technology consists of a Parabolic Trough Concentrator (PTC) that uses solar energy turned into heat in order to pasteurize, as an alternative disinfection process, an unprotected water source. The key results obtained from this experience are the definition of the operating conditions of the studied pasteurization device in the small rural community and at the same time the higher awareness of local students and school staff on how to treat and manage the improved water source.

The technology results appropriate to be used in rural contexts for several reasons: i) it does not entail environmental impacts; ii) it does not use chemical reagents or external energy sources (fuel, electricity, etc.); iii) there are no management costs; iv) it is accepted by the local community; v) it does not generate any process residue that needs a further treatment or that needs to be disposed of in some way and vi) the total costs are comparable with other water treatments based on solar energy exploitation.

Keywords: Parabolic Trough Concentrator, pasteurization, Cameroon

p3.10

SANITATION SYSTEM AND EFFECTS ON DRINKING WATER QUALITY IN THE CITY OF VILANCULOS (MOZAMBIQUE): ANALYSIS, MONITORING AND PROPOSALS OF IMPROVEMENT

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The research work aimed at creating a framework for sanitation system in Vilanculos (Mozambique) and at analyzing the influence of poor sanitation management on drinking water quality. The first phase covered the monitoring of microbiological quality (216 samples were analyzed).

The water sources were wells (56%), divided into open and protected wells with electric or hand pumps, while the 44% was water distributed by a network, used by consumers through private taps or public fountains.

The microbiological analyses showed that open wells had a significant contamination (as regards Enterococci, 92% of the samples was above 100 CFU/100mL, 52% of which was even higher than 1,000 CFU/100mL), while among those protected, hand pumps showed greater compliance with the standard limit (0 CFU/100mL). The water supplied by the network did not provide a good microbiological quality at the tap, despite water at the feed point was in compliance with the standards. This means that a microbiological contamination took place along the distribution system.

This preliminary monitoring phase allowed to identify 3 critical areas in Vilanculos to be valued in a next sanitation assessment activity, carried out by means of interviews to different stakeholders. A prevalence (64% of surveyed population) of unimproved sanitation facilities with direct infiltration into the ground and difficulties in managing septic tanks were identified.

To achieve the objective of improving population's health conditions will be necessary to put in place a preventive approach that includes both the improvement of the structural characteristics of latrines and their management, and the improvement of water supply infrastructures.

Keywords: water and sanitation, Mozambique

p3.11

SOURCE SORTING ORGANIC COLLECTION SYSTEM FOR IMPROVED COMPOST BLENDING TO INCREASE FOOD SOVEREIGNTY IN PALESTINE

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A source sorting organic waste collection system from commercial activities, agricultural farms and agro-industrial factories is going to be implemented in the city of Tulkarem, located in the North West of Palestinian West Bank. The collected material is under study to be used to improve the compost produced by a Cooperative of around 90 farmers. The compost will be tested and tailored for a local improved vegetables variety to increase the food sovereignty and resilience of the Palestinians. The organic collection system has been studied using a participatory approach, which involved in different stages all the stakeholders based on the strategic waste management plan from the World Bank (Strategic Planning for MSWM, 2006). The implementation of the system is following 5 pilots phases in which different collection systems, tailored to the social and urban texture of each selected pilot area will be implemented and monitored. From the urban commercial centre to the agricultural surrounding areas. The first organic collection has been delivered to the Composting facility and 5 pilot experimental piles, using different percentages of each raw material including the organic from the new collection system, has been implemented. The composting phase will have a duration 120 days during the process will be monitored and final sample of each pile will be analysed at the Al Najah University in Tulkarem to assess the maturation and the nutrients. The final compost will be enriched with different mineral fertilisers to join a suitable rate of nutrients (NPK). During the last phase a greenhouse growth test will be implemented. ICARDA which has a program to improve the quality of different local vegetables variety will supply for the most suitable seeds for the test.

Keywords: enriched, compost, organic, collection, sovereignty

p3.12

ENERGY ASSESSMENT AND POSSIBLE INTERVENTION STRATEGIES FOR ST. MARY’S HOSPITAL LACOR

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This paper summarizes the authors’ thesis work in St. Mary’s Hospital Lacor in Uganda, which was carried out in collaboration with the Unesco Chair in Energy for Sustainable Development of Politecnico di Milano and Fondazione Piero e Lucille Corti. This work aims to support the hospital in the identification of management strategies of its material and human resources, in order to maximize their benefit in the service of medical care. The first topic discussed deals with a deep analysis of the hybrid micro grid of the hospital, which compensates the external unstable national grid, in order to detect possible future scenarios related to the changing context and with the purpose to improve some critical aspects of the generation and distribution systems. The second critical subject is medical and domestic waste management. Particular attention is given to the final disposal system, in order to understand the current issues and to propose suitable solutions and best practices. The authors conducted a mission on field, in order to collect data needed to assess the current state of Lacor’s technical facilities, towards direct measurements, interviews with local people and a bibliographical research on the subjects carried out. Afterwards, simulations and technical studies led to the final conclusions that some savings and improvements are possible with no or low investments, while others require more sophisticated interventions. This experience fosters the research of a balance between appropriate technologies and the peculiarities of a developing and rural context, finalised to perform a larger study and to ensure the feasibility of the proposed actions, enhancing benefits both for the local reality of the hospital, for the academic activity and students’ personal growth.

Keywords: electrical generation, waste management, hospital

p3.13

**ENERGY ACCESS AND THE NEXUS WITH WATER AND FOOD:
DESIGN OF A PILOT PROJECT FOR IRRIGATION IN A RURAL
INDIAN VILLAGE**

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This paper presents the results of a thesis work carried out in the rural village of Katgaon in India, developed in collaboration with the UNESCO Chair in Energy for Sustainable Development of Politecnico di Milano and Engineering Without Borders Milano (EWB). The thesis has been developed in the context of the EWB “Sanjeevani Project”, whose goal is to improve the socio-economic conditions of farmers in the village.

The aim of the work is to design an appropriate solution to meet the energy needs for irrigation of a select group of farmers in the village.

The authors carried out a two-month mission to study the context and collect data by means of a questionnaire, developed for the purpose in collaboration with the local partner of the project and a number of farmers who accepted to test its efficacy. The problems identified and the strategy proposed to solve them have been analysed using the Project Cycle Management (PCM) method. The feasibility and economic aspects of the various solutions have been then evaluated by means of specific engineering tools. In particular, the authors developed different possible scenarios considering different ranges of size and system design (stand-alone or grid-connected systems, with or without a water tank). Finally, a SWOT analysis and some practical considerations for the installation of the appropriate system are given.

Keywords: energy, irrigation, India, farmers

p3.14

SOURCE SORTING ORGANIC COLLECTION SYSTEM FOR IMPROVED COMPOST BLENDING IN PALESTINE

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A source sorting organic waste collection system from commercial activities, agricultural farms and agroindustrial factories is going to be implemented in the city of Tulkarem, located in the North West of Palestinian West Bank. The collected material is under study to be used to improve the compost produced by a Cooperative of around 90 farmers. The compost will be tested and tailored for a local improved vegetables variety to increase the food sovereignty and resilience of the Palestinians. The organic collection system has been studied using a participatory approach, which involved in different stages all the stakeholders based on the strategic waste management plan from the World Bank (Strategic Planning for MSWM, 2006). The implementation of the system is following 5 pilots phases in which different collection systems, tailored to the social and urban texture of each selected pilot area will be implemented and monitored. From the urban commercial centre to the agricultural surrounding areas. The first organic collection has been delivered to the Composting facility and 5 pilot experimental piles, using different percentages of each raw material including the organic from the new collection system, has been implemented. The composting phase will have a duration 120 days during the process will be monitored and final sample of each pile will be analysed at the Al Najah University in Tulkarem to assess the maturation and the nutrients. The final compost will be enriched with different mineral fertilisers to join a suitable rate of nutrients (NPK). During the last phase a greenhouse growth test will be implemented. ICARDA, which has a program to improve the quality of different local vegetables variety, will supply for the most suitable seeds for the test.

Keywords: composting, waste, collection, Palestine, fertiliser

PARALLEL SESSION P4

UNIVERSITIES AND NGOS: HOW TO INTEGRATE THEIR ACTIVITIES?

co4.01

COLLABORATION BETWEEN UNIVERSITY AND ONG IN PROJECTS INVOLVING SUSTAINABLE DEVELOPMENT

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ONG VIS, CTM-Altromercato, Universities of Ferrara and Pavia (Italy), Shuar and Achuar ethnic groups, UPS University and Chankuap Foundation (Ecuador) were the main partners in a project funded by MAE aimed to valorize the cultural heritage and the biodiversity of the Amazonian Ecuador, laying the foundations of sustainable activities as source of incomes through fair trade, avoiding any kind of negative relapses.

Community engagement and context analysis make all the partners aware of the project and of the derived beneficial effects. The main actions identified were based on following topics: 1) Scientific topic: several activities to set up laboratories and specific databases and to support local herbal production chain. 2) Educational topic: creation of a Master's Degree in science and technology for sustainable use of non-traditional biological resources, of training courses in agronomy, medicinal plants cultivation and herbal uses for young Shuar and Achuar people. 3) Trade topic: commercialization of raw materials, herbal and cosmetic products; 4) Legal topic: organization of Meetings about uses of Ecuadorian genetic resources and suggestions about an agreement document specifically devoted to Ecuadorian biodiversity and its exploitation.

The project has allowed the creation of a short chain cosmetic line, named Ikiam (Chankuap Foundation) and of a long chain cosmetic line, named Natyr (CTM-Altromercato). The University of Ferrara published a lot of papers on ISI certified journal about related topics.

The collaboration between University and ONG has allowed us to set up a sustainable development project, making the actors aware of the roles of all the partners in cooperation projects. It has been a pilot experience that highlighted the strengths and weaknesses of University and possible long and medium term relapses. However, all these evidences can be considered as starting points for future projects such as that of Sahrawi people, currently in progress.

Keywords: University, ONG, sustainability, biodiversity, heritage

co4.02

ANALISI DI UN'ESPERIENZA DI COLLABORAZIONE TRA UNIVERSITA' CATTOLICA E FONDAZIONE ALBERO DELLA VITA NELL'AMBITO DI UN PROGETTO DI PRESA IN CARICO DI MINORI SIRIANI IN TRANSITO A MILANO: CRITICITA' E PUNTI DI FORZA

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Lo studio si propone di valutare l'esperienza di collaborazione tra l'Unità di Ricerca sulla Resilienza (U.d.R.) dell'Università Cattolica di Milano e la Fondazione Albero della Vita (F.A.d.V.) nell'ambito dell'intervento psico-sociale rivolto a minori siriani in transito a Milano.

La collaborazione ha previsto due fasi: una formazione condotta dall'U.d.R. rivolta agli educatori e ai volontari della F.A.d.V., e uno studio sul campo volto ad indagare fattori di rischio e fattori protettivi specifici dei minori in transito, al fine di delineare buone pratiche di intervento.

A partire dai risultati ottenuti sono stati elaborati atelier creativo-espressivi condotti dall'equipe di educatori affiancati dai ricercatori universitari, svolti durante un periodo di due mesi, coinvolgendo 452 minori.

L'esperienza ha permesso l'identificazione di punti di forza e di difficoltà rispetto ai due ambiti di intervento: la formazione e la conduzione dei laboratori. La prima, malgrado i problemi logistici legati al setting di intervento, ha favorito un incremento di consapevolezza negli operatori rispetto alle difficoltà che caratterizzano i minori ed un potenziamento della pratiche educative sul campo. La seconda ha permesso di unire le expertise, consentendo agli educatori di assimilare i contenuti teorici e pratici e ai ricercatori di sperimentarli sul campo. La non conoscenza della lingua araba ha limitato le possibilità di intervento effettivo dei ricercatori ma, al contempo, ha favorito un maggiore lavoro di squadra.

In conclusione, la collaborazione ha permesso all'U.d.R. di sperimentare teorie e tecniche sul campo e agli educatori di strutturare il loro intervento con una maggiore consapevolezza rispetto alle buone pratiche da adottare nella relazione d'aiuto con minori in transito.

Keywords: collaborazione, minori, transito, buone pratiche

co4.03

**PEDIATRIC HIV MANAGEMENT IN BURKINA FASO: AN ENDURING
COLLABORATION BETWEEN THE HOPITAL ST.CAMILLE IN
OUAGADOUGOU, BURKINA FASO, THE UNIVERSITY CHILDREN'S
HOSPITAL IN BRESCIA AND THE NGO MEDICUS MUNDI ITALIA**

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The HIV pandemic has its peak in sub-Saharan Africa, children are the most under-diagnosed and under-treated group and prevention of vertical transmission is a top priority. The University Children's Hospital in Brescia is working with the Camillian Fathers in Burkina Faso to implement successful management of HIV in children.

The project is part of the ESTHER framework and is logistically organized by Medicus Mundi Italy. Since 2003 there is always one expatriate pediatric resident from Brescia in rotation in Ouagadougou to work side-by-side with a local physician in the HIV outpatient clinic and the pediatric ward. Senior staff from Brescia do at least 3 supervision visits per year.

Beside clinics, much effort is put on education and training of local personnel, development of guidelines and logistics.

Over the years more than 300 HIV infected patients have been followed, many have been passed on to adult clinics. Actually 152 children are on therapy (130 first line, 21 second line, 1 third line). We also developed an individualized dose antiretroviral-combination suspension.

In 2014 there were 140 admissions for a total of 2332 days among HIV positive children, mostly for start or switch of antiretroviral therapy, but also for malnutrition, malaria or other acute infections, while over 4000 visits have been performed in the outpatient clinic.

Thanks to the implementation of an effective prevention of mother to child transmission program vertical transmission rate has fallen.

Keywords: HIV, children, PMTCT, cooperation, education

co4.04

LA FORMAZIONE COME PUNTO DI CONNESSIONE TRA SAPERI E PRATICHE, TRA LOCALE E GLOBALE

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Nel 2008 nasce in Trentino il Centro per la Formazione alla Solidarietà Internazionale, associazione costituita da quattro soggetti locali che in modo distinto ma interdipendente si occupano di cooperazione internazionale (CI): autorità locale, università, federazione delle cooperative e fondazione privata.

Il Centro è espressione di una politica con cui Trentino si è dotato di un ente con funzione di raccordo tra soggetti che intendono rafforzare il proprio lavoro congiunto sui temi della CI. La CI è intesa come opportunità di un territorio di entrare in relazione con “l’altrove” in modo responsabile. Il Centro ha inoltre un ruolo di raccordo tra livello locale e nazionale/internazionale nel presentare il sistema della CI trentina e al tempo stesso portare in Trentino dibattito e pratiche significative maturate in ambito nazionale e internazionale.

La presentazione illustra come il Centro abbia attivato la connessione tra mondo accademico e associazioni che operano nella CI. Saranno evidenziate le attività congiunte avviate dal Centro e l’Università di Trento a livello istituzionale (presenza negli organi del Centro), formativo (educazione formale e non formale) e progettuale (studi, convegni, pubblicazioni) e saranno evidenziate le modalità con cui si realizzano tali attività.

La crescita delle associazioni (e quindi del Trentino) e la divulgazione del sapere accademico sono obiettivi perseguiti dal Centro facilitando l’incontro tra soggetti che, seppur con ruoli diversi, siano in grado di parlare un linguaggio comune, porsi obiettivi condivisi e coniugare teorie e pratiche. Il lavoro di raccolta ed elaborazione del Centro intende collocarsi come punto di raccordo tra chi realizza attività di CI (le associazioni) e chi le convalida a livello scientifico (Università).

Keywords: formazione, partenariati territoriali, sviluppo locale

co4.05

INTEGRATION UNIVERSITY-NGOs: ADVANTAGES OF A TRILATERAL PARTNERSHIP IN COLOMBIA

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The Research Laboratory on Appropriate Technologies for Environmental Management in resource-limited Countries (CeTAmb LAB) of the University of Brescia (Italy) has established in 2012 a partnership with the *Asociacion Campesina del Valle del Rio Cimitarra* (ACVC), Colombia, to technically and politically support their mission: safeguarding and protecting the environment by promoting a conscious exploitation of the territory. This cooperation came from local contacts of a Colombian PhD student at the time he realized his research experience at CeTAmb LAB.

The collaboration was enlarged in 2014, to the Barrancabermeja's University of Peace (UNIPAZ), Colombia, to expand the partnership by focusing on a local technical support.

The main theme of collaboration is to develop systems and technologies for remediating soil and water contaminated by mercury resulting from informal mining of gold, and in the meantime to sustain local campaigns to raise awareness on the prevention and protection of land.

The logistical and scientific endorsement of UNIPAZ and the ACVC rootedness on the territory has expanded the range of activities and research projects, linking the academic investigation to real local needs in order to help the local partners to preserve the rural area of the reserve. The main difficulty is to put in communication these two realities, in a context where the political situation is stressed by the strong interest that are focused on the Colombian territory.

The trilateral cooperation has a multiple function, to join the real problems of the territory to academic research, enabling the practical application of the solutions developed by students, researches and experiences.

Keywords: mercury, partnership, research, prevention, protection

p4.01

SOLAR COOLING FOR FOOD PRESERVATION: TECHNOLOGY REVIEW AND DESIGN OF A STAND-ALONE SYSTEM FOR FISH PRESERVATION IN MOZAMBIQUE

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Food loss and waste is a critical problem that affects the wide world. In developing countries, it concerns the first stages of food supply chain, in particular harvest and conservation. Regarding the latter, an adequate conservation system is hardly present, since refrigeration techniques rely on access to reliable and affordable source of energy (either electricity or diesel), often lacking in rural areas. A great deal of effort is directed to develop alternative technologies to reduce perishable food losses, as stand-alone cooling systems powered by solar energy.

In the paper, authors show their work of MSc. thesis, born from a collaboration between Politecnico di Milano and the NGO CeLIM. The work consists of the design and the feasibility study of a solar cooling system for food preservation. Specifically, it concerns a particular case study concerning the problematic fresh fish preservation in the Mozambican province of Zambezia, where CeLIM is operating to improve fishermen and merchants conditions.

A brief review of existing prototypes illustrates some cooling systems developed for food preservation in rural contexts.

The analysis of the context, consisting of the individuation of the stakeholders and their needs, brings to identify the problem and to define objectives and strategy. The operation of different types of system configurations is simulated with a Matlab code, developed by Authors in order to select the suitable system to propose to CeLIM.

Finally, a decision making process leads to define the most appropriate solution. The results obtained aim to suggest possible technical solutions to CeLIM for the realization of its project.

Keywords: food preservation, ice, Mozambique

p4.02

**UNIVERSITY OF BRESCIA, MEDICUS MUNDI ITALIA (MMI) AND
THE DISTRICT OF MORRUMBENE IN MOZAMBIQUE: WORKING
FOR THE NATIONAL TUBERCULOSIS (TB) CONTROL PROGRAM
(NTCP)**

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Mozambique is among the 22 TB high burden countries, with an estimated incidence rate of 552 cases/100,000 and a case detection rate as low as 37% in 2013. Since 2008 Medicus Mundi Italy (MMI) operates in Morrumbene District, where TB case detection is about 39%, ranking as the lowest in the Province. Strengthening TB diagnosis and treatment is a recognized local priority.

We aimed at: 1) creating a collaboration between MMI and local partners based on common needs; 2) increasing the number and improving the quality of sputum sample collection and examination at peripheral sites; 3) increasing the number of TB cases detected in the District.

A two-day training session was organized and implemented by MMI. 11 Health Workers from 11 PHC Centers were invited to attend. A resident physician in Infectious Diseases from the University of Brescia contributed to organize the course. The local staff acting in TB care was involved to identify the major educational needs and provide the participants with specific skills. Pre and post-tests were realized to evaluate the course impact.

All the participants completed the course. The mean rate of correct answers was 43.8% in the pre-test, and increased up to 74.4% in the post-test, with an improvement of 69.8%.

The involvement of three actors (University of Brescia, MMI and Health District of Morrumbene) showed several positive features: the University ensures expertise in formal training, besides a stimulating experience for resident physicians; MMI played a key role to adjust educational aims to local needs; the beneficiary achieves a better knowledge and expertise for health workers. A mentoring approach is needed to verify the impact of training on clinical practice.

Keywords: tuberculosis, MMI, Morrumbene, Brescia University

p4.03

EVALUATING INCOME GENERATING ACTIVITIES PROGRAMS: HOW UNIVERSITY RESEARCH CAN STRENGTHEN NGOS WORK ON THE FIELD. AN EXPERIENCE FROM COTE D'IVOIRE

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Goal of the paper is to show how University can contribute to NGOs' intervention in developing countries by outlining the functioning, as well as strengths and weaknesses, of a particular type of household economic reinforcement measure, in order to trigger a process of reflexivity to enhance the quality of the service delivered.

The paper is based on a longitudinal multi-method case study focused on Ivorian urban household members (responsible for orphans or vulnerable children, OVC), who qualify for economic strengthening and form groups to implement income-generating activities (IGAs) with the support of Italian NGO AVSI and its local partners, within the framework of a USAID-sponsored program. Data were gathered through qualitative group interviews (No.18) and structured individual questionnaires (No.41) administered to the members of No.10 collective IGAs across two different waves (2013 and 2014). This study is part of the impact assessment of AVSI initiative in Cote d'Ivoire (N=768).

The research confirmed the effectiveness of AVSI approach (working with families, collectively, to develop human, economic and social capital) but also highlighted some aspects of the collective IGAs' organization that need to be strengthened (preliminary market assessment, technical training and group dynamics management, work-life conciliation, etc.), as well as criticalities in the relations with the local partners. Research also showed that cases of failure generate a distrust of groupwork, which is difficult to recover.

Through empirical research we gave indications that AVSI immediately applied. The results have also been the basis for programming next AVSI intervention in the country, thus showing the relevance of the academic contribution to the NGOs' intervention.

Keywords: impact evaluation, University research, NGO

p4.04

THE POTENTIAL OF COLLABORATION BETWEEN NGO AND UNIVERSITIES BETWEEN PRACTICALITY AND RESEARCH

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The CeTAmb LAB (Research Laboratory on Appropriate Technologies for Environmental Management in resource-limited Countries), University of Brescia, is currently partner in a cooperation project managed by the Italian NGO ACRA CCS, aimed at improving health and hygiene conditions of poor communities living in the peri-urban areas of Iringa Municipality, Tanzania. The CeTAmb LAB is, together with BOKU (University of Natural Resources and Life Sciences), technical partner in collaboration with local and international institutions. The interaction between NGO and Universities in cooperation projects offers important opportunities of sharing knowledge and competencies. It helps academics in increasing operational and professional skills, while providing NGOs the possibility to research and exploit innovative tools and methodologies. This relation, if adequately structured, has a huge potential in incrementing the value of partners' work and actions carried out in international projects.

Keywords: research, international cooperation, sanitation

p4.05

UNIVERSITÀ, ONG E COOPERAZIONE DECENTRATA: QUALE INTEGRAZIONE?

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Sempre più spesso si parla di approccio integrato ai progetti della cooperazione internazionale allo sviluppo, dove le competenze specifiche dei diversi attori della cooperazione possano essere messe a frutto in un quadro concertato, rispettoso delle normative locali e sostenibile.

Il presente lavoro nasce dalla volontà di integrare le esperienze concrete della cooperazione decentrata della Provincia autonoma di Bolzano in Burkina Faso nell'ambito dell'approvvigionamento idrico, con la collaborazione del CeTAmb LAB dell'Università di Brescia.

L'obiettivo della presente ricerca è quello di individuare e valutare possibili pratiche idriche sostenibili e condivise nel Comune di Dori (Burkina Faso– West Africa), analizzando in particolare gli aspetti legati all'uso promiscuo dell'acqua di quaranta pozzi: sia ad uso potabile che per l'allevamento.

Il lavoro è stato svolto in concertazione con le autorità locali del Comune di Dori. Sono stati studiati: a) i piani di sviluppo locali, redatti dalle amministrazioni territoriali, b) la legislazione nazionale in materia di decentralizzazione e di gestione delle risorse idriche e c) le linee guida dell'OMS sull'acqua potabile. Si è acquisita la cartografia ufficiale della regione del Sahel e si è proceduto alla mappatura dei 40 waterpoints (pozzi per l'approvvigionamento idrico).

Durante la missione in Burkina Faso è stata realizzata una prima campagna di prelievo da una decina di waterpoints e sono stati valutati gli aspetti fisici e i caratteri organolettici (colore, aspetto, odore/sapore, sedimento, temperatura, conducibilità elettrica specifica).

Successivamente sono state effettuate le analisi chimico-fisiche e le analisi microbiologiche di alcuni dei pozzi realizzati e di altre fonti di approvvigionamento idrico presenti: carica batterica totale, *Escherichia coli*, *Enterobacteriaceae* e loro sviluppo a 12h, 24h e 48h e le analisi, in collaborazione con l'Arpa della Provincia di Bolzano.

I quaranta waterpoints inizialmente previsti per uso animale vengono usati anche dalla popolazione locale, a causa della scarsità di acqua principalmente nella stagione secca (novembre-maggio).

È prevista una ulteriore campagna di prelievo dei campioni, di valutazione dei sistemi di protezione dei waterpoints realizzati e di valutazione dei metodi di gestione e di manutenzione dei waterpoints.

Keywords: Burkina Faso, acqua, cooperazione decentrata

PARALLEL SESSION P5

PEDAGOGICAL APPROACH FOR SUSTAINABLE DEVELOPMENT AND HERITAGE VALORIZATION

co5.01

PROMUOVERE L'EDUCAZIONE ALIMENTARE PER IL BENE COMUNE: QUALE RUOLO PER LA COOPERAZIONE DECENTRATA?

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Una maggiore consapevolezza delle relazioni che il ciclo alimentare intrattiene con tutte le componenti della vita umana e dell'importanza dell'interdipendenza dei legami fra le persone che vivono su questo pianeta e della complessità che da ciò consegue, costituisce un punto di vista strategico per comprendere e orientare alcuni dei principali elementi costitutivi del nostro modello di sviluppo. A partire da semplici mutamenti negli stili di vita e di consumo delle singole persone, è possibile dunque influenzare la struttura del nostro modello di sviluppo a diverse scale, dal locale al globale. In questo processo è fondamentale il ruolo dell'educazione alimentare nella costruzione di una cultura del "noi". La cooperazione decentrata, per alcune sue caratteristiche di visione e di modalità di azione, può rappresentare un contesto privilegiato, per veicolare con una maggiore efficacia i contenuti e gli intenti dell'educazione alimentare. Obiettivo dell'articolo è di approfondire quale contributo possa apportare la cooperazione decentrata ad un'educazione alla sostenibilità, a partire dall'approfondimento di un'esperienza di formazione condotta dal Settore Affari Internazionali della Regione Piemonte e dal Consorzio delle ONG Piemontesi (COP) nell'ambito del progetto "Regioni per un'educazione allo sviluppo sostenibile e alla solidarietà internazionale" (REDDSO). Il corso di formazione rivolto ad insegnanti della scuola secondaria di I e II grado, è analizzato alla luce dell'articolazione, dei suoi contenuti e delle aspettative e risultati conseguiti tra i partecipanti, rilevati mediante la somministrazione di un questionario ex ante ed ex post. L'analisi del caso studio mostra come l'approccio e le modalità di progettazione della cooperazione decentrata rappresentino un contesto favorevole alla trasmissione e apprendimento dei contenuti di un'educazione alimentare orientata al bene comune. Tuttavia, un aspetto che necessita di essere rinforzato in futuro, è la diffusione della conoscenza di questa forma di cooperazione e delle sue potenzialità operative ed educative fra la società civile.

Keywords: cooperazione decentrata, bene comune, educazione alimentare, educazione alla sostenibilità

co5.02

FROM MDGS TO SDGS: GEOGRAPHIC EDUCATION AND GLOBAL CITIZENSHIP

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The year 2015 marks the transition from MDGs to SDGs, the latter aimed to a more concrete sustainability inserted on the sharing of responsibilities. This reminds the pivot of education for an open, active, inclusive, sustainable and feasible citizenship in a context of geographical complexity.

This contribution presents the actions that since 2000 the World Social Agenda (WSA) - a program of Fondazione Fontana - carries out with the schools of all levels in the territories of Padova and Trento. About 4.000 students and hundreds of teachers have been involved in this annual project studying, reflecting and implementing concrete actions concerning global problems in a transcalar perspective. During the last eight years, the WSA has re-evaluated each MDG looking for critical situations and opportunities in relation to the Universal Declaration of Human Rights.

The methodological approach, based on active pedagogy and on community driven development, allowed to create networks that led to: a fruitful integration between formal and informal education in the viewpoint of lifelong lifewide learning; a higher permeability among life, academic, scholastic and territorial knowledge and a wider awareness of the values of cooperation and peace.

The multiple belonging of networks inhabitants - if conveniently recognized and legitimated - open to cooperative education with other subjects of the territory. These connections allow further openness or relationships strengthening for a deeper integration of knowledge and practices, that, in the forthcoming 2015-2030 period, will find future advancements centered on peace, development, environment, that are bases of the next global agenda.

Keywords: geography, sustainability, network, global citizenship

co5.03

EXPERIMENTATION IN EL SALVADOR OF MODELS OF VOCATIONAL TRAINING AS A TOOL FOR OPPOSING ORGANIZED YOUTH VIOLENCE

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In the last decades, the northern region of Central America has experienced an accelerated growth in youth violence and organized crime. The phenomenon is associated with historical, political and social factors. There exist numerous programs of international cooperation, which involve training as a useful means of preventing and reducing youth violence. The model of “Escuelas Tallers”, which has been developed and adopted in Latin America since 1985 by the Spanish Agency for International Cooperation for Development (AECID) through the creation of 48 application programs, was analysed. This paper presents the methods and results of a experimentation, which is currently being carried out in El Salvador, of new models of training in professions related to the preservation and conservation of cultural heritage, directed towards promoting the employment and inclusion in the workforce of youths living in areas of high social risk, have been developed in order to support the development policies of the country, particularly with regards to the fighting of poverty and the prevention of the spreading of youth violence, a major cause of the deficit in the country’s security. The major innovations of the model are the following: the Escuela Taller is now part of the public training system, is itinerant, meaning that it operates in different cities, with the involved municipalities sharing costs; the trained groups are organized in cooperatives that are at the service of the different local realities. In this way an on growing process is generated, which, on the one hand, acts on the social field, opposing the participation of youths to organized crime, on the other it produces tangible effects in the recovery of the traditional and widespread building trade and the handicrafts in the process of disappearing: essential components of the heritage that determine the socio-cultural identity.

Keywords: crime, training, identity

co5.04

**UN'ESPERIENZA DIDATTICA PER LA CONOSCENZA,
VALORIZZAZIONE E RECUPERO DEL PATRIMONIO
ARCHITETTONICO E PAESAGGISTICO DELL'ALBANIA**

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Il contributo intende illustrare l'attività di ricerca, le esperienze didattiche e le collaborazioni scientifico-culturali sviluppate da quasi un decennio presso il Dipartimento di Scienze dell'Ingegneria Edile e dell'Architettura del Politecnico di Bari per la conoscenza, valorizzazione e recupero del patrimonio culturale dell'Albania, in un momento in cui questo paese frontaliero si sta orientando ad uno sviluppo territoriale e urbano coerente con la sua identità culturale e i suoi valori ambientali e si sta aprendo allo sviluppo di un turismo "responsabile" e "sostenibile".

Nella convinzione che la valorizzazione del patrimonio di un paese sia da affrontare con una visione globale, nella sua interscalarità e multidisciplinarietà, queste attività interessano molteplici aree tematiche: conoscenza, valorizzazione e recupero dei paesaggi storici, antropici e naturali; conoscenza e riqualificazione dell'architettura e città moderna italiana in Albania; valorizzazione dell'archeologia industriale e recupero delle aree industriali dismesse; valorizzazione di siti archeologici e architettura museale.

Si tratta di un'esperienza didattica, di ricerca e di cooperazione, articolata nei vari campi di pertinenza del Corso di Laurea in Architettura, in collaborazione con le istituzioni territoriali e culturali albanesi e italo-albanesi (tra cui le Ambasciate presenti nei due Paesi, l'Istituto Italiano di Cultura a Tirana, alcuni Ministeri albanesi, l'Istituto di Cultura dei Monumenti, l'Istituto Archeologico d'Albania, il Politecnico di Tirana e altre Università albanesi), che si sta dimostrando particolarmente fruttuosa sia da parte italiana sia albanese, offrendo preziose occasioni di scambio interculturale

Keywords: patrimonio culturale, architettura città e paesaggio albanese, cooperazione internazionale

co5.05

IL CIBO TRA CURA E RESPONSABILITÀ

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In tutte le culture il momento del pasto è considerato un rito importante che stabilisce i ritmi e le norme sociali della comunità, è parte della nostra narrazione del mondo e bene culturale. L'elaborazione intorno al tema del cibo non è tuttavia priva di ambiguità e rilievi critici ed è connotata dall'imprescindibilità del riferimento alla dimensione etica e alla riflessione sulle pratiche educative. In una società incentrata sul consumo come quella occidentale non è infatti facile modificare abitudini già consolidate legate allo spreco e conservare il ruolo centrale del cibo nella costruzione dell'identità sociale, configurandolo come bene comune. Il progetto illustrato nel presente contributo si propone di realizzare, attraverso lo studio di buone pratiche di recupero delle eccedenze alimentari nelle mense scolastiche bresciane, la costituzione di una rete di scuole per progettare percorsi pedagogici e didattici che prevenano il problema dello spreco di cibo in famiglia e a scuola. Obiettivo principale è dare vita a una vera e propria food education orientata ad un'inedita progettualità politico-educativa condivisa. Agire localmente significa volgere al contempo lo sguardo al globale e al futuro per considerare il cibo come diritto di tutti e non come un prodotto sul quale è possibile speculare trascurandone il valore più intrinseco. In questo contesto l'elaborazione pedagogica e l'azione didattica sono chiamate, ad individuare indicazioni e azioni che sostengano, attraverso il discorso sull'alimentazione, la crescita e la formazione umana, designando un'innovativa prospettiva euristica. Orientare a un cambiamento culturale nel segno della sostenibilità implica trasformare il territorio in una comunità educante, per una cittadinanza responsabile e competente.

Keywords: sostenibilità, cura, educazione, spreco

co5.06

COMUNICAZIONE PER LA SOSTENIBILITÀ: ENVIRONMENTAL AND EDUCATIONAL HUB

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La ricerca qualitativa, condotta da Alta Scuola per l'Ambiente (UCSC), ha censito e interpretato lo stato dell'arte delle buone pratiche sostenibili nell'area bresciana al fine di elaborare un'ipotesi di educazione allo sviluppo sostenibile che supporti la responsabilità e la connessione tra soggetti, sistemi economici, sociali e ambientali.

Obiettivo del lavoro è quello di analizzare le attività “sostenibili” realizzate da enti/istituzioni del settore pubblico e privato, individuandone le dimensioni innovative e formative; diffondere i risultati del monitoraggio e la loro interpretazione; istituire un HUB permanente, luogo di ricerca avanzata, confronto, collaborazione e coordinamento.

Sono state raccolte e interpretate 205 best practices relative alle aree tematiche “climate change”, “sustainable energy for all” e “food management”, in sintonia sia con i nuclei tematici e i bisogni formativi dell'educazione alla sostenibilità, sia con le linee proposte dai recenti documenti e indirizzi internazionali: disposizioni dell'UE sul Climate Change, l'International year of Sustainable energy for all (ONU 2012), Nutrire il Pianeta, Energia per la Vita (EXPO 2015).

I risultati portano a tracciare un profilo dell'identità sostenibile e a stilare un piano di orientamenti per la governance locale a sostegno dello sviluppo di nuovi stili di vita e buone pratiche sostenibili. L'HUB scaturito da questo lavoro di ricerca si propone, anche attraverso la realizzazione di una bacheca online pubblica sul sito di ASA e la produzione di materiale multimediale, di divenire uno strumento di comunicazione orientato a favorire il dialogo tra soggetti portatori di interesse “ambientale”, promuovendone la partecipazione e favorendone la formazione in relazione alla sostenibilità.

Keywords: sostenibilità, comunicazione, formazione

co5.07

SVILUPPO UMANO E AMBIENTE. PROCESSI FORMATIVI E CONOSCENZA SCIENTIFICA PER CUSTODIRE IL CREATO

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La ricerca qualitativa, condotta da Alta Scuola per l'Ambiente, ha analizzato la proposta formativa volta a promuovere lo sviluppo sostenibile tra le professioni, le organizzazioni e la governance attuata dal 2008 al 2015 dall'Università Cattolica del Sacro Cuore, nella sua alta formazione. Obiettivo del lavoro è designare modelli formativi di eccellenza che promuovano conoscenze, competenze e riflessione critica per lo sviluppo di green jobs, attraverso l'analisi dell'esistente e la comparazione con format internazionali.

La formazione è considerata dalla suddetta ricerca un luogo euristico in ordine alla coltivazione delle risorse umane e fattore vitale di trasformazione della società, nelle sue dimensioni sociale, ambientale ed economica.

Il lavoro ha esaminato: i profili di ingresso degli studenti, i ruoli professionali rivestiti, le organizzazioni coinvolte nell'investimento formativo, le collaborazioni attuate, la proposta didattica, i tirocini erogati, le progettazioni e la ricerca realizzate, l'azione di fund raising, i cambiamenti per l'attualizzazione del corso di master in sette anni di edizione e le ricadute sui contesti organizzativi pubblici e privati.

Lo studio ha portato ad evidenziare dimensioni innovative ed indicatori di eccellenza della formazione per lo sviluppo umano e dell'ambiente, in linea con le proposte comparate contenute in documenti e buone pratiche internazionali.

I risultati portano a tracciare linee di indirizzo formativo sia dal punto di vista metodologico, sia inerenti a tematiche cogenti per lo sviluppo umano integrale e lo sviluppo sostenibile.

Keywords: sostenibilità, formazione, green jobs

p5.01

DECENTRALIZED COOPERATION AND LOCAL DEVELOPMENT. WITH WOMEN AND FOR WOMEN

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During the past twenty years the engagement of Adl in Zavidovici (Bosnia Herzegovina) has produced an observatory close to the local social problems and the possibility to integrate-in collaboration with the Institute for Social Research of the University of Piemonte Orientale - intervention and training actions in few rural communities.

The objectives are based on integrated actions between training sessions and local development strategies in favor of women and of Zavidovici rural areas.

The methodological approach considers:

- Long term territorial approach for the local development.
- Collection of social needs and training demands.
- Women recipients and operators involved in the decision making process. Women as promoters of local development.

In the past years, thanks to decentralized cooperation programs, it was established Sigurno Mjesto, a Bosnian association which offers support to domestic violence victims. It has become an empowerment and training space for women (pre-natal courses, legal consulting, psychological support, local productions, cooking and food services, activities in schools and rural areas). In 2014-2015 Adl distributed the funding collected to assist women victims of the flood in collaboration with Sigurno Mjesto network, which has contributed to understand the needs of the victims and to choose selection criteria of the recipients. In 2015 Adl is organizing an "after flood" support for the family farming through training sessions having the aim to develop more productive, varied and cleaner farming.

The territorial approach based on "to stay" can put together actions which incorporate social dimensions, different needs, and a lifewide learning oriented towards the social rights, the active involvement, and sustainable development through women agency.

Keywords: territorial approach, women agency, local development

p5.02

THE PROJECT RUSSADE IN THE EDULINK PROGRAM: A STEP OF INNOVATION IN NORTH-SOUTH SCIENTIFIC AND TECHNICAL COOPERATION

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In this communication we report the ongoing project RUSSADE (Sahelian University Network for food security and environmental sustainability) in the ACP-UE cooperation program in higher education Edulink II, setting an international Master degree in “Food security and environmental sustainability”.

The Master is training technicians and researchers able to contribute to the development process considering the interactions between different strategic fields (livestock productions, food security and safety, environmental protection) and increasing the awareness towards a sustainable management of environmental resources.

Courses and training activities are taking place in an innovative higher education vision, offering an integrated and interdisciplinary handling of themes concerning sustainable rural development in a cyclical vision structure, coordinated and shared by Italian and African teachers together.

Our approach is original and innovative because we first formed a network gathering all stakeholders (actors from North, Italy, and actors from South, Burkina Faso, Niger and Chad), who interacted to come out with the RUSSADE project that EU accepted to finance (FED/2013/320-115).

We describe the adopted general character methodology that may be applied elsewhere in North-South Cooperation

Keywords: North-South, technology transfer, network, Sahel

p5.03

CONNECTING RESEARCH AND DEVELOPMENT COOPERATION THROUGH THE TERRITORIAL APPROACH

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Il contributo vuole offrire una riflessione sul concetto di approccio territoriale partendo dal confronto delle declinazioni sviluppate rispettivamente dal mondo della cooperazione e quello accademico. In questo quadro di riferimento, si evidenzieranno gli aspetti principali della ricerca “Patrimonio territoriale e valorizzazione sostenibile di filiere produttive in agricoltura” nell’ambito del progetto europeo Mediterranean CooBEEration.

La cooperazione allo sviluppo sta vivendo una fase cruciale di mutamenti con nuove sfide, tra le pratiche innovative dell’efficacia degli aiuti allo sviluppo e gli ostacoli della crisi economica globale. In questo quadro, assume rilevanza la “cooperazione territoriale” che, a partire dal ruolo politico e istituzionale dei governi locali, coinvolge e dà protagonismo ai molteplici attori del territorio in un’ottica di complementarità e interdipendenza sempre maggiore tra la dimensione locale e quella globale. Punto di contatto fondamentale tra la cooperazione allo sviluppo e il governo del territorio diventa la definizione di uno scenario territoriale integrato, che possa contribuire ad una rinnovata responsabilità multi-attoriale attraverso un approccio basato sul tema di bioregione come area vasta in cui si mantiene l’integrità dei processi biologici, delle formazioni geografiche specifiche e dello sviluppo materiale e sociale delle comunità.

I risultati si basano sui seguenti aspetti: evidenziare il contributo teorico e le ricadute applicative del concetto di approccio territoriale; contribuire alla comprensione degli elementi di connessione tra la salvaguardia della biodiversità e la valorizzazione e gestione del patrimonio territoriale nell’area del Mediterraneo.

Keywords: development cooperation, territorial approach

p5.04

LA VALORIZZAZIONE EDUCATIVA DELLE COMPETENZE LOCALI PER LO SVILUPPO INCLUSIVO E SOSTENIBILE: UNA RICERCA- INTERVENTO NELLE COMUNITÀ MAYA DEL GUATEMALA

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Ricerca-intervento realizzata nell’ambito di un progetto di cooperazione internazionale, che ha avuto l’obiettivo di verificare come l’utilizzo di una metodologia partecipativa consenta di definire processi, strategie e azioni di gestione delle risorse naturali, a partire dalla valorizzazione educativa delle conoscenze e delle competenze espresse nelle pratiche ambientali maya *tzutuj’il*. Lo studio, che adotta un approccio eco-sistemico e interdisciplinare, rileva come la dimensione educativa si intreccia con la valorizzazione del patrimonio culturale, la partecipazione democratica alla gestione delle risorse naturali e le *policy* di sviluppo locale.

Keywords: patrimonio naturale e culturale, inclusione sociale, partecipazione democratica, sviluppo umano locale, educazione degli adulti

PARALLEL SESSION P6

SUSTAINABLE POLICIES FOR URBAN DEVELOPMENT

co6.01

THE ROLE OF CIVIL SOCIETY IN THE PROCESS OF PACIFICATION: THE CASE OF COMPLEXO DA MARE

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Since 2008 the Government of the State of Rio de Janeiro put in place a program to reduce violence in favelas. The program, Unidades de Policia Pacificadora (Unities of Peace Police, UPP) aims to lower the violence rates through a more intense participation of the police in the life of the communities so to enhance cooperation between them and the population, and to develop economically and socially those areas.

This paper focuses on the analysis of the implementation of UPP in the area of Complexo da Maré, and it aims to highlight which role the civil society can have in this process. The main objectives are to understand Maré's complex social network and how its participation can shape the realization of the project, especially for what concerns cooperating with the Government, monitoring and checking what is done and mobilizing the local community.

The methodologies used were open questions interviews to the main actors of local civil society (treated with a simple textual analysis method -tag clouds) and community meeting participation.

The research lead to two results.

First of all, the role of civil society in the implementation of policies is crucial, especially in vulnerable areas such as favelas where the human rights and the rule of law are often disrespected.

Second, the position of civil society actors is often difficult, as there is the risk that the Security Forces use it to legitimate themselves and this can lead to irreconcilable conflicts between the different actors.

To play a crucial role and to create the circumstances for a sustainable pacification the civil society must be cooperative and cohesive and never lose its focus, that is, working to achieve positive result for the community. In this sense the case of Maré can serve as example for other areas.

Keywords: pacification, cooperation, favelas, urban development

co6.02

“UNIVERSIDADES ESTRATÉGICAS” - IL RUOLO DELLA COOPERAZIONE INTERNAZIONALE NEL PROMUOVERE RAPPORTI TRA UNIVERSITÀ E TERRITORIO PER UNA PIANIFICAZIONE STRATEGICA PARTECIPATA

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L'obiettivo del paper è analizzare il caso concreto di un progetto di cooperazione tra università, ONG e entità pubbliche e private che aveva l'obiettivo esplicito di migliorare la capacità delle università di incidere nei processi di pianificazione strategica del proprio territorio. Il Progetto ha coinvolto 7 paesi tra europei e latinoamericani (ITA, ESP, ARG, BRA, COL, PAR, VEN) e 9 università (inclusa l'Università del Molise) per un periodo di 3 anni.

Il ruolo di membro dell'equipe di monitoraggio colloca l'autrice nella posizione di osservatore partecipante permettendole un'analisi non solo delle debolezze identificate all'inizio nella relazione università-territorio e dei risultati ottenuti dal progetto, ma anche dei vari percorsi intrapresi che permettono di identificare le difficoltà incontrate dalle università nell'uscire dalle dinamiche tipiche della docenza e ricerca e sperimentarsi in quelle richieste dalla “terza missione”.

L'analisi si soffermerà su quale è stato l'apporto specifico del progetto di cooperazione (Programma ALFA III) - e delle ONG e attori privati in esso coinvolti - ai processi di relazione Università-territorio già in essere o in fase embrionale, su quali sono stati i processi attivatisi grazie all'esistenza del progetto, e su quali sono i prodotti, le capacità, e i processi che hanno buona possibilità di sostenibilità e replicabilità una volta terminato il progetto.

L'analisi permetterà anche una riflessione sulle due componenti della Terza Missione che caratterizza molte delle università latinoamericane: la Extensio e la Vinculao Tecnológica. Considerate spesso alternative e indipendenti, potrebbero invece rafforzarsi mutuamente contribuendo in forma complementare ad uno sviluppo locale sostenibile.

Keywords: pianificazione, cooperazione, America Latina

co6.03

PRELIMINARY FLOOD RISK MAPPING OF RIVER NIGER IN NIAMEY, NIGER: A SNAPSHOT DECISION MAKING TOOL

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This paper aims to present the preliminary risk mapping and evaluation of river floods in Niamey (population 1.2 million, 123 km² in 2015). The relevance of this activity springs from the 2010-2013 unseasonal floods that generate tens of thousands of victims in the Niger capital city. It brings to the forefront the old planning question of what to do when flood prone areas are occupied by informal settlements. This study has been developed as a capacity strengthening project co-funded by Italian bilateral cooperation (Ministry of Foreign Affairs), Ibimet-CNR, DIST-Politecnico di Torino and National Directorate of Meteorology of Niger. As for methods, risk (R) has been assessed as a function of Hazard (H) and Damage (D): $R = H \cdot D$. The approach is historic. Flood prone area has been observed by satellite during the flood peak of the last 70 years. Hazard is the probability of flood according two scenarios: probable and less probable. Damage is the current value of all receptors (crops and buildings) in flood prone area. Two are the main results: (i) 52% of hot spots are concentrated in 225 hectares only and (ii) protection costs are much lower than the value of exposed receptors. Conclusions are threefold. First, the value of exposed receptors is determined from informal settlements than from vast paddy crops along river banks. Second, resettlement of population in safer areas (the only measure that delete the residual risk) is costly and ineffective: in a short run victims leave remote places where they have been resettled and return to the site they occupied close to downtown. Third, flood risk preliminary mapping is a valuable and low cost aid in decision making: it helps in emergency and even in physical planning as it allows localizing a wide set of measures as flood drills, early warning, raised entrances, elevated latrines and river embankments works.

Keywords: river flood risk, risk mapping & evaluation

co6.04

WATER AND MEGALOPOLIS: USES, CONFLICTS, AND PROJECTS IN MEXICO CITY

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The objective is to show up the complexity of water management in megacities. Open a discussion above the circles of poverty related to water in Mexico City. Water is a priority resource in megacity's lifetime; it is connected with halt and feeding of million people, but has also a social spatial historical character in landscape perception. The morphology linked to social character of water, how is explained through traditional rules, social values and space, can be useful to study, understand and reduce ecological problems? Mexico City founded in the middle of lake systems, is now like a desert of two floor houses, which sustainability is in danger. The research focus on four case study chosen from Pueblos embedded in the city area. They are study across analysis's layers came up from geographical and historical investigation: 1. Supply and drain, 2. Flood protection, 3. Economy and ecology of water, 4. Perception of water as part of the landscape, 5. Pueblos and cooperation.

The result shows a genuine network of handing down knowledge; this network is borne around lakes and river system, it based on specific technique call chinampas, supported by local construction to retain rainwater. Even if it this heritage water system were in a process of endangered also due to the city waste circle, the structure and cooperative attitude still survive.

In conclusion, the marginal areas will be start point to encourage community cooperation projects and integrated planning processes of inclusion aim to look through sustainability considering the place and his environment. The buen vivir, demonstrate in others Latin America countries, is, in Mexico City, expression of water culture. "The key to overcome the crisis is ethics" The question posed by Javier Bogantes it is still open.

Keywords: water, megacity, resource, sustainability

co6.05

PROPOSTE DI AUTO-MIGLIORAMENTO PER GLI SLUM DI FREETOWN (SIERRA LEONE)

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Il percorso di ricerca, sviluppato nell'ambito del Dottorato in Forme e strutture dell'Architettura del Dipartimento di Ingegneria Civile e Architettura dell'Università di Parma, riguarda gli slum della città di Freetown, capitale della Sierra Leone, con l'obiettivo di indagarne l'organizzazione spaziale, le tecnologie costruttive prevalenti, le dinamiche di auto-organizzazione delle comunità e le relazioni con il sistema legislativo locale.

Il lavoro si basa su analisi multidisciplinari svolte sul campo in numerosi slum di Freetown mediante mappature, censimenti, interviste e redazione di abachi relativi alle strutture di organizzazione spaziale maggiormente diffuse. Particolare attenzione è stata posta ai materiali utilizzati e alle buone pratiche di autocostruzione.

Lo slum di Kroo Bay, assunto come caso studio, è stato oggetto di molteplici sopralluoghi in un arco temporale di 5 anni (2008-2013).

Tali approfondimenti hanno consentito la realizzazione di un'indagine diacronica sull'evoluzione dell'insediamento che, a dispetto della labilità attribuita "per definizione" agli slum, ha permesso di verificare la permanenza della struttura spaziale originaria dell'insediamento stesso (spazi aperti, allineamenti, assi principali), evidenziando anche la presenza di regole condivise all'interno della comunità in grado di governarne l'evoluzione e l'espansione.

Gli approfondimenti su tali codici di auto-organizzazione e sulle buone pratiche già intraprese dai residenti in alcuni insediamenti hanno condotto a delineare un modello di auto-miglioramento svincolato dalle rigidità dei processi di legalizzazione e basato sulla promozione di azioni autorealizzate nell'informalità attraverso regole orali condivise, impiego di tecnologie povere e materiali di recupero a bassissimo costo.

Keywords: slum, Africa occidentale, autocostruzione, automiglioramento

co6.06

PERCORSI FORMATIVI SPERIMENTALI E PATRIMONIO TERRITORIALE. CARITALENTS: UN PROGETTO DI COOPERAZIONE CON LE WEST INDIES

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Il progetto CARITALENTS, finanziato dal MAECI/Cooperazione Italiana, è frutto della collaborazione tra Università di Firenze e delle West Indies.

Suo obiettivo generale è quello di sperimentare in partenariato innovativi percorsi di formazione diretti sia ad educatori che ai loro studenti, appartenenti ad aree a forte rischio sociale.

La tematica è quella della valorizzazione delle risorse locali (economiche, ambientali, culturali) da rendere esplicite ed utilizzare nella progettazione partecipata della trasformazione urbana e territoriale.

La tesi di fondo è: incrementando la consapevolezza dei giovani nei confronti del proprio ambiente culturale e naturale li si mette in condizione di proporsi come protagonisti del cambiamento, promotori/progettisti di risposte alle criticità ambientali e socio-culturali

L'argomento proposto si colloca nell'ambito della formazione e della ricerca sperimentale, teorica, metodologica e applicata in progetti di cooperazione internazionale.

Punto di partenza dell'approccio metodologico è una visione che considera in modo inscindibile le due componenti di uno sviluppo autocentrato e sostenibile: il potenziale umano e il patrimonio territoriale. Il percorso formativo si propone di stimolare il primo attraverso il trasferimento di metodologie e strumenti mirati alla conoscenza consapevole del secondo.

L'obiettivo è quello di definire un percorso di coinvolgimento e qualificazione di fasce giovanili per metterle in grado di individuare valori e potenzialità presenti nel territorio da utilizzare per trasformazioni del contesto in senso autosostenibile, creando adeguate fonti di reddito.

A tale scopo vengono delineati una serie di apporti innovativi quali l'utilizzo di forme tecnico-artistiche più facilmente recepibili da parte dei giovani (video-documentazione, story-telling, emomapper, musica etnica e sue contaminazioni, fotografia, comics, etc.) nel trasmettere in modo immediato ed efficace messaggi alternativi a quelli pervasivi dei modelli di consumo globalizzati.

Nel ventaglio dei risultati, centrale è l'attesa incrementata possibilità per i giovani partecipanti di inserirsi con maggiore consapevolezza e propositività nei processi di sviluppo locale.

Keywords: formazione, cooperazione, patrimonio, territorio, autosostenibilità

co6.07

THE GECEKONDU ORIGIN OF GAZI AND ZEY TINBURNU IN ISTANBUL: THE INFORMAL CITY MADE POSSIBLE

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The paper considers two former gecekondu settlements of Istanbul, looking for relationships with the urban features belonging to the city at the time preceding the genesis and development of informal neighbourhoods. In the Mediterranean, the production of informal urban habitat contributes with the formal one in reshaping the urban identities, thus providing new opportunities for the material expression of the people's cultural background, in the field of the housing and settlement practices.

The paper examines three study areas, comparing the features of the urban fabric with those of the historical city and trying to reconstruct their spontaneous generative paths. Three operational tools for the analysis of informal settlements are defined: the analysis of the urban structure; the direct exploration of the urban landscape; the self-perception inferred from vernacular photographs.

The results show that the settlement patterns may result from models that are the legacy of age-old cultural elaborations, or by their contamination with cultural inputs coming from the modern and contemporary imaginary. Under certain conditions, informal practices are able to produce a habitat with significant levels of consistency and liveability, based on a strong adherence to the cultural and settlement model expressed by the inhabitants.

The paper argues that, to make this possible, priorities are the slowness of change and the high degree of shared meta-projectual decision inside the settlement process. Through appropriate policies of progressive regularization and institutionalization that recognize these qualities, this type of informal settlement can evolve towards established forms of habitat with a defined urban identity.

Keywords: informal settlement, gecekondu, urban identity

co6.08

UNDERSTANDING THE COMPLEXITY OF URBAN INFORMALITY: FROM THE DICHOTOMY LEGAL/ILLEGAL TO THE HETEROTOPIA

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With the definition “urban informality” we identify a complex phenomenon with a wide range of spatial manifestations in different geographical and cultural context.

This contribution aims to reflect on the need to abandon the historical and simplistic dichotomy between legal and illegal in order to understand informality as a multidimensional and structural manifestation of city development, especially in global south contexts but more and more also at different latitudes.

I will analyse the evolution of rhetorical path concerning informal settlement in the Brazilian context to underline the weight of the ideological aspect on the proposed solutions during the time.

As a mine result I suggest the use of the Foucaultian figure of Heterotopia that allow us to underline the political and societal component of the phenomenon, without leave aside its dual and opposite nature. Informality represents the other side of the system, and at the same time one of the mayor challenge for urban planners and society.

Keywords: informality, Brazil, heterotopia

co6.09

FROM GLOBAL CLIMATE GOVERNANCE TO RESILIENT INFRASTRUCTURE IN SUB-SAHARAN CITIES

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The development and research agencies and institutions are involved in implementing and debating global climate change governance agenda that touch on local authorities and urban issues, fostering collaboration between knowledge, policy and practice domains and actors. The contribution focuses on policy mobility related to the implementation of global CC governance agenda in sub-Saharan cities. It aims to identify the main implication of the agenda in terms of policies and programmes for resilient infrastructure.

Reviewing scientific literature and policy documents on resilient infrastructure in sub-Saharan cities the paper analyses them through the lenses of political ecology and post-structural/postcolonial approach. It acknowledges that inadequate attention has been paid to the reconfiguring of urban infrastructures, and to the risk that global models and standardized infrastructure result in increased discrimination, and bypass low-income and politically powerless places and people.

The analysis shows that the criticism to global models of secure urbanism and resilient infrastructure provides a theoretical framework and highlights that the interactions between infrastructure provision and urban socio-spatial configurations is both context-shaped and -shaping. However, it is not possible to generalize about the local effects of global infrastructure models, and specific risks need to be investigated.

Therefore, there is need to better understand how actors involved in planning, development, management and use of infrastructure, mobilize their interest, models, and means. The different dimensions of infrastructure policies and their context need to be explored through place-based case studies, including normative, environmental, economic and social aspects.

Keywords: resilient infrastructure, policy mobility, Africa

PARALLEL SESSION P7

**PARTICIPATORY APPROACHES AND CONTEXT ANALYSIS
IN DEVELOPMENT COOPERATION**

co7.01

DO PARTICIPATORY VISUAL METHODS CONTRIBUTE TO TRANSFORMATIVE CHANGE AND SOCIAL JUSTICE? BENEFITS AND CHALLENGES IN ENGAGING INDIGENOUS COMMUNITIES THROUGH PARTICIPATORY VIDEO

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Participatory visual research is progressively diffusing within development cooperation across the world. The main reason is that by giving a ‘voice’ to local people participatory visual methods can potentially enable social change through raising awareness of issues, building capacity to engender action and as a vehicle for communicating and potentially influencing decision makers at local, national and global levels. At the same time using visual approaches with local communities brings forward ethical and methodological issues. Researching local communities with visual methods in an ethical way, in particular, invites us to rethink what research can do within development cooperation, what types of research we do, and to reposition power relationships in research processes. What are participants’ and researchers’ differential motivations for using visual methods and how does this affect decision making during the research process? What is the role of technology? How do visual methods contribute to transformative change and social justice? With what limits? In this paper, we reflect on these questions through discussing Participatory Video (PV) experiences of research carried out by the authors in collaboration with Indigenous communities in the North Rupununi, Guyana. PV formed part of the “Community-owned solutions for future environmental challenges in the Guiana Shield, South America” (COBRA) project, a project involving local communities, local, national and international civil society organisations and academic researchers. We conclude that PV can be a powerful tool for identity formation and self-representation as long as it takes into consideration the different motivations, expectations and perspectives of the people involved.

Keywords: indigenous communities, participatory video, research

co7.02

EFFECTIVE PARTICIPATORY PROCESSES AND MULTI-DISCIPLINARY APPROACHES FOR THE ANALYSIS OF A TERRITORY AND THE FOSTERING OF DURABLE AND SUSTAINABLE SELF-MANAGED STRATEGIC PLANNING: THE MA.SA.MA. PROJECT, A RURAL CASE STUDY IN EL SALVADOR

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This contribution presents a participatory and multi-disciplinary approach to the development issues of a deprived area of El Salvador. Here, the various dimensions of sustainability are not taken for granted, and the area is characterized by an unproductive and undiversified rural economy, scarce access to resources and funding, as well as increasing environmental plights.

Thus, appropriate planning and technological actions were drawn up for designing strategies, projects and practices aimed at promoting social development and achieving basic, essential conditions for granting durable acceptable living conditions in a healthy environment.

Participatory, co-planning and co-design processes were tailored and put into action together with the local communities. This helped supporting people's empowerment by increasing their awareness, knowledge, skills, and self-organization capabilities. It also defined an innovative model aimed at overcoming unbalanced decision-making processes and supporting the collaborative work of the population towards the creation of shared development strategies, thought to be environmentally, socially and economically sustainable.

Beside participative territorial analysis, and the subsequent development of guidelines and strategic lines of action, some value-added results have been achieved, such as the strengthening of the relations among local groups, and the creation of a system to share problems and potentials, and respectively solve and enhance them through the formulation of common goals and strategies.

The contribution focuses on the difficulties the project run through, and reflects on the effectiveness of participatory design processes to promote sustainable, innovative models of development within complex environments.

Keywords: community engagement, empowerment, co-planning, sustainability

co7.03

WHAT DOES “FLOOD” STAND FOR? FLOOD RISK AND FLOOD BASED FARMING: THE CASE OF SPATE IRRIGATION IN ETHIOPIA

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Spate irrigation is an ancient form of flood based farming typical of arid climates. It is based on the diversion of unpredictable spate flows in ephemeral river (wadi), using diversion bunds made with local materials, constructed within the river bed.

In the framework of rural development programs in Ethiopia, the modernisation process of spate systems failed to achieve desired results as it did not consider the particular hydrological environment of wadis and it did not involve local farmers in planning rural development interventions. On the other hand, local population shows advanced knowledge in spate flows management and great experience of the local hydrology and environment. The objective of this study was to develop a participatory Diagnostic Analysis (DA) for planning effective improvements in a traditional spate irrigation system, in order to involve local farmers in the future development strategies.

DA of Harele traditional spate irrigation system (Tigray region) was carried out using a Participatory Rural Appraisal (PRA) methodology. PRA focused on spatial, temporal, socio-economical and spatio-temporal aspects of the system, and it was integrated with geographic and meteorological data analysis. System problems were identified and prioritized with local farmers and suitable solution were proposed.

The analysis showed that the main constraints for rural development are represented not only by irrigation structures, but also by flood related problems. The study showed that, rather than an irrigation development focus, a river system approach is more appropriate for future development strategies.

Keywords: spate irrigation, diagnostic analysis, PRA, flood based farming

co7.04

ANALYZING PARTICIPATORY INTERVENTIONS USING SOCIAL NETWORK ANALYSIS: A CASE STUDY IN NORTHEAST BRAZIL

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This paper aims at understanding whether the combination of two policy interventions, based on participatory approach, can support the transformation of the social structure of three agrarian reform settlements (assentamentos) in Northeast Brazil. The two policies are the Brazilian agrarian reform and the creation of a producers' cooperative. The main novelties from factory towns of sugarcane plantations (engenhos) to assentamentos are the presence of households with heterogeneous backgrounds, free use of land and the introduction of new economic activity: family farming.

The question is if the change in the land tenure system and in villages' composition has supported the change of community social structure from hierarchical landlord dependence of sugar cane plantations to a more plural patronage system. Three assentamentos have been sampled in a single municipality as they differ in the ways in which social movements recruited and organized households in the village. The hypothesis is that village formation has created different constitutive and behavioral social networks that influence the capacity of settlements to respond to the two interventions object of analysis.

Based on extensive fieldwork and household survey, multiple social networks were mapped for all the households that permanently reside in each village. The analysis of the history of the three villages' creation and the quantitative analysis of the social networks' configuration shows the three villages have structural differences in social networks' formation.

The paper argues that the settlement that responded best to agrarian reform incentives and producers' cooperative creation is the one where the two constitutive social networks kinship and family-farming employment do not completely overlap.

Keywords: agrarian reform, social network analysis

co7.05

**MANAGING INNOVATIONS IN A TRADITIONAL SYSTEM UNDER
DISTRESS: THE PROCESS OF PARTICIPATORY CULTURAL
ASSIMILATION IN THE CASE OF AN AGRICULTURE
DEVELOPMENT PROJECT IN THE SWAT DISTRICT OF PAKISTAN**

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In response to the two fold crisis occurred in the Swat District (Pakistan), the 2009 internal displacement and the 2010 floods, the Italian Development Cooperation (MAECI/DGCS) identified a rural development program, aimed to reduce vulnerability to food insecurity and alleviating poverty of the affected farming community, implemented by the Overseas Agronomic Institute (IAO), introducing a set of socio-cultural innovations funneled through a technical assistance scheme but based on the local human capital empowerment. This has been done in a conservative social context, characterized by hegemonic masculinity (Barth;1965), under the pressure of a post-conflict and disaster scenario.

How has been possible to deliver cultural innovation within a crisis affected traditional system?

To achieve socio-economic sustainability, while proposing elements of socio-cultural innovation, a research-action model has been developed by overlapping the two roles on the coordination unit (De Sardan, 1995). Increasing knowledge about the context, while using qualitative methods of data collection (e.g. life stories), has driven to a significant local acceptance of the innovations.

The empowerment of human capital, in a post-crisis context, is challenging but possible. However the focus should be on the local cultural assimilation of the proposed innovations. The lubrication of such a process, often oxidized by a top-down approach on the donor side, might consist of a detailed preliminary context analysis, by adopting a participatory approach to problem-solving, while showing the willingness of the donors to adapt to local cultural patterns (particularly in terms of time perception) possibly filtered through a participatory observation and particularly in contexts dominated by uncertainty.

Keywords: Pakistan, participation, empowerment, development, assimilation

co7.06

ASSESSING AID EFFECTIVENESS WITHIN A MULTI-LEVEL GOVERNANCE PERSPECTIVE: THE CASE OF AN ITALIAN COOPERATION VALUE CHAIN PROJECT IN RURAL ETHIOPIA

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The Paris Declaration on Aid Effectiveness and the following Accra Agenda for Action are widely recognised as reference point in the international development cooperation.

This paper presents the results of a field evaluation study carried on between July 2013 - March 2014 in order to evaluate the degree of compliance of the Agricultural Value Chains Project in Oromia (AVCPO), funded by the Italian bilateral cooperation, with respect to the Paris principles. Moreover, a large scale Impact Evaluation has been implemented to assess the impact of the project on key agricultural and social variables.

The main objectives of AVCPO require dealing with the systemic governance of the Durum Wheat VC, facilitating linkages and engagement opportunities in decision-making at all levels in order to foster resource mobilization. Nonetheless, complex VCD initiatives like AVCPO may face difficulties regarding collective empowerment of farmers, M&E of implemented activities, direct impact on poverty and inequality reduction.

A tailored methodology, based on mixed methods, was elaborated to assess the degree of compliance of AVCPO with regard to the Paris principles. In particular, this methodology relied on four main tools for data collection: semi-structured interviews with key informants, SWOT Analysis, Structured Focus Group Discussions (SFGDs) and a survey involving 800 farmers living in areas included and not included in AVCPO.

Summarising the main findings, AVCPO is recognised to have boosted a process of self-expansion of the VCs, by enhancing multilevel governance mechanisms, which directly affect community and family well-being. So far, the key achievement of the project lies in the upgrading of poor farmers as leading actors in the large-scale production of high-quality crops.

Keywords: impact, value chain, Ethiopia, agriculture

p7.01

A SUD DELL'INDIA: FLUSSI CITTÀ - CAMPAGNA E RIORGANIZZAZIONE DELLO SPAZIO RURALE. IL CASO STUDIO DI PEDAVADLAPUDI NELL'AREA METROPOLITANA DI VIJAYAWADA

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La tesi nasce dal progetto di scambio Memorandum of Understanding fra l'Università degli Studi di Firenze e la School of Planning and Architecture di Vijayawada. La ricerca si propone di scoprire e vivere la realtà delle campagne indiane, attraverso un'esperienza diretta. Questo implica un adattamento delle conoscenze acquisite in Italia alle caratteristiche di un territorio impregnato di una cultura molto diversa dalla nostra e denotato dinamiche nuove. Nella parte introduttiva analizziamo i concetti di periurbanizzazione e rurbanizzazione, ricercando corrispondenze con la realtà in questione. Inquadrati i temi da affrontare, abbiamo proceduto trattando la ruralità indiana e le sue politiche governative, per poi descrivere dettagliatamente l'area rurale di Vijayawada e il villaggio scelto come "oggetto di scoperta": Pedavadlapudi.

Nell'affrontare la nuova tematica è stato utile ricercare altre esperienze simili per studiarne la metodologia, in modo che fungessero da guida ai sopralluoghi da svolgere. Ritenendo il metodo partecipativo del Participatory Rural Appraisal, e quello scientifico dell'Analisi Swot, i migliori da applicare, ne abbiamo estrapolato parti di processo per creare una nostra metodologia, cucita appositamente sull'esperienza di Vijayawada. Così, con le carte alla mano e l'aiuto di abitanti del luogo, abbiamo intrapreso i sopralluoghi nei villaggi di Gudavalli, Mangalagiri, Nidamanuru, Nunna, Penamaluru, Poranki e Pedavadlapudi, soffermandoci su questo ultimo.

Attraverso un'attenta attività di ricerca, prima e, osservazione, poi, abbiamo elaborato un approccio che ci permettesse, sia di penetrare le dinamiche della cultura rurale indiana, sia di trarre il maggior beneficio da un viaggio di studio fonte di un arricchimento personale.

Keywords: analisi, metodo partecipativo, villaggi, India

p7.02

SURVEY ON ANIMAL PRODUCTION PROJECTS IN DEVELOPMENT COOPERATION

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A survey was carried out in Italy among the members of the Animal Science and Production Association (ASPA), to obtain a profile of the characteristics of animal production projects in development cooperation started after 2010. The questionnaire was sent by e-mail to all ASPA members. Eighteen projects were censused. Most of them are concentrated in Asia (45%), followed by projects in Africa (27%) and South America (17%). Eastern Europe is still receiving little attention (11%), but will probably receive more in the future. The trend of the number of projects funded per year is rather constant (3 projects/year). The species which receive more attention are buffaloes (28%) and fish (11%). Only one project was censused for each of the following species: small ruminants, cattle, pigs and camelids. However, the majority of projects focuses on many species at the same time (29%) and is directed to more than one sector (44%). Twenty-two per cent of projects are both in the milk and meat sector, 17% are on milk only and 17% on meat only. European (29%) and extra-European (35%) international organizations represent the most important sources of funding, but Ministries (12%), local bodies (12%) and private institutions (12%) also contributed to support these projects. Only 33% of the projects are carried out in collaboration with NGOs, and 72% with foreign partners. The results show that most of the activities have a multi-actor approach with complementary types of knowledge (scientific and practical). The projects take into account the needs and the problems of local breeders, and find complementary solutions using many existing research tools. This approach, based on the exchange of knowledge between Italian and foreign partners, has very often generated innovative solutions.

Keywords: animal production, development cooperation

p7.03

USING THE POSITIVE THINKING APPROACH TO INVESTIGATE THE INSTITUTIONAL LOCAL CONTEXT IN DAR ES SALAAM

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The contribution presents a case study developed by using the ‘Positive Thinking’ (PT) approach to investigate the local institutional context in Dar es Salaam (Tanzania) for supporting the implementation of an EU funded project whose objective was to enhance Local Government Authorities’ (LGAs) capacities to design climate change adaptation (CCA) measures.

The approach proposes a learning process that goes beyond the identification of gaps and needs, and explores the specific situation starting from the successes than from failures. It suggests to look at those cases in which the expected problems did not occur or were addressed successfully by the local actors in the real context of the intervention.

Therefore, the case study detected existing local positive practices in the field of CCA carried out by LGAs in the peri-urban area of Dar es Salaam to capitalize their strengths and to formulate explanations for such successes by identifying the specific mechanisms that made them possible and significant.

The results of the study provide an answer to the following questions: What could we learn through PT approach in development interventions where theories in use are sometimes unable to cope with the complexity of the specific contexts? Could this learning offer a new understanding of the situation, strengthening or undermining the assumptions of the intervention and helping to (re)design it? Could the PT approach overturn the logic for which local beneficiaries are recipients more than co-authors of the desired changes and local partners are co-producers of knowledge more than data providers, fostering local grassroots and empirical knowledge?

Keywords: positive thinking, local context analysis

p7.04

UNA ANALISI DI CONTESTO PER UN TURISMO SOSTENIBILE NELLE CITTÀ ANTICHE DELL'UPPER MYANMAR

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Nel nostro contributo al convegno vorremmo presentare l'impianto metodologico per l'analisi di contesto adottato in un progetto di cooperazione per la valorizzazione turistica sostenibile delle città antiche dell'Upper Myanmar, in corso presso il Laboratorio di Geografia Sociale dell'Università degli studi di Firenze (LaGes).

L'analisi di contesto nel nostro caso di studio si articola in tre diverse fasi:

- 1) un'analisi di indicatori di tipo oggettivo ricavati dalla statistica ufficiale;
- 2) una ricerca quantitativa condotta sul campo attraverso strumenti standardizzati creati ad hoc;
- 3) una ricerca qualitativa condotta sul campo.

La prima parte della ricerca, quella relativa all'analisi di indicatori di tipo oggettivo e ricavati dalla statistica ufficiale, parte dall'obiettivo di valutare la situazione attuale del turismo nell'Upper Myanmar, al fine di implementare una progettualità di sviluppo sostenibile da accompagnare con indicazioni operative e un costante monitoraggio negli anni a venire.

La seconda parte della ricerca, finalizzata alla individuazione della componente della domanda turistica locale sensibile alle tematiche del turismo "responsabile", si è basata sull'analisi delle pratiche turistiche specificamente sviluppate nel contesto locale.

Infine, la terza parte di ricerca mira alla messa a punto di un set di indicatori che misurino la tenuta del contesto culturale locale a fronte del crescente confronto con i modelli culturali veicolati dai turisti. L'ottica di fondo di questa parte della ricerca dell'azione cooperativa. Non si può infatti pensare di attuare alcuna politica di sviluppo che prescindere dalla conoscenza approfondita del contesto locale e dal coinvolgimento diretto dei beneficiari.

Keywords: turismo sostenibile, cooperazione, Birmania, analisi di contesto

PARALLEL SESSION P8

TRAINING IN COOPERATION FOR DEVELOPMENT

co8.01

CAPACITY BUILDING ON WATER AND SUSTAINABLE DEVELOPMENT

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The World Water Assessment Programme (UNESCO/WWAP), through the World Water Development Report has repeatedly highlighted that “Water professionals need a better understanding of the broader social, economic and political context, while politicians need to be better informed about water resource issues”. To respond to this call for capacity enhancement, one of the focus areas of WWAP activities is Capacity Development. This year, WWAP is developing a Capacity Development Training Programme whose target audience are medium-high level Representatives of the Ministries of Environment, Water, Natural Resources, Energy of African Developing and Least Developed Countries. This Capacity development training is focused on the WWDR 2015 topic “Water and Sustainable Development” and aims to enhance countries’ capacity to deal with water issues in a complex world environment. The course aims to provide policy makers with tools for assessing water data, managing water resources and competing users, dealing with extreme events and with the challenge of growing urban environments, consistent with the priorities listed in the post 2015 agenda. The material of the course is being developed with the collaboration of international experts and participants will be given the opportunity to bring their own case studies to be discussed during the training. The expected result of this training is to provide tools that strengthen institutional capacity and effectiveness of water and water-related governmental agencies and to support the knowledge sharing through presentation of experiences, discussions and exchange of expertise among participants. WWAP takes this opportunity to acknowledge the support of the AGfund for the realization of this project, as well as the contribution provided by all trainers.

Keywords: capacity development, water, sustainable development, decision makers, Africa

co8.02

AN INTERVENTION TO PROMOTE THE HUMAN CAPITAL OF ETHIOPIAN PROFESSIONALS WORKING WITH HIV AFFECTED- CHILDREN

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We will present an intervention financed by the University of Turin (UNI.COOP project 2013) and CIFA Onlus Turin. Our study aimed at:

- increase operators' knowledge and techniques for the development and assessment of Emotion Understanding (EU) and psychological work in HIV-affected children;
- promote the (EU) and psychological adaptation in HIV-affected children and their families.

A team of 5 local psychologists from the Addis Abeba University (AAU), coordinated by a researcher of Turin University, was created. First, the group shared the intervention and evaluation techniques, and adapted them to the local cultural context. After that, 33 HIV-affected children (18 girls) from 5 to 8 years and their caregivers from CIFA NGO local project was selected and participate in training and intervention with families.

We adopted a sequential design, using 2 training groups, observed 3 times each one. We considered the second training group, observed before the intervention, as control group.

To test the intervention, we adopted 2 different tools: the TEC (Test of Emotion Comprehension, Pons and Harris, 2000; Italian version Albanese e Molina, 2013) adapted for Ethiopian context (Leonti, Heran and Molina, 2013); and the Amharic version of SDQ questionnaire (Goodman, 1997), 2014), filled by the parents.

Preliminary results showed a better EU and psychological adaptation in the experimental group compared with the control group.

The intervention of local psychologists training for the implementation of EU seems to consolidate resilience elements in HIV-affected families' improving their psychological adaptation.

Moreover, a conference in collaboration with AAU was organized to share best practices and support the interest shown by other local NGOs.

Keywords: TEC, HIV-children, professional training

co8.03

SVILUPPO DELLE RISORSE UMANE (HUMAN RESOURCES DEVELOPMENT) E SISTEMA SANITARIO: IL CASO ETIOPIA E L'ASSISTENZA TECNICA DELLA COOPERAZIONE INTERNAZIONALE NEGLI ULTIMI 10 ANNI

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L'Health Sector Development Programme III 2005-06/2009-10 ed i successivi, del Federal Ministry of Health (MOH) dell'Etiopia prevedevano un ambizioso piano di sviluppo del settore sanitario con l'obiettivo di erogare in maniera efficiente ed efficace prestazioni sanitarie di qualità accessibili agli strati più disagiati e vulnerabili della società. L'orientamento del Piano era ed è verso il raggiungimento degli Obiettivi di Sviluppo del Millennio (MDGs) per il 2015 ed in particolare quelli direttamente collegati con la salute (Goal 4, 5 e 6) e altri Obiettivi indirettamente legati alla salute come quelli riguardanti istruzione, genere e accesso all'acqua potabile quali determinanti fondamentali per la promozione ed il miglioramento della salute. L'assistenza tecnica della Cooperazione italiana si è caratterizzata per essere stata sempre conforme ai principi del club di Parigi (2005) con particolare rilevanza alla titolarità degli interventi dei beneficiari (ownership) e al coordinamento (harmonization) con gli altri partner dello sviluppo (donors). Gli ostacoli allo sviluppo di un sistema sanitario efficiente, equo e sostenibile, in modo particolare e drammatico per certi aspetti in Etiopia sono stati di tre tipi:

- a) macroeconomico e di "governance" del sistema (crescita demografica e crescita economica; PIL; % del PIL per la sanità; governo del sistema sanitario);
- b) basso livello di accesso e di utilizzo ai servizi sanitari di base e barriere naturali e culturali alla domanda di servizi;
- c) carenza assoluta e in skill-mix di risorse umane in sanità.

Come indicatori sulle risorse umane si riportano solo lievi miglioramenti tra il dato 2005 e quello 2012 - OMS:

- Rapporto medico / abitanti: da 0,27 a 0,30 x 10.000;
- Rapporto infermiere / abitanti da 1,7 a 2,5 x 10.000;
- % di parti assistite da personale sanitario: tra il 12% e il 15%.

Con un quadro generale di fragilità di sistema, pur lentamente migliorato negli ultimi 5 anni, è stato difficile ottenere risultati a breve termine senza approcci integrati ed adeguatamente sostenuti nell'ambito del rafforzamento generale dei servizi sanitari - Health System Strengthening (HSS). Una strada praticata attraverso i contributi della Cooperazione italiana allo sviluppo del settore sanitario etiopico è stata quella della partnership pubblico privato (PPP), soprattutto con il privato non profit (NGO). In queste dimensioni contenute, è stato possibile con la leadership del MOH, pilotare e sostenere alcuni meccanismi di incentivazione del personale basati sulle performances, sul miglioramento del pre-service training dei quadri intermedi e l'"on the job training", favorendo il programma di formazione degli agenti estesi di sanità (HEWs), delle ostetriche e degli Health Officers. Uno degli ostacoli più grossi e delle sfide più impegnative per il rafforzamento dei servizi sanitari ha riguardato sicuramente la strategia per lo sviluppo delle risorse umane.

Il contributo della Cooperazione Italiana in Etiopia si è mosso dal 2003 in poi nella logica del

rafforzamento di servizi, con il focus sulla Assistenza Tecnica (AT) sia a livello centrale che regionale nelle tre “aree - sistema” dello sviluppo delle risorse umane, dello sviluppo del sistema informativo sanitario e del miglioramento dell’accesso ai farmaci essenziali. Contribuendo così in maniera determinante alla realizzazione dei piani settoriali e producendo sinergie, ben oltre l’entità del contributo finanziario a dono.

Keywords: human resources development, Health System Strengthening, health governance

co8.04

SI PARTE: CONTENUTI, METODOLOGIE ED ESPERIENZE PER AVVICINARSI AL MONDO DELLA COOPERAZIONE INTERNAZIONALE

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La proficua collaborazione sviluppata tra Centro per la Formazione alla Solidarietà Internazionale e Università di Trento, socio fondatore del Centro, ha permesso di elaborare un'offerta formativa complementare a quella di ateneo in ambito di educazione formale e non formale oltre a diverse collaborazioni in ambito di ricerca applicata.

Il Centro negli anni ha sviluppato un percorso di educazione non formale (strutturato in 8 corsi) per formare gli studenti universitari sulle competenze richieste per profili junior nell'ambito della cooperazione internazionale. Accanto al sapere tecnico, le competenze trasversali e l'acquisizione di uno sguardo internazionale diventano elementi qualificanti per il lavoro. La competenza si compone dei tre livelli della conoscenza: sapere, saper fare, saper essere. Al fine della loro acquisizione, le metodologie formative (esercitazioni individuali e in gruppo, simulazioni e metodologia esperienziale) sono altrettanto rilevanti dei contenuti tipici della cooperazione internazionale (quadro storico, intercultura, progettazione europea, animazione territoriale). Obiettivo del contributo è mettere in luce i contenuti e le metodologie utilizzate nei diversi percorsi, la valutazione dell'apprendimento, il valore rispetto al mondo del lavoro.

La misurazione dell'impatto in termini di reale accesso al mondo del lavoro è in fase di definizione. Alcuni dati quantitativi preliminari confermano l'interesse degli studenti (n. di studenti che partecipa a uno o più corsi, valutazioni da parte dei corsisti). Un corso pilota ha dimostrato inoltre come la formazione e un'esperienza breve di volontariato internazionale rafforzino le competenze chiave per la formazione permanente e quelle trasversali richieste nel mondo del lavoro.

Keywords: cooperazione, competenze trasversali, profili junior

co8.05

COURSE IN EDUCATION FOR INTERCULTURALISM AND COOPERATION FOR DEVELOPMENT - A CASE STUDY

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Starting from the experience of the Giuseppe Tovini Foundation, a NGO active in Brescia in the field of pedagogy, some Professors from the University of Brescia, University of Bergamo and the Sacro Cuore Catholic University, together with the Giuseppe Tovini and the the Museke Foundations and the Chizzolini Association, launched a new academic course dedicated to the “Education for interculturalism and cooperation for development”, in collaboration with the Mozambican Universidade Pedagógica Sagrada Família (UNISAF).

The course aimed at preparing Italian University students for meeting the African Country reality and for living an intercultural communication experience. The course structure met three criteria: introducing students to intercultural and international cooperation perspectives; covering different topics (cultural, pedagogical, technical, economic, medical, political and juridical); offering basic knowledge concerning the Mozambique reality.

In the framework of the course, some Mozambican students came to Italy and were hosted by those Italian students who in turn went to Mozambique to attend an intercultural educational course.

Lessons dealt with different topics, for example: “The political-juridical challenges to pass from a multi-culture to an inter-culture”, “Technologies, developing countries and the drinkable water challenge”, “Inequalities in healthcare: the mother-child health in countries with limited resources”, etc.

The results of the final exam made evidence of the high level of motivation that characterized the students, who diligently attended all the lessons and actively contributed to the course bringing their own experiences.

It is possible to say that the general objectives of the course have been achieved with high levels of satisfaction.

Keywords: academic course, interculture, international cooperation

co8.06

CORSO DI ATENEO IN COOPERAZIONE INTERNAZIONALE E SVILUPPO

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L'Università degli Studi di Genova intende presentare il Corso di Ateneo in Cooperazione internazionale e sviluppo, una nuova iniziativa formativa che prenderà il via nell'anno accademico 2015-2016. Si tratta di un corso breve di introduzione alle forme della Cooperazione internazionale e alle opportunità di collaborazione economica con i Paesi in Via di Sviluppo, rivolto a studenti, laureati e dottorandi dell'Università di Genova.

Suo obiettivo è quello di sensibilizzare gli studenti alle tematiche della cooperazione allo sviluppo e fornire gli strumenti di base necessari ad un primo orientamento in questo settore, in vista di un eventuale futuro professionale.

Nel corso della presentazione verrà illustrato il quadro istituzionale di collaborazioni che sostengono il progetto, le esperienze nel campo della cooperazione che ne hanno favorito l'elaborazione, l'approccio metodologico che lo caratterizza, l'articolazione didattica e il profilo dei docenti. Verranno inoltre presentate le iniziative previste per favorire le esperienze di tirocinio e la creazione di reti studentesche che facilitino la comunicazione e lo sviluppo di progetti nell'ambito della cooperazione internazionale.

La dimensione nazionale del progetto è assicurata dalla partecipazione di funzionari del Ministero degli Affari Esteri (MAECI) e docenti segnalati dalla Conferenza dei Rettori delle Università Italiane (CRUI). Collaboreranno alla docenza la cattedra UNESCO di Genova, il Politecnico di Milano e la Regione Liguria.

Keywords: corso di Ateneo, cooperazione e sviluppo, interscuola

co8.07

TRAINING YOUNG DOCTORS IN AFRICA. EXPERIENCE OF NON FORMAL EDUCATION FOR ITALIAN MEDICINE STUDENTS

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The main objectives consist to:

- fill the gap between academic training and medical practical experience in the field;
- give to medical students a reference model of medicine in contests with limited resources;
- increase the students skills, stimulating them to experience their future job in different contests even before concluding their educational path;
- ameliorate the relationship between Universities and Non-Governmental Organizations work, in order to widen the students professional and cultural horizons.

With the need to train a future medical class able to face health challenges of globalization, and with the willing to adjust university curricula in order to answer to the new needs of the identities of medical doctors, Doctors With Africa Cuamm has been proposing for ten years an innovative professional path—built with some Italian universities - which allow medical students and newly graduated doctors to experience a practical traineeship in the African countries where the organization is present: the “Wolisso Project”.

Thanks to this project, students observe, listen and learn by seeing the everyday life of a context with limited resources, and are immersed in a kind of medicine completely different from the Western standards to which they are accustomed.

Applications from students willing to participate at the project have been exponential growing in the last ten years: 177 students left since 2005

In 2015, there are plans for 48 students to leave for this experience (four students each month: two to Wolisso - Ethiopia - and two to Tosamaganga - Tanzania)

A raising number of Italian universities asked to join the initiative and there are now 37 Universities promoting the project.

Positive acknowledgements declared by participants both at the conclusion of the experience and three years after the traineeship.

International recognition as the third best project in the world for medical students, received at the Project Presentation of the General Assembly of IFMSA, International Federation of Medical Students’ Associations, in Baltimore in 2013.

Cooperation between Doctors With Africa Cuamm and Italian Universities allowed to create an harmonious training path, able to mix theory and its practical application, and to train health professionals with a view which goes beyond the national borders and includes global changes. A resulting effect of this cooperation is that when students feel to be involved, they become operative and generate new project themselves (i.e. the project “Un ecografo a Wolisso” they carried on through a fund raising activity and a specific training for local health workers in Wolisso). Finally, students wanted to share their experiences with their mates, and therefore decided to create a blog in order to show how different medicine and life could be in a developing country: www.educationglobalhealth.eu/blog.

Keywords: international health cooperation, Africa, Cuamm

co8.08

COOPERARE ASSIEME TRA DOCENTI E STUDENTI

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Viviamo in un mondo sempre più internazionale: ogni giorno siamo a contatto con culture, etnie e lingue diverse. L'esigenza di conoscenza è sempre più forte nei giovani.

Un gruppo di studenti universitari ha deciso di calarsi in un contesto altro prendendo parte ad un viaggio di cooperazione in Senegal.

La possibilità di svolgere questa esperienza è stata offerta dal CUCI, Centro per la Cooperazione Internazionale dell'Università di Parma, che sostiene progetti di cooperazione decentrata, con la collaborazione della Regione Emilia-Romagna e di associazioni territoriali di Parma e dei paesi partner.

La promozione della salute, l'empowerment femminile e le attività di formazione, sono tra gli obiettivi principali dei progetti.

La partecipazione contemporanea di studenti e docenti ai progetti costituisce una occasione di scambio reciproco con punti di vista differenti.

Approfondendo dell'esperienza maturata da tre studenti che hanno partecipato alla missione del mese di febbraio 2015 prevista dal progetto, assieme ad un gruppo di docenti vengono riportate riflessioni sul significato della collaborazione tra docenti e studenti nella cooperazione allo sviluppo.

Una prima osservazione riguarda la possibilità per gli studenti di apprendere sul campo modelli di cooperazione finalizzati ad un benessere reciproco diversi da quelli solitamente unidirezionali meno elaborati e più istintivi espressione di carità o generosità. In secondo luogo, anche la convivenza docente-studente in condizioni di vita diverse da quelle abituali aiuta sia gli uni che gli altri ad adattarsi alla diversità ed a collaborare alla ricerca di soluzioni in maniera paritaria.

La collaborazione sul campo tra docenti e studenti consente di perfezionare costantemente aspetti organizzativi delle missioni, eliminando le criticità ed ottimizzando tempi e metodi in modo da soddisfare le esigenze diverse degli attori.

In conclusione l'esperienza ha dimostrato che la partecipazione degli studenti alle attività di cooperazione dell'università costituisce un valore aggiunto.

Keywords: cooperazione, collaborazione studenti e docenti

co8.09

LEARNING THROUGH EXPERIENCE IN AN INTERDISCIPLINARY AND MULTICULTURAL CONTEXT

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The article presents the methodological approach used in the Coimbra Group ACP TF Winter School (WS) regarding “Urban Changes and Social Dynamics in Africa”, occurred at the University of Khartoum from the 20th to 31st January 2014. The WS involved 44 students attending different courses (e.g.: Master in Local Development, in Development Cooperation, in Geography, in Anthropology, ...) and from different European and East-African Universities. The adopted methodology aims to promote an orientation of listening, reading and interpretation of the territory in a perspective of active learning. Based on this meta-objective, the WS was structured as an in situ educational method, within the territorial context chosen as the case of study. The reference approach for the WS setting is the cooperative learning that enhances the sharing of resources, knowledge and skills, differences in cognitive styles and it contributes to the creation of an educational, non-competitive, highly responsible and collaborative environment.

In particular, we adopt the Group-Investigation (GI) approach, which metaphorically describes the stages of a research cycle, combined with the Jigsaw (Peer-Tutoring approach).

Thus, students coming from different backgrounds have been mixed so as to give rise to different ways of handling territorial issues and of exploring the same problem analyzing different aspects.

The assignment of roles (socio-relational skills) to the groups components (timekeeper, team facilitator, task coordinator, ...) guarantees the appreciation of relational cooperation.

In general, the WS experience was appreciated as a multicultural environment and for its multidisciplinary approach. The real practice of fieldwork and the group work methodology were seen as moment of learning and of improving personal skills.

Keywords: fieldwork, cooperative learning, international context

co8.10

ESPERIENZE DI COLLABORAZIONE TRA ITALIA E VIETNAM: L'INGEGNERIA IDRAULICA TRA FORMAZIONE E RICERCA

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A quarant'anni dalla conclusione dei maggiori conflitti sperimentati nella seconda metà del '900, il Vietnam è ora un Paese economicamente e socialmente molto dinamico, in cui una rapida crescita demografica ed economica ne sta modificando profondamente le strutture sociali, culturali e produttive. Nel Paese una grande spinta al conurbamento e all'industrializzazione convive ed entra in conflitto con la permanenza di tecniche agricole tradizionali. L'acqua riveste un ruolo chiave nella società vietnamita, perché la ricchezza d'acqua, oltre a rendere il Paese uno maggiori esportatori di riso al mondo, costituisce una fonte di pericolosità per le popolazioni che vivono lungo i fiumi. In questo contesto, per contribuire a definire pratiche di gestione ottimale delle risorse idriche e al contempo minimizzare il rischio idrogeologico, il gruppo di ricerca in ingegneria idraulica del DICATAM sta da dodici anni collaborando con la Thuyloi University di Hanoi. La collaborazione si è articolata su due direttrici fondamentali: (1) la formazione di tecnici locali di elevata preparazione e (2) la partecipazione a progetti di ricerca congiunti per sviluppare metodologie di protezione del territorio. I temi affrontati sono stati: (1) tecniche non strutturali di protezione del territorio dalle piene, anche per bacini transnazionali; (2) irrigazione e drenaggio in ambienti misti urbani e rurali; (3) gestione delle risorse idriche in scenari di stagionalità climatica ed evoluzione dell'antropizzazione del territorio; (4) scenari di crollo di sbarramento. La collaborazione ha permesso tra l'altro di formare nove dottori di ricerca, che ora lavorano nel loro Paese avendo intrapreso la carriera accademica e rivestendo importanti ruoli nell'università di provenienza e due laureati magistrali.

Keywords: Vietnam, acqua, alluvioni, irrigazione, clima

p8.01

GLOBAL HEALTH & COOPERATION FOR HOSPITAL STAFF IN ROME: LESSONS LEARNED AFTER A THREE YEAR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) EXPERIENCE

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A short course program and weekly workshop with reminders in global health and international cooperation were organized from 2009 to 2011 for 82 selected health professionals following a standard curriculum in six modules (see Table 1) as a part of a specific continuing professional development (CPD) program. Aim of the training was to train health staff in Global Health in a highly specialized hospital twinned with health facilities in two Sub-Saharan African countries (Eritrea, Orotta Hospital, and Ethiopia, Mekelle Hospital).

Global Health standard curriculum modules

- Health and its determinants
- The origin and development of health systems. Health as a human right
- Globalisation and health
- Inequalities in health and in healthcare assistance
- Immigration and health
- International health cooperation

Source: EU project "Equal opportunities for health: action for development" ONG-ED/2006/120-752 – Ref. 47 –NGO Doctors with Africa – CUAMM.

Hospital staff within the frame of the national continuing medical education (CME) credit system were recruited for the program in order to provide doctors, nurses and technicians with a policlinic referral hospital with an insight on global health issues and about field work in African settings. A new info/training project proposal called "EaS" (health personnel education for development) has been approved and co-financed by the Ministry of Foreign Affairs, Directorate General for Development Cooperation with a network of health partners in Rome. Classroom observation and final questionnaire evaluation were used to achieve information for future global health and international cooperation lifelong learning and commitment.

Obstacles and achievements in conducting a training course in global health and international cooperation as a part of a continuing medical education program are pointed out. Involving busy health professionals in the global health training requires, above all, the capacity to strengthen links with overseas projects through the institutional twinning already in place and the ability to link up global health themes with specialized clinical routine practice. Basic competencies for the health workforce of the 21st century should not ignore global health issues with a fair balance between theory and practice as a basis of what health professionals can do to improve health for the world's poor.

Keywords: continuing education, continuing professional development, international cooperation, global health

p8.02

MICRO-TEACHING SKILLS ASSESSMENT OF TUTORS IN THE HEALTH PROFESSIONAL SCHOOLS OF OROMIA REGION, ETHIOPIA

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In the framework of Human Resources Development contribution years 2001 - 2010 to the health sector of Ethiopia, a baseline survey to assess school tutors in micro-teaching skills through direct observation in the classroom was carried out in Oromia Region with Italian Cooperation technical assistance. Aim of this study was to evaluate tutor's competency in teaching methodology as one of the most important factors impacting positively or negatively on the students' learning process and their working performances. Ministry of Health experts reported poor quality of teaching-learning as a major constraint to improve educational standard of health professionals in Ethiopia.

In the annual outreach visits of the health educational system, a micro-teaching skills assessment of tutors in all the six governmental schools of Oromia Region was undertaken. The assessment started after completion of an inventory and after collection of information at national and regional level. A self-assessment questionnaire was anonymously obtained from 53 tutors of the schools (91% response rate). On the field, a direct micro-teaching skills observation was performed with a 22 item check-list used by two experts to screen 41 tutors (71%) of the 6 schools during 75 hours of silent observation of tutors' teaching classroom sessions (see the item list).

22 Items observed. *N.B. Observed teachers were ranked on a 1-5 scale for each item.*

1. Assesses students understanding of previous session
2. Introduces the topic
3. States objectives clearly
4. Explains the subject according to the objectives
5. Uses language to level of students ability
6. Makes the topic relevant
7. Demonstrates / Illustrates with relevant examples
8. Simplify complex issues
9. Uses colourful voice
10. Uses appropriate methods for active learning
11. Encourages participation
12. Provides relevant teaching aids
13. Utilizes teaching aids properly
14. Creates equal eye contact with students
15. Listens to students sympathetically
16. Gives relevant feed back
17. Summarizes the lesson using key issues
18. Prepares written lesson plan
19. Follows the written lesson plan
20. Manages the class
21. Appears clean & presentable
22. Provide assignment for the next session

Main results showed that up to 61% of tutors performed unsatisfactorily when ranked according to the 22 items check-list. The percentage of unskilled tutors decreased to 41% and then to 32 % after running n. 3 annual teaching methodology courses, sponsored by the Italian Cooperation in the framework of human resource development.

The study pointed out the need to streamline further intervention on appropriate training on teaching-learning methodology for nurse tutors considering, among others, micro-teaching skills as one of the issues to be addressed in training of trainers. Rapid needs assessment and appraisal prior to organize training of trainers courses and in-service training programs has been confirmed to be mandatory.

Keywords: micro-teaching skills, Training of Trainers (ToT), human resources development

p8.03

THE “DIPLOMADO PARA DOCENTES DE APOYO A LA INCLUSIÓN”: THE TRAINING AS EMPOWERMENT FACTOR

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The Department of Educational Sciences of the University of Bologna has promoted an international cooperation project in El Salvador (2009-2014), funded by the MFA and implemented with the Salvadorian Ministry of Education. The purpose of the overall project was to promote inclusion principles identified by the government as foundational model of all social and educational policies. The project represented an experience of cooperation based on the enhancement of equal dignity between local and international experts. In this framework, the experience of the “Diplomado para docentes de apoyo a la inclusion” was implemented. It consists of a training program finalized to prepare a group of support teachers: figure born from the process of transformation of education system in inclusive perspective. About 180 directors, teachers and experts attended the training, which included placement activities and project works. The most innovative component with respect to local reality has been the “project work” experience related to inclusive projects involving schools and communities. Among the key results of the course we underline: the empowerment of participants on the ability to promote inclusive processes, starting from existing resources; the consolidation of existing expertise in human resources towards a sustainability of inclusive approach. Promote synergy between academic and institutional sectors has been an opportunity to capitalize skills through certificated and joint acknowledgment training processes addressed to educational figures. The overall project has moved in the awareness that the school plays a fundamental role in human development for its capacity to provide quality education and to spread an inclusive culture in the whole society.

Keywords: inclusion, empowerment, training, education, development

p8.04

THE TROPED CORE COURSE IN TROPICAL MEDICINE AND INTERNATIONAL HEALTH OF THE UNIVERSITY OF BRESCIA

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The University of Brescia is part of TropEd, the European Network for training in International health. It offers the Core Course of the Troped Master in International Health.

The aim is to present the organizational structure of the Course on Tropical Medicine and International Health (Course) of the University of Brescia.

The Course was first established in 1995 to provide skills in international health cooperation to Italian and foreign students. It is a post-graduate course of the University of Brescia and it is taught in Italian over a span of 13 intensive weeks. Entry criteria is an official University Degree, certified by Italian Embassies in case of foreign candidates. The Course is organized with the official partnership of: Doctors for Africa CUAMM, Doctors without Borders, Medicus Mundi Italy and Museke Foundation. The course is credited as the Core Course for the TropEd Master in International Health. To this aim, it provides 20 European Credit Transfer System (ECTS). Additional 20 ECTS are to be provided by Advanced Modules in other European Institutions (www.troped.org) and 20 ECTS are earned with the final thesis work to be presented within 5 years to the partner Institute in Basel. The Course is also part of the Italian Master in Tropical Medicine and Global Health, in collaboration with the University of Florence and the Negrar Foundation for Tropical Medicine.

As many as over 500 students have attended the Course so far. Strength of the Course is the synergistic approach between the University of Brescia and the involved NGOs and the possibility to keep a strong link with the home Institution. Weaknesses are the limited number of scholarships for foreign candidates and the teaching in Italian language, both factors that limit the enrollment of international students.

Keywords: TropEd, training, international health

p8.05

STUDENTS' MOBILITY IN THE FRAMEWORK OF DEVELOPMENT COOPERATION PROJECTS IN THE GLOBAL SOUTH. INSIGHTS FROM THE PROJECT UNI.COO (UNITO FOR INTERNATIONAL COOPERATION)

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The paper presents the experience of the University of Turin's project Uni.Coo, a partnership between the University, NGOs and local authorities sponsoring mobility grants to undertake applied field research in development cooperation projects.

The paper focuses on:

- i) which knowledge and competences are built through the interaction between academic training and students experiences of international mobility in development projects?
- ii) how the experience of international mobility shapes students' understanding and perceptions of international cooperation?

The research draws on a questionnaire administered to the 150 students that took part to Uni.Coo in 2012, 2013 and 2014. This is part of a broader action research project designated to monitor and evaluate the University of Turin's development cooperation initiatives.

The findings here presented suggest that international mobility in the context of development cooperation projects represents a fruitful experience to apply the theoretical and methodological knowledge acquired in higher education and to develop relational, intercultural and organizational competences for working in multicultural and complex environments. While Uni.Coo represents in many cases an initial socialization with the professional experience in development cooperation, in describing the most rewarding and challenging episodes of their mobility experience students emphasize the relational and personal dimensions.

The study points at the need for academic institutions to further reflect on how to strengthen the promotion of relational, intercultural and organizational competences, also through a renovated collaboration with other development cooperation actors in the broader framework of global citizenship education.

Keywords: academic mobility, intercultural competence, development

p8.06

KITE PROJECT (AQUILONE): E-LEARNING FOR THE MEDICINE STUDENTS OF EBOLOWA (CAMEROON)

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The Kite Project has been created by the school of medicine of Genoa (Italy) and Ebolowa Cameroon and its purpose is to share the medical knowledge of both universities.

The purposes are:

- Education of medical Students based on best practice adoption
- E-learning for medical student and post-graduates
- Medical Teleconsulting between the two universities

Start up: September 2012. Concluding: May 2015.

Until now the project has been defined an e-learning system and educational project; the most part of the offline lessons have been recorded and are in the post-production phase going forward, we may alter this definition, dependent on future results.

The main contractors are the Onlus Seniores Italia, and the secondary partners are Babboleo Radio and Consortium SPERA, both of whom are charged with disseminating the materials. The university departments DISC and DITEN (University of Genova) are responsible for the medical education project and e-learning technology; Medici in Africa and Don Bosco Institute cooperate in the organization of travel and logistics. The project is sponsored by regional fund "iniziativa di cooperazione allo sviluppo 2012".

The expected benefit is the sharing of medical knowledge and the improvement in efficiency and efficacy of the medical students who will operate as medical doctors in Africa.

The efficiency and the effectiveness of the project will be evaluated after one year of activity.

Keywords: e-learning, educational project, medical

p8.07

THE ITALIAN MASTER OF TROPICAL MEDICINE AND GLOBAL HEALTH

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Post-Graduate training in Tropical Medicine and Global Health is poor in Italy. In the nineties, the University of Brescia and Florence established two separate courses in Tropical Medicine, that partially filled the gap. However, a Master degree was not offered until the 2011-12 Academic Year, when the two courses were merged and the Italian Master of Tropical Medicine and Global Health was created with the collaboration of the Centre for Tropical Medicine, SacroCuoreHospital, Negrar (Vr).

The aim is to present the organizational structure of the Italian Master of Tropical Medicine and Global Health of the Universities of Florence and Brescia and the Centre for Tropical Diseases, Sacro Cuore Hospital, Negrar (VR).

The master is based on a convention stipulated between partners and administratively hosted by the University of Florence or Brescia on a rotation basis. Topics covered by the Master are (i) international health, (ii) health inequalities, (iii) social determinants of health, (iv) diagnosis and treatment of tropical diseases, (v) management of control programmes, (vi) ultrasounds, (vii) rational use of drugs, (viii) non communicable diseases, (ix) basic laboratory. The one-year master's degree consists of 60 CFU credits and takes place as follows: University of Brescia (February-April): 19CFU, University of Florence (May-June): 12CFU, Centre for Tropical Medicine of Negrar (October): 9CFU, totalling 40 credits (class hours=475 and self-study= 525). Additional 20 credits refers to practical stages (14CFU) and the final examen. All teachers have working experience in the tropics. The official language is Italian.

The Master represents an interesting course for those health professionals willing to live and work in low-income tropical countries. Interestingly, the synergy between the 3 Organizations involved has created a platform for further development of the Course, who is endorsed by the Italian Society of Tropical Medicine and Global Health (SIMET).

Keywords: Italian Master, Master Degree, Tropical Medicine, Global Health

p8.08

EUROPEAN EDUCATION POLICIES AND PROGRAMMES AND INTERNATIONAL COOPERATION: WHAT ROLE FOR THE UNIVERSITIES?

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The aim of this presentation is to illustrate an international cooperation project that is partially implemented in a University in North-East Italy. The main project objective is to give to meritorious high school students from Less Developed Countries (LDCs) fellowships chance to continue their studies in one of the Italian Universities, not simply to assist them to pursue individual and economic success but to help them to grow holistically to the full extent of their capabilities and create same opportunities for others. A case study methodology was chosen to draw up the project using an international statistical survey on higher education and the most disadvantaged LDCs were identified in the African states. Based on an analysis of their education systems, the research revealed the educational needs and a pilot project was promoted. The implementation phase has allowed students from the Horn of Africa to start their 1st level degree programs in Italy. Strengths: Education is the basis of development (the real empowerment of people); Commercial exchange opportunities related to markets in the South; Stronger bilateral relations; Creation of strategic dialogue between Universities and the network of Italian missions. All facilitated by referents educated in Italian Universities. Weaknesses: Lack of interest shown by the Universities; Long-term type of project objectives; Difficult to raise funds from the industrial world. Conclusions: Cultural deficit from the Universities that fail to valorise their role in the global scenario. The first essential step is to raise awareness of the Universities on the need for their specific intervention in promoting equally access and international mobility programmes for LDCs' young students, then they should involve industries.

Keywords: less developed countries, international cooperation, education systems, international student mobility, higher education

p8.09

**SUPPORT FOR THE MATERNAL AND CHILD HEALTH PROGRAM
IN THE DISTRICT OF MORRUMBENE, MOZAMBIQUE:
PERFORMANCE EVALUATION OF TRAINING COURSES FOR
HEALTH WORKERS AND THE PROVISION OF HEALTH
EQUIPMENT**

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A sanitary project was initiated in 2009 and involved training of health care workers (HCW) and donation of sanitary equipment to the district of Morrumbene, Mozambique.

The aim is to evaluate the performance of training courses for HCW and donation of health equipment in the sanitary district of Morrumbene.

The courses aimed to improve the knowledge, attitudes and skills of HCW on maternal and child health and endemic infectious diseases. Anonymous pre and post tests on course themes were applied and participants answered to a course evaluation questionnaire. From 2012, health centers were equipped with a kit for basic newborn care consisting of: 1 wooden crib, 1 mattress for the bed, 2 lamps to cradle heating to prevent newborn hypothermia, 1 wall clock to record the time of delivery and to check the time during newborn resuscitation, and 1 thermometer to measure delivery room temperature.

From 2009 to 2012, five training courses were organized, for a total of 78 participants, including nurses, nursing assistants and midwives. The courses themes were: vertical transmission of HIV, tuberculosis, essential newborn care 1 and 2 and complications of labour and delivery. Statistically significant increase between pre/post test media was detected in all courses performed. Courses were considered good or excellent by all HCW. Improvement of participants' skills on newborn resuscitation was observed during practical lessons with mannequins.

We observed good results regarding knowledge acquisition and improving skills on newborn resuscitation by the HCW who attended the courses. However, changing in attitudes, including the proper use of sanitary equipment, needs to be encouraged and continuously monitored in order to be effective.

Keywords: health workers training, international cooperation

p8.10

NATI PER ESSERE SOLIDALI

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La promozione della solidarietà ha, nell'Università Campus Bio Medico, i connotati precisi di uno stile formativo che si propone di educare alla solidarietà.

Questo patrimonio va messo a frutto dai primissimi anni universitari.

Il tema cruciale in gioco è il rapporto che esiste fra competenze (cioè saperi), passioni e compassione.

Il lavoro di educare come e-ducere (tirar fuori) consiste nel coltivare la passione per l'uomo e la passione per il sapere trasformandole in competenze professionali orientate ad un autentico servizio.

Compito dell'università è dunque coltivare le passioni buone degli studenti.

Questo intento diventa per il Campus un progetto formativo. Concepire e praticare sempre una ricerca biomedica che sia socially oriented.

Gli strumenti didattici messi in atto al Campus Bio sono:

- Un Corso di aiuti umanitari: attività didattica opzionale costituita da incontri con attori del mondo dell'aiuto umanitario italiani e stranieri.
- Il medical workcamp: un training on the job rappresentato da esperienze dirette degli studenti nei Paesi in Via di Sviluppo (PVS) presso i partner del CBM.

I risultati ottenuti sono:

- Migliaia gli studenti del Campus che hanno partecipato agli incontri del Corso di Aiuti Umanitari: in media 6 incontri all'anno dal 2001 a oggi.
- Duecento gli studenti che hanno fatto esperienza di workcamp nei PVS.
- Da queste esperienze hanno preso corpo tesi di laurea e specializzazione e pubblicazioni scientifiche su riviste internazionali.
- Si è costituita una rete di istituzioni africane con le quali l'università ha stabilito rapporti di collaborazione.

Dietro a queste iniziative c'è un'etica della ricerca che fa da bussola d'orientamento verso un nord che è già la medicina del futuro: vale a dire la Global Health. L'interdipendenza, che è dimensione essenziale del processo di globalizzazione, tocca anche la salute degli uomini ovunque siano, e dunque il modo di pensare medicina.

Keywords: solidarietà, workcamp, aiuti umanitari

p8.11

LA COOPERAZIONE PER L'ALTA FORMAZIONE E L'UNIVERSITÀ: IL PROGRAMMA ERASMUS +

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Obiettivo del presente lavoro è illustrare il supporto di strumenti che possano favorire la cooperazione tra le varie Università alla luce della nuova programmazione europea dei finanziamenti per la ricerca, l'educazione e l'innovazione.

Molti Paesi in Via di Sviluppo scontano attualmente un insufficiente livello di formazione specifica, infrastrutture inadeguate e procedure amministrative farraginose, che limitano l'impatto degli aiuti anche nel settore dell'istruzione, in particolare dell'Alta Formazione universitaria.

Quest'ultima costituisce un elemento fondamentale per promuovere dall'interno di un Paese la creazione di risorse in grado di proporsi come motore di cambiamento, creando le giuste condizioni per promuovere e animare il cambiamento istituzionale e rispondere a tale sfida.

L'Agenzia formativa di Torino IUSEFOR - specializzata nell'Alta Formazione rivolta al settore non profit - attraverso una partnership con Europe Direct Puglia, avvierà a breve con l'Università di Bari un Master in Sustainable Development and Innovation.

Il Master sarà parte di un progetto più ampio, finanziabile dal nuovo programma Erasmus +, tra le cui azioni vi sarà il coinvolgimento di studenti provenienti dai PVS e la realizzazione di stage nei Paesi terzi.

Tale opportunità permette, da un lato, la creazione di piani formativi congiunti tra Università degli Stati Membri e Università dei PVS, dall'altro il supporto alle amministrazioni pubbliche attraverso il trasferimento di conoscenze e buone pratiche per attivare cambiamenti virtuosi nell'ambito della formazione in questi Paesi. Obiettivo del progetto è l'identificazione di best practices per migliorare la cooperazione in tema di Alta Formazione

Keywords: sustainable development, Master, Best Practice

p8.12

THE MASTER IN INTERNATIONAL HEALTH OF PARMA UNIVERSITY: A POSSIBLE MODEL OF SANITARY COOPERATION WITH DEVELOPING COUNTRIES

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The Master in “International Health and Medicine for Cooperation with Developing Countries” was established by CUCI, based on the evaluation that many health facilities and hospitals in the low-middle income Countries are not properly equipped to face daily emergencies.

The objective of the Master’s program is to train doctors with multi-sector skills, necessary to operate in healthcare ambulatories, hospitals and medical districts, characterized by poor infrastructures and management systems, that are typical in areas of high-poverty, facing cases of emergencies of various entities.

The Italian Ministry of Foreign Affairs and International Cooperation is funding a number of scholarships for the best candidates classified in the final selection rating and residing in African Countries. The Course is also open to Italians who wish to extend their professional skills in order to work in resource-constrained settings.

The Master course lasts one year and includes lectures, seminars, videoconferencing and internships both at the University Hospital of Parma and in other Structures / Laboratories. The final work includes a scientific section and a project work for future collaboration with the Countries from which the doctors come from.

Besides the various fields of medicine, other important themes are addressed in the course, like guidelines for hospital managements, health cooperation, development, prevention strategies.

Why this Master could be a model of sanitary cooperation? The WHO and the Geneva Foundation for Medical Education and Research provide scientific support and they are involved in the teaching programme; the physicians formed in the course, once back in their Countries, are expected to facilitate training of the local staff (physicians, nurses and auxiliary personnel) and to continue collaboration; the project allows strengthening of partnerships with other Universities, Ministries, local and international Associations, NGO.

The feedback of the participants who have attended the previous editions will also be discussed.

Keywords: health cooperation, multi-entity collaboration, sanitary high education

p8.13

PRELIMINARY RESULTS OF A MASTER ON “FOOD SECURITY AND ENVIRONMENTAL SUSTAINABILITY”

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This communication presents some achievements of the Master on “Food security and environmental sustainability” planned in the RUSSADE project (FED/2013/320-115), financed in the ACP-UE Cooperation program in higher education EDULINK II. The project is led by the University of Turin (C.I.S.A.O.), Italy, in partnership with the University Abdou Moumouni of Niamey (Faculty of Agronomy, C.R.E.S.A.), Niger, the Polytechnic University of Bobo Dioulasso, (L.E.R.N.S.E.), Burkina Faso, the University Institute of Sciences and Technologies of Abéché (I.U.S.T.A.), Chad.

Lectures and practical activities treat various strategic topics: livestock productions, food security and safety, environmental protection, sustainable management of natural resources. Lessons are organized according to an interdisciplinary and multidisciplinary approach.

The Master is open to students with different previous training, therefore different sensitivity and competence with respect to the problems addressed the exchange of views constitute an enrichment of their learning experience.

Six months of lectures are supported and supplemented by six months of internships dedicated to qualifying experiences carried out in the technical structures of ministries, training and research institutions, enterprises and NGOs.

The educational program aims to emphasize the links between learning, research and professional practice and to open new perspectives: the capacity to face problems in a systemic way in different contexts and to acquire professional skills to work on different environmental components, in compliance with the fragile and complex natural balances.

All modules have been monitored and analyzed to detect the expectations of the students, the difficulties faced, the effectiveness of the content’s articulation and the achievements. Some modules have also been tested, using questionnaires ex ante and ex post, in order to investigate if and how the awareness of the students about some general concepts changed during the performance of the master.

Keywords: food security, environmental sustainability, interdisciplinarity, education, Sahel

p8.14

A MEDICAL PHYSICS TRAINING OPPORTUNITY FOR YOUNG PHYSICISTS IN TRIESTE TRAINING PROGRAMME

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The University of Trieste and the Abdus Salam International Centre for Theoretical Physics (ICTP, Trieste, Italy) have initiated in 2014 a Master of Advanced Studies in Medical Physics (<http://www.ictp.it/programmes/mmp.aspx>), a two-years training programme, co-sponsored by the Academy of Sciences for the Developing World (TWAS).

The Master Programme is designated to provide young promising graduates in physics, mainly from developing countries, with a post-graduated theoretical and clinical training suitable to be recognised as Clinical Medical Physicist in their countries. Every year 13 participants from Africa, South America, Asia, Europe and Middle East have been selected among more than 700 applicants.

The University of Trieste and the ICTP, a UNESCO educational institution with training initiatives in the area of medical, have developed the Master programme according to the recommendations of International Organization of Medical Physics (IOMP) and International Atomic Energy Agency (IAEA) for the education and the clinical training. The first year of the Master Programme in Medical Physics consists of basic and advanced courses and practical given by experts in these fields. The second year is spent in a medical physics department of the hospitals' network for a full time clinical training in radiotherapy, diagnostic and interventional radiology, nuclear medicine and radiation protection.

IOMP and IAEA are seeing this initiative as an answer to the growing demand of Medical Physicists in developing Countries. Full or partial scholarships are awarded to successful candidates from developing countries, thanks to the support of the IAEA, TWAS, IOMP, EFOMP and ICTP.

Keywords: training programme, master

PARALLEL SESSION P9

INTERNATIONAL COOPERATION AND MIGRATIONS

co9.01

LOCAL INTEGRATION AND THE PATHOLOGY OF XENOPHOBIA: A STUDY OF REFUGEES IN CAPE TOWN

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The aim of this paper is to explore the extent of xenophobia experienced by refugees in Cape Town, South Africa, and provide reliable data for further researches. The objectives identified to reach the aim were: analyze different forms and main causes of discrimination and xenophobia; analyze the role of institutions, media and civil society; consider whether the situation has changed after the attacks of 2008; collect and analyze data and identify the better ways to promote integration and reduce intolerance.

The research made use of a qualitative approach to provide a complete and detailed description of the research topic. Data capturing was conducted primarily with questionnaires, a workshop and colloquial interactions with African refugees and South African nationals. A random sampling technique was used and sampling cases were selected on the basis of their availability. The sample included a total of 40 people.

The result was surprising, as the situation is slowly improving. The extent of xenophobia found through data analysis was lower than expected.

Some kind of discrimination is still present in the society but it involves, in most of the cases, just a change in the attitudes towards the subject. Just a small percentage of refugees reported to have been victims of physical violence. Stereotypes are widely present within both communities and this is the factor that most prevents interaction and integration. A quite high level of discrimination, and sometimes violence, is still expressed by the service providers, especially the police forces and the hospital personnel. Adding the fact that South Africa has been a democracy for just 20 years, after a long period of isolation and violence, both the communities need to be informed and helped during the delicate process of integration but a solution is likely to be reached in the long period.

Keywords: refugees, xenophobia, integration, South Africa

co9.02

LE ASSOCIAZIONI DEI MIGRANTI COME NUOVI ATTORI DELLA COOPERAZIONE: NOTE DI UNA RICERCA DI CAMPO

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Il contributo si pone l'obiettivo di fare luce sulla realtà delle associazioni di migranti presenti nel nostro paese. Esse sono molto spesso impegnate nel sostegno e nella gestione di progetti di sviluppo nei luoghi di origine svolgendo a tutti gli effetti un ruolo di attori della cooperazione allo sviluppo. In questo senso attuano dinamiche di co-sviluppo in quanto il loro impegno transnazionale rafforza la loro integrazione locale.

In particolare il contributo espone i risultati di una ricerca di campo sulle associazioni ghanesi. La ricerca si è svolta in Italia, Regno Unito e Ghana dove sono state condotte 60 interviste semi-strutturate e svariate osservazioni partecipanti.

Dalla ricerca emerge che sono molteplici i fattori esogeni ed endogeni che favoriscono o meno la partecipazione dei migranti nei contesti di residenza attraverso le loro forme associative. Inoltre, per quanto riguarda il contesto italiano, la ricerca illustra la pluralità di tipologie associative presenti e la varietà di azioni svolte, tuttavia molto spesso senza sviluppare sinergie con gli attori della cooperazione dei contesti di residenza. Molto spesso si verificano dei parallelismi in cui gli i diversi attori italiani e migranti fanno le stesse cose senza sapere l'uno dell'esistenza dell'altro e perdendo l'opportunità di fare sistema nell'ottica della sussidiarietà e della complementarità delle risorse.

Partendo dal caso dei ghanesi il contributo vuole evidenziare le potenzialità delle associazioni dei migranti nella cooperazione allo sviluppo e alcune piste per la loro valorizzazione all'interno del mondo della cooperazione allo sviluppo.

Keywords: associazionismo dei migranti, co-sviluppo, integrazione

co9.03

IMMIGRATION AND ASYLUM IN EU: UNDERSTANDING THE CHALLENGE TO THE PROTECTION OF HUMAN RIGHTS

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The work aims at highlighting the problems arising from the huge scale reached by immigration flows to Europe in these last decades due to the numerous conflicts in different areas of the world. The Syrian conflict, for example, has left millions displaced, and the number of those embarking on dangerous journeys across the Mediterranean has held distressingly firm.

The work aims at sharing through an oral report the researches to date done about the EU policies in these fields at a time when very real crises, requiring urgent attention, are taking place at the southern borders of Europe. As the EU European Court of Justice and the European Court of Human rights have stress in recent sentences, the huge flows of immigrants to Europe causes lots of problems in order to the protection of human rights, first of all asylum.

The first result of this research has been the publication in 2012 of a book titled: “La politica migratoria europea: da Tampere a Lampedusa”. Another important result have been the submission to the Committee Against Torture (ONU) of a claim by the students of the Legal Clinic of International law where I teach to denounce the inhuman treatment suffered by migrant during their stay in the CIE of Lampedusa. The CAT judged our petition admissible and, currently, we are waiting for the decision.

The report wants to highlight that these challenges will not subside in the future. Therefore, it is necessary that EU institutions and Member State governments try to find different ways of working together to identify common solutions based on the real future needs of Member States and on the protection of human rights of the migrants, and by focusing on adding value to existing immigration systems.

Keywords: immigration, asylum, EU, human right

co9.04

**TREATMENT SUFFERED BY MIGRANTS IN THE IDENTIFICATION
AND EXPULSION CENTRE IN LAMPEDUSA AND PETITION TO THE
COMMITTEE AGAINST TORTURE (ONU) PRESENTED BY THE
BRESCIA LEGAL CLINIC**

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The purposes that our work points at were to allow a young migrant to present a petition to the Committee Against Torture (CAT) to denounce the inhuman treatment suffered by him and the other people during their stay in the homeless shelter in Lampedusa. The importance of our project is to give assistance to a man who can't afford to pay legal fees and even doesn't know the protection that the International law recognizes him.

Our legal clinic works in a team composed by a lawyer, a professor and three students. At first, we went to Tunis to conduct an interview to our patient to retrace the events. We focused on some important points: the time he spent at the reception center, the organization and the quality of the treatments received by him and the other migrants. After that, we developed this narrative, contextualizing it within the International and Italian law, looking for the best deed.

Our studies led us to select the petition at CAT as the best way to claim our patient's right. We wrote a deed against Italy and sent it to Geneva, seat of the Committee. The CAT judged our petition admissible and, after that, the procedure started. Currently we are waiting for the judgment.

Our work achieves an important aim: it focuses the international attention on the situation of migrants in Italy and it gives voice to a victim of inhuman treatment. Universities are suitable for applying this kind of assistance: indeed poor people could be protected and students have the possibility to improve their knowledge. We'll make a poster to explain this project in each detail.

Keywords: migrants, legal clinic, Lampedusa, Brescia

co9.05

IL RUOLO PROTETTIVO DEI SOCIAL WORKER NELLA PRESA IN CARICO DEI MINORI SIRIANI RIFUGIATI IN GIORDANIA: ANALISI DI BUONE PRATICHE DI INTERVENTO

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L'analisi dei bisogni formativi di un gruppo di 15 Social Worker giordani, deputati alla presa in carico di minori siriani rifugiati, ha rilevato come la necessità di comprendere e affrontare le problematiche dei bambini rappresenti una delle esigenze maggiormente pregnanti. A partire da questi risultati, è stato condotto uno studio volto ad indagare i fattori di rischio e i fattori protettivi specifici dei minori utenti dei Community Development Centres (CDCs).

Il campione è composto da 134 bambini siriani di età compresa dai 7 ai 12 anni, frequentanti i CDCs di Balqca, Jerash e Ajiloun. Sono stati somministrati strumenti quantitativi volti ad indagare il livello di esposizione alla guerra (CWTQ, Macksoud, 1988, Macksoud e Aber, 1996), il disturbo post-traumatico da stress (PTSR Checklist - Child Version, Macksoud et al., 1990), il disfunzionamento sociale (SDQ 4-16, Goodman, 1997), e il livello di resilienza (CYRM-28 items, Ungar e Liebenberg, 2009). In parallelo, sono stati impiegati strumenti qualitativi che indagano la percezione soggettiva del minore riguardo a fattori di rischio e protettivi, risorse interne ed esterne e la capacità di proiezione in un futuro positivo (Castelli, 2013).

I risultati mostrano come il livello di esposizione alla guerra influisca direttamente sulla salute mentale dei minori e come la famiglia e i CDCs assumano un ruolo protettivo fondamentale in quanto agenti capaci di promuovere competenze sociali nel nuovo contesto.

Questi risultati sono stati tradotti in buone pratiche da adottare nella presa in carico di minori siriani e trasmessi ai Social Worker nell'ambito di una formazione finale. Studi successivi sono attivi per monitorare l'effettivo impatto delle buone pratiche trasmesse sull'azione dei Social Worker.

Keywords: resilienza, social worker, minori rifugiati

co9.06

**THE CASE OF THE “LEFT-TO-DIE BOAT” ADDRESSED BY THE
STUDENTS OF THE COURSE OF LEGAL CLINICS AT THE
UNIVERSITY OF BRESCIA**

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The case we dealt with is called “left-to-die boat”. In March 2011, 72 migrants were forced to embark from the Libyan coast on a small vessel in order to reach Italy. They soon run out of fuel and they were left adrift without food or drinkable water for 15 days, despite the approach of some of the many military boats and aircrafts present in that area in the context of the Nato operations against Libya, and some contacts with the Italian MRCC. Only 9 of them eventually survived. Despite the attention of the media, no serious investigation began on these facts.

Our aim was then to submit the case to the European Court of Human Rights for violation of art. 2-3 of the ECHR committed by the Italian authorities.

Supervised by Prof. Luca Masera, firstly, we studied the reports in order to understand the events precisely and to identify which violations of the ECHR could be claimed. The research was also directed to find and study the relevant case law on analogous situations.

Finally, we wrote an application to be submitted to the European Court. It was particularly challenging to find a way to overcome the limit of 6 months imposed by art. 35 of the ECHR, that were already elapsed, so we affirmed that the total lack of an effective investigation by the Italian authorities was still ongoing.

However, after we finished to write our application, the Military Prosecutor actually started to work on this case. Thus, we filled a complaint to strengthen the indictment.

This experience has been very useful to study some aspects of immigration and international law which are related to each other, but it had also a practical effect in providing a free legal assistance to people that otherwise would not have had such possibility.

Keywords: human rights, ECHR, Arab spring

PARALLEL SESSION P10

**THE SOCIAL SCIENCES AND ANTHROPOLOGY IN
DEVELOPMENT COOPERATION: HOW HUMAN
RESOURCES COME INTO PLAY**

co10.01

RICERCA PARTECIPATIVA E PROGETTI DI COOPERAZIONE

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Le domande sul “perché e per chi” si genera conoscenza (Lynd, 1939) sono da tempo una chiave per la disciplina antropologica. Negli ultimi cinquant’anni si sono sviluppati approcci di ricerca che favoriscono la partecipazione dei soggetti (ricerca-azione partecipativa) e la valorizzazione dei saperi “locali” o “popolari”. La centralità della ricerca come strumento di trasformazione della società caratterizza anche gli approcci più recenti, marcati dal giro decoloniale, e più impegnati, come l’antropologia attivista o quella militante. Con maggior frequenza si sviluppano ricerche in cui i “soggetti di studio” partecipano attivamente, dalla definizione delle tematiche fino alla disseminazione dei risultati, poiché il sapere così prodotto può essere usato per incidere positivamente nella realtà studiata.

La relazione espone alcuni casi concreti in cui, come antropologa, ho coordinato progetti di cooperazione e processi di formazione comunitaria in zone indigene del Messico. Tali esperienze rivelano la necessità dell’integrazione della ricerca antropologica attivista o partecipativa e le attività di cooperazione, in cui il lavoro del ricercatore ha facilitato l’individuazione di tematiche chiave per l’intervento ed ha propiziato la relazione con la collettività destinataria del progetto.

In secondo luogo, si è resa evidente la necessaria complementarità dei saperi (locali, colti, popolari, esterni, tradizionali ed innovativi: nelle parole di un saggio indigeno wixarrica, “solo entre todos sabemos todo”) per l’interpretazione integrale della realtà ed il conseguente disegno dei progetti di cooperazione. In terzo luogo, la valorizzazione delle strutture di organizzazione locale garantisce la forza e la durabilità dei risultati ottenuti attraverso le attività di cooperazione.

Keywords: antropologia attivista, ricerca partecipativa, decolonizzazione, cooperazione, formazione comunitaria

co10.02

NATURE FROM SUMAK KAWSAY TO BUEN VIVIR: FROM COSMOVISION TO NEOEXTRACTIVISM

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Cori Andrea, *Università degli Studi Roma Tre*

This work will try to trace the evolution of the relation between nature and human well-being from the original indigenous cosmovision of Sumak Kawsay to the recent Ecuadorian Buen Vivir policies. The harmonious relation between nature and human communities is at the core of the indigenous cosmovisions of Sumak Kawsay, while the primacy of the human well-being is at the basis of the recent neo-extractivist policies, where the exploitation of the nature is conceived as a means to develop human societies. Different understandings of nature are at the basis of different economic paradigms. Conclusions should therefore be drawn on the way human welfare is pursued in a context of environmental sustainability: fascinating visions (such as those on which the indigenous cosmovision of Buen Vivir are based) need to be translated into practice.

Keywords: Buen Vivir, Ecuador, natural resources, sustainability, Sumak Kawsay

co10.03

CO-INNOVATION FOR RURAL DEVELOPMENT IN AFRICA: THE AGRINOVIA TRAINING PROGRAMME

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The aim of this paper is to present Agrinovia, an innovative training programme and approach conceived and hosted by the University of Ouagadougou (Burkina Faso), with the contribution of IFAD, the University of Roma Tre and other academic and institutional partners. Agrinovia's main objectives include the co-construction of new competencies in support to local co-innovation; the creation of an horizontal network of African and European universities, all working together towards an innovative and concerted approach to rural development; the initiation of a critical reflection on consolidated yet obsolete development cooperation habits, supporting a shift from the concept of knowledge transfer to that of co-research, from the idea of beneficiaries to that of co-innovators, from capacity building to capacity support. Training modules and field work provide students with the skills and instruments to identify, strengthen and disseminate local and "farmers owned" innovation processes; support fruitful partnerships among all stakeholders involved, from farmers to policy makers and universities; facilitate the flow of communication through a network of actors, supporting farmers' knowledge, and its interaction with more formal knowledge systems. Three pedagogical cornerstones inspire the programme: i) Multi-actor and multidisciplinary learning: trainers originate from different institutions (academia, development organizations), different specializations and cultural horizons (North and South); ii) International and mixed environment: students come from different countries and with different academic backgrounds; iii) Combination of knowledge and know-how: classroom learning is coupled with constant exposure to real life experiences of rural innovation and development. AGRINOVIA has, in its four editions, trained more than 80 African and European students, turning them into development professionals able to work with rather than for rural communities, and to provide competent support to those endogenous innovation processes that can improve the living conditions of local actors.

Keywords: rural innovation, Africa, partnership, training

co10.04

DECENTRALIZED COOPERATION PROGRAMS AS PRACTICES OF TERRITORIAL NETWORKS EVOLUTION: INCLUSIVE OR CENTRALIZED DYNAMICS?

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This paper aims at showing that international cooperation projects can produce benefits and effects not only on direct beneficiaries in developing countries but also in the communities that promote such interventions. These effects on civil society can be particularly relevant in development programs that try to aggregate different territorial actors and promote collaborative environments. These effects can be material and immaterial, social and economic, relational and organizational.

In recent literature, there are no studies that describe and analyze this kind of effects. The study proposes to fill in this gap by evaluating the effects on social networks of decentralized cooperation programs using a combination of the territorial approach, network theories and the use of social network methodology.

The paper presents a longitudinal analysis of the relational and structural assets of Trentino's International cooperation activities and the specific case of "Tavolo Trentino con il Kosovo" (TCK). Specifically, through a secondary collection of data obtained by the reading of Local Government and Association official documents, the analysis produces 10 bimodal matrixes that describe networks of the experience in different years (1999– 2009). The matrixes are composed by 92 actors and 7 types of events and permit to describe the evolution of the networks and the TCK capacity to create a common collaborative structure between the different territorial actors.

The results of this research demonstrate that this program has enhanced its capacity to include new actors into the network. However problems in terms of empowerment and ownership of the single actors remain. The network has been distinguished by dynamics as centralization process, creation of an intra-organizational elite and mimetic isomorphism esteem other Trentino's decentralized cooperation programs. This kind of evolution has affected program's potentiality to promote effective forms of collaboration and consequently its capacity to produce socio-organizational innovation.

Keywords: decentralized cooperation, Social Network Analysis, socio-organizational innovation

co10.05

“NEGATIVE BENCHMARKING”: WHAT THE WESTERN COUNTRIES MAY REALLY TEACH TODAY TO THE SOUTH OF THE WORLD, NAMELY “WHAT NOT TO DO” (INSTEAD OF “WHAT TO DO”)

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At the end of the modernity cycles, it is possible to trace some elements in order to establish a reference for a discussion that, otherwise, may still be influenced by ideologies and contingencies. In particular, it is possible to state that the development theory can be traced to a commonly acknowledged paradigm, that would bases on a certain definition of human capital intended as an essential engine for the peoples’ “development”. This signifies a sequence of elements that may be considered indispensable in the frame of an effective policy growth-oriented. Among them: 1) the participation to the international economics circuits (to be considered as a > zero sum game; 2) stability and democratic minimization-of-the-violence assumptions; 3) economic leverage based on a certain idea of social capital and human; 4) freedom of initiative and further fundamental rights, that may configure a scheme of political balances and of “governance”; 5) an effective accountability for costs affecting the territorial organization (e.g. considering the possibility of hidden costs, that on the long term may emerge to the point that they may choke any development effort). Above all, such conditions must realize themselves simultaneously in order to induce the possibility of a sustainable, self-cumulative and inclusive growth, that may delineate an hypothetical trajectory, that many developing countries have undertaken: targets that several western advanced countries (that indeed evidence a severe risk for regression) have missed. These consist in a sequence of “bubbles” (speculative, real estate, financial, social, technological, politic-administrative etc.), that risk anytime to escalate, making collapsing the whole system. In fact, today many self-defined advanced countries have matured such an experience that may represent a kind of “negative benchmark”, that many developing countries should consider in order to avoid in the next future the same errors.

Keywords: developing countries geography, negative benchmarking

co10.06

IL TOPO HA PARTORITO LA MONTAGNA

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Il nostro contributo vuole mostrare, partendo dal caso concreto del progetto Centro Giovanile Maxixe” e “Università Pedagogica Maxixe” (Mozambico), come un’ autentica cooperazione allo sviluppo è possibile solamente attraverso la conoscenza della realtà socio-culturale da parte dei cooperanti e il coinvolgimento delle risorse umane locali.

Questo modus operandi ricorre all’ approccio metodologico classico delle tre mediazioni (alle quali vogliamo aggiungere una quarta):

- mediazione socio-analitica: solo la gente del posto e i cooperanti che da anni vivono e lavorano in quel contesto possono raccogliere dati affidabili.
- mediazione ermeneutica: l’ interpretazione dei dati rilevati richiede un background di studi antropologici, sociali, culturali dell’ ambiente in cui si vuole operare.
- mediazione pratica: senza strategie concrete di attuazione le mediazioni precedenti risulterebbero sterili.
- una quarta mediazione, praticamente inesistente o quasi nelle politiche di cooperazione, è quella che chiamiamo mediazione valutativa. La cooperazione non può risolversi nella mediazione pratica, ma nel monitorare, valutare i risultati, rivedere e correggere eventuali mancanze fino a quando il progetto implementato possa diventare auto sostenibile.

I risultati ottenuti lungo questi anni con i nostri progetti sono confortanti: il “Centro Giovanile Maxixe” ha accompagnato migliaia di giovani con progetti di formazione dove gli stessi giovani sono diventati leaders nella formazione di altri giovani; l’ Università Pedagogica Maxixe, che conta attualmente circa 4000 studenti, ha formato e sta formando il suo corpo docente in loco e in paesi cooperanti.

Possiamo concludere che con un modesto investimento, il giusto appoggio di organizzazioni esterne e locali e con la metodologia sopra indicata, abbiamo raggiunto risultati molto superiori a tante ONG e cooperazioni internazionali che hanno investito “montagne” di milioni di euro “per partorire topi”.

Keywords: mediazioni, scienze sociali, risorse umane

PARALLEL SESSION P11

ECONOMY AND DEVELOPMENT

co11.01

WEST BANK: A FEASIBILITY ANALYSIS OF THE JENIN SUSTAINABLE INDUSTRIAL AND LOGISTIC DISTRICT

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The study has been funded by the Republic of Italy through the Ministry of Foreign Affairs, Italian Development Cooperation Office.

The initiative in Jenin is intended to create a model of balanced and long-term permanent development, promoting the growth of economic and industrial activities in the Governorate of Jenin, quickly and with a rapid impact on income and on the social status of the population. A specific objective will be the creation of a logistic and industrial complex. With the systematic involvement of local communities and the use of existing potential, it will be possible to create the most appropriate and favourable local background for the economic development area.

The logistic activities will be modulated conforming to a sophisticated study, which will account for the probability of encountering Israeli checkpoints along the routes and the characteristics of the trade firms.

The aim of the project is the building of a self-sustainable industrial park, involving an integrated cluster of firms and a logistic port in Jenin and it will be an important opportunity to: develop and support the local economy and the whole country; facilitate the manufacture, distribution and export of agricultural and industrial products derived within the West Bank; facilitate the importation of products; generate employment, in a short time, for both skilled and unskilled workers; establish relations between the Palestinian and Israeli economies improve security through efficient scanning techniques to allow movement; encourage Palestinian economic diversification; encourage industrial development projects independent for both energy and water supplies, using technologies with low environmental impact.

The project of the Jenin Industrial and Logistic Area (JILA) covers an area of about 90 ha destined for industrial use and consists of the following subprojects: industrial park, land port, security checkpoint, power plant from alternative sources of energy, water management facility, administrative area development.

The investment is expected to generate about 160 factories established in the JILA, about 5000 new direct employment opportunities in Jenin, plus an indirect employment effect in the West Bank area as large as 1.5 times the direct effect. The projections show an average gross national product growth of 30-40% for the Jenin area under the current conditions of labour mobility within the OPTs. The estimated economic internal rate of return for the investment is 89%.

Keywords: West Bank economic development

co11.02

SIERRA LEONE: SMART RICE VILLAGE ECONOMY

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The objective of the project is the development of a local development model for Sierra Leone based on the idea of a self-sustainable Village Economy that is also resilient because capable to effectively respond to economic, climatic and political shocks and integrated in the global community also thanks to the modern smart technologies. Rice is the main product conditioning both the economic sustainability and the food security of the local community. The study proposes an innovative model of village economy that plans transformation, storage and trading facilities of rice. The village has the characteristics of an advanced rural community both in terms of the provision of education and health services and for the use of modern technologies adapt to the local stock of knowledge. The Village Economy model is designed so that it will be reproducible in the socio-cultural contexts of different rice producing areas of Sierra Leone. The research will use local planning techniques to study the links between the different production sectors of the local economy with the different farm-household typologies and to develop a cost-benefit analysis following the international guidelines explaining the project feasibility and the financing opportunities for its implementation.

Keywords: Sierra Leone development, village economies

co11.03

WOMEN'S EMPOWERMENT AND POVERTY REDUCTION: THE ROLE OF FEMALE PRODUCER GROUPS IN WEST AFRICA

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The broad objectives of the paper are: a) to examine gender inequalities in West Africa (Burkina Faso, Mali, Niger) and their negative impact on development; b) to assess the role of women's income-generating groups in promoting women's empowerment and poverty reduction.

The paper analyses the data from surveys conducted in Niger and especially in Burkina Faso in 2008-2011 on women's producer organisations. The data were collected through in-depth open interviews to key informants and group interviews with a semi-structured questionnaire to the board and members of different organisations.

Psychological empowerment appears to be the main benefit for a woman from being member of an organisation involved in income generating activities. As far as the economic empowerment is concerned, it depends on the characteristics of the organisation and of its members, its sector of activity, amount of capital and marketing capacity and on the way work is organised and remunerated.

Women's empowerment and greater income and assets in the hands of women result in larger improvements in child welfare (education, nutrition and especially health) and higher growth of the economy. Given the strong relationship between women and natural resources, women's empowerment can have a positive impact on the environment.

Considering the limits of women's income-generating groups that emerged from our surveys, some conclusions at the policy level are drawn and some suggestions are given to improve the effectiveness of NGO's projects.

Keywords: women's producer groups, empowerment

co11.04

RURAL HOUSEHOLD RISK EXPOSURE AND COPING STRATEGIES IN ETHIOPIA: EVIDENCE AND POTENTIAL IMPROVEMENT

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Achieving food security is one of the most important goals in order to implement development's action in low-income countries, especially where farming is the most important source of income. In this situation, natural disasters, climate change and other shocks can badly affect the production and food consumption levels.

Farmers adopt strategies to cope with shocks and disasters, trying to keep a smooth consumption level. Food security is the first step to an overall improvement in life conditions: after they do not have to worry about food, households can use their money and resources to focus on other issues like health and education and to buy food in case of famines. On the other hand, access to finance can be a very effective channel to cope with shocks and disasters and to achieve consumption smoothing. This paper wants to analyze the strategies carried out by Ethiopian farmers in order to cope with different shocks and natural disasters, given their overall limited knowledge of insurance products. Data were gathered during a three-years research carried out by Findev group of the Research Center in International Co-operation of the University of Bergamo in Southern Ethiopia, one of the major food deficit and famine-prone parts of Ethiopia. 360 household from three different villages were interviewed twice a year.

The study aims to understand if farmers' strategies have changed during these three years in order to highlight possible new paths and improvements through the development of suitable financial and insurance products.

Keywords: risk management, microinsurance, Ethiopia

co11.05

WHICH COMPETENCES FOR THE REMOTE VILLAGES?

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In the areas of limited available resources the level of wellness of the population has been often expressed through the analysis of the locally accessible technologies. In particular, in rural situations, the wellness of farmers has been classified as (i) farmers who avail themselves only of simple tools such as shovels and hoes, (ii) farmers that use working animals (iii) and farmers who utilize mechanical resources such as tractors and engines.

Taking in to account that the use of draught animal power increases the productivity of farmers by five or six time, an analysis has been conducted to classify the competences, technologies, vocational training procedures and best practices to be exchanged between the farmers and to be transferred in the villages.

A cost benefit analysis has then been conducted to motivate the selection of the local technologies needed in remote areas. The analysis has compared the benefits of the use of animal traction versus the adoption of the mechanization.

Then it has been drafted a tentative inventory of the competences needed to strengthen the role of local technologies in remote villages with particular reference to the consolidation of the use of draught animal power. In particular the improvement of the following competences have been considered useful in those areas: agronomic, zootechnical, veterinarian, meteorological, economic and anthropological. Animal welfare has been considered as one of the main issues.

Then an analysis has been conducted on the best practices to be adopted for the diffusion of the competences in the said areas.

The cost benefit analysis seems to have demonstrated that, in the first stage of development, the support to promotion of the local competences is more profitable than the acquisition of foreign technologies that are not specifically suited for the needs of the villages.

Keywords: local technologies, remote villages development

p11.01

KURDISTAN REGION - A FEASIBILITY ANALYSIS OF THE ERBIL SUSTAINABLE INDUSTRIAL AND LOGISTICS DISTRICT

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This feasibility study aims at contributing to the socio-economic development of the Kurdistan Region and the Erbil Governorate, through the implementation of an industrial and logistic district fully sustainable both under a socio-economic and environmental point of view. The project represents a real opportunity of industrialization both for local and international companies.

The initiative in Erbil is intended to create a model of balanced and long-term permanent development in order to promote the growth of economic and industrial activities in the governorate of Erbil, quickly and with a rapid impact on income and the social status of the population. With the systematic involvement of local communities and the use of existing potential, it will be possible to create the most appropriate and favorable local background for the economic development of the area.

The Erbil Industrial and Logistics Area project will involve an area of about 50 hectares destined for industrial development and will consist of the following subprojects: industrial area (66.08% of the overall area); land port (28.32%); security checkpoint (2.36%); administrative area development (1.24%).

The investment is expected to generate approximately 86 factories set up in the District, about 2440 new direct employment opportunities in Erbil, plus an indirect employment effect in the Kurdistan region as large as 1.5 times the direct effect. In terms of the objectives and priorities discussed above, the proposed action meets the requirements because: it launches a real development initiative which has obtained immediate consent and considerable agreement; it creates a situation that will provide tangible income benefits, self-respect and a better quality of life for the Iraqi people; it requires the credible and stable creation of agreements between the Kurdistan region and neighbouring Countries; it contributes to creating a new managerial class in Iraq; it contributes to modifying, with the incentive of the private sector, the orientation and behavioral practices of decision-makers, who will request administrative actions to support development initiatives.

Keywords: Erbil industrial logistics district

p11.02

A PERMACULTURE CENTRE IN THE SINAI DESERT, EGYPT

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The association ECOntACT works in local and international cooperation projects, using a grassroots approach to technologies, in order to protect environmental resource and support self-determination and development of peoples.

In Nuweiba, Sinai, Egypt a learning center for permaculture is rising, in order to support food self-reliance of the Bedouin community, with the aim to promoting the training proper use of energy and water resources.

The tourism has changed the traditional living concept of Egyptians and Bedouins, as well as European communities. Current security problems have strongly changed this economy, and the people face suddenly no alternative to convert the system. As a marginalized group, Sinai's Bedouins struggle with poor access to education and health services, and have been the losers in many legal struggles over land and resources.

The project started in 2013 with the collaboration between ECOntACT with Habiba Organic Farm and the local community of Nuweiba.

ECOntACT is supporting the learning center project proposing the integrations of traditional local techniques with eco-building engineering approach, using straw bales, plaster and salvaged windows and doors, displaying low cost techniques and materials easily obtainable in Sinai. Beyond this, ECOntACT support the management of the space where to realize the permaculture design, helping to create training courses and awareness for the Bedouin community.

The learning center construction is a learning suite case itself and its scope is to enhance the effective transfer of skills, facilitate the conceptual and attitudinal development, introducing appropriate changes in local behavior.

Keywords: energy, permaculture, resilience, farm education

OFFICIAL PROGRAMME OF THE IV CUCS CONGRESS

THURSDAY 10 SEPTEMBER 2015	
TIME	SESSION
11.00 – 13.00	<p>OPENING SESSION</p> <p><u>Opening Ceremony:</u></p> <ul style="list-style-type: none"> • Maurizio MEMO, <i>Vice-Chancellor for Internationalization, Research, and Higher Education, University of Brescia</i> • Mario TACCOLINI, <i>Rector's delegate for the coordination of development strategies of Università Cattolica del Sacro Cuore – Brescia Campus</i> • Angelo STEFANINI, <i>Delegate of the Conference of Italian University Rectors (CRUI) at the Foreign Affairs Ministry</i> • Donatella ALBINI, <i>Member of Brescia's Town Council</i> • Claudia SORLINI, <i>President of the Scientific Committee for EXPO 2015</i> • S.E. Valerio VALENTI, <i>Brescia Prefect</i> <p><u>Conference Presentation:</u></p> <ul style="list-style-type: none"> • Francesco CASTELLI, <i>Rector's delegate for the coordination of development strategies of University of Brescia</i> <p><u>Lectio magistralis:</u></p> <ul style="list-style-type: none"> • Eric FALT, <i>Assistant Director-General for External Relations and Public Informatio (ADG/ERI), UNESCO, Paris</i>
13.00 – 14.30	POSTER SESSION
14.30 – 16.30	<p>SEMI-PLENARY SESSION T1: <i>From Millennium Development Goals to Sustainable Development Goals: a new role for Universities</i></p> <p><u>Moderators:</u> Emanuela COLOMBO (<i>Politecnico di Milano</i>), Eduardo MISSONI (<i>Università Commerciale Luigi Bocconi</i>)</p> <p><u>Speakers:</u> Luciano CARRINO (<i>OECD/DAC poverty reduction group</i>), Richard MASIKA (<i>World Federation of Colleges and Polytechnics, WFCP</i>), Manuel FASCO (<i>Ministry of Education, Cuba</i>)</p> <p>SEMI-PLENARY SESSION T2: <i>Emergencies and Development: links, challenges and their management</i></p> <p><u>Moderators:</u> Carlo COLLIVIGNARELLI (<i>Università degli Studi di Brescia</i>), Gian Battista PARIGI (<i>Università degli Studi di Pavia</i>)</p> <p><u>Speakers:</u> Claudio VALSANGIACOMO (<i>Swiss Agency for Development and Cooperation (SDC) and University of Applied Sciences and Arts of Southern Switzerland (SUPSI), CH</i>), Angelo STEFANINI (<i>University of Bologna</i>), Valentina FUSCOLETTI (<i>Italian Institute of Health</i>)</p>
16.30 – 17.00	POSTER SESSION (S1)

<p>17.00 – 18.30</p>	<p>PARALLEL SESSION P1: UNESCO Chairs in Italy <u>Moderators:</u> Francesco CASTELLI (<i>University of Brescia</i>), Felice RIZZI (<i>University of Bergamo</i>) <u>Introduction:</u> Prof. Giovanni PUGLISI, <i>President of UNESCO National Commission</i> <u>Oral presentations:</u> co1.01 UNESCO Chair “Training and Empowering Human Resources for Health Development in Resource-limited Countries”, University of Brescia (<i>Francesco Castelli</i>) co1.02 Integrating sustainable development goals into engineering education and research: the case of Polimi (<i>Emanuela Colombo</i>) co1.03 A trans-disciplinary UNESCO Chair team in environmental engineering: opportunities and challenges for academic empowerment (<i>Guido Zolezzi</i>) co1.04 Global Bioethics and the Challenge of Convergence in Cultural and Religious Diversity (<i>Alberto Garcia</i>) co1.05 Popular sovereignty and cooperation (<i>Felice Rizzi</i>) co1.06 The role of UNESCO chairs in cultural heritage conservation for urban sustainable development (<i>Paolo Ceccarelli</i>) co1.07 Training and Educating in international cooperation: a case history - The Master’s Degree in Engineering for the Environment and the Territory with special focus on “Environmental Integration in International Cooperation contexts” (<i>Massimo Zortea</i>)</p>
	<p>PARALLEL SESSION P2: Public Health and Cooperation for Development <u>Moderators:</u> Susanna ESPOSITO (<i>University of Milano</i>), Gavino MACIOCCO (<i>University of Florence</i>) <u>Oral presentations:</u> co2.01 Effectiveness of Demand-side Incentives on Utilisation of Delivery Services in Oyam District, Uganda: A Quasi-Experimental Study (<i>Maria Nannini</i>) co2.02 RODAM: Research on Obesity and Diabetes among African Migrants. The Italian experience of the RODAM project (<i>Agnese Caselgrandi</i>) co2.03 Genitorial education programs and impact on the prevalence of intestinal parasitosis in a paediatric population in an remote rural area in Ecuador (<i>Chiara Poppi</i>) co2.04 Utilità della valutazione ecografica nel percorso diagnostico e terapeutico presso il Mother Teresa Hospital di Turaley in Sud Sudan (<i>Marilena Bertini</i>) co2.05 Imparare dai Paesi “emergenti”: il caso del programma di cooperazione inter-universitaria con il Brasile (<i>Angelo Lorusso</i>) co2.06 Cystic echinococcosis: a zoonosis gone (even more) global (<i>Roberta Narra</i>)</p>
	<p>PARALLEL SESSION P3: Water, energy and food <u>Moderators:</u> Guido ZOLEZZI (<i>University of Trento</i>), Emanuela COLOMBO (<i>Technical University of Milano</i>), Angela CALVO (<i>University of Torino</i>) <u>Oral presentations:</u> co3.01 Challenges and opportunities of addressing technological innovation in “standard” humanitarian projects: a discussion paper (<i>Marco Caniato</i>) co3.02 Gender indicators on access and water management in Ethiopia: a student mobility project (<i>Francesca Alice Centrone</i>) co3.03a Water and Energy Nexus: a case study example (<i>Thuy Laurens</i>) co3.03b WWDR 2015: Water and Sustainable Development (<i>Angela Renata Cordeiro Ortigara</i>)</p>

<p>co3.04 Residual biomass recovery to improve energy access at household level: an experience from Madagascar (<i>Angelo Mazzù</i>)</p> <p>co3.05 Energy for water supply: a case study in the Southwestern Region of Burkina Faso (<i>Marcello Rava</i>)</p> <p>co3.06 Who will feed Africa? (<i>Hans Holmen</i>)</p>
<p>PARALLEL SESSION P4: Universities and NGOs: How to Integrate their activities?</p> <p><u>Moderators:</u> Sabrina SORLINI, Mentore VACCARI (<i>University of Brescia</i>), Giuseppe SALVINELLI (<i>Sipac Foundation – Brescia</i>)</p> <p><u>Oral presentations:</u></p> <p>co4.01 Collaboration between University and ONG in projects involving sustainable development (<i>Alessandra Guerrini</i>)</p> <p>co4.02 Analisi di un'esperienza di collaborazione tra Università Cattolica e Fondazione Alberto della Vita nell'ambito di un progetto di presa in carico di minori siriani in transito a Milano: criticità e punti di forza (<i>Silvia Cocioli</i>)</p> <p>co4.03 Pediatric HIV management in Burkina Faso: an enduring collaboration between the Hopital St.Camille in Ouagadougou, Burkina Faso, the University Children's Hospital in Brescia and the NGO Medicus Mundi Italia (<i>Gloria Patelli</i>)</p> <p>co4.04 La formazione come punto di connessione tra saperi e pratiche, tra locale e globale (<i>Jenny Capuano</i>)</p> <p>co4.05 Integration University-NGOs: advantages of a trilateral partnership, in Colombia (<i>Lavinia Di Francesco</i>)</p> <p><u>Poster discussion and round-table exchange of ideas:</u></p> <p>p4.01 Solar cooling for food preservation: technology review and design of a stand-alone system for fish preservation in Mozambique (<i>Martina Frangi</i>)</p> <p>p4.02 University of Brescia, Medicus Mundi Italia (MMI) and the District of Morrumbene in Mozambique: working for the National Tuberculosis (TB) Control Program (NTCP) (<i>Carlo Cerini</i>)</p> <p>p4.03 Evaluating Income Generating Activities programs: How University research can strengthen NGOs work on the field. An experience from Cote d'Ivoire (<i>Stefania Giada Meda</i>)</p> <p>p4.04 The potential of collaboration between NGO and Universities between practicality and research (<i>Marta Domini</i>)</p> <p>p4.05 Università, ONG e cooperazione decentrata: quale integrazione? (<i>Antonella Vidoni</i>)</p>

FRIDAY 11 SEPTEMBER 2015	
TIME	SESSION
09.00 – 11.00	<p>SEMI-PLENARY SESSION T3: <i>Development Cooperation's new geography. The distribution of poverty today</i> <u>Moderators:</u> Gianni VAGGI (“Sacro Cuore” Catholic University Pavia), Egidio DANSERO (University of Torino), Guido SALI (University of Milano) <u>Speaker:</u> Emma MAWSDLEY (University of Cambridge): Locating the poor in a complex development landscape</p>
	<p>SEMI-PLENARY SESSION T4: <i>Meeting Universities in Northern and Southern areas</i> <u>Moderators:</u> Anna CASELLA, Maddalena COLOMBO (“Sacro Cuore” Catholic University), Francesco LAZZARI (University of Trieste) <u>Speakers:</u> Helion POVOA NETO (Federal University, Rio de Janeiro, Brazil), Francesco LAZZARI (Trieste), Mirela TINGIRE (Catholic University of Brescia/Bucarest), Anna CASELLA (Brescia branch of the “Sacro Cuore” Catholic University)</p>
11.00 – 11.30	POSTER SESSION (S2)
11.30 – 13.00	<p>PARALLEL SESSION P5: <i>Pedagogical Approach for Sustainable Development and Heritage Valorization</i> <u>Moderators:</u> Giovanna DEL GOBBO (University of Florence), Alessandra VISCHI (“Sacro Cuore” Catholic University) <u>Oral presentations:</u> co5.01 Promuovere l’educazione alimentare per il bene comune: quale ruolo per la cooperazione decentrata? (Nadia Tecco) co5.02 From MDGs to SDGs: geographic education and global citizenship (Emanuela Gamberoni) co5.03 Experimentation in El Salvador of models of vocational training as a tool for opposing organized youth violence (Mario Micheli) co5.04 Un’esperienza didattica per la conoscenza, valorizzazione e recupero del patrimonio architettonico e paesaggistico dell’Albania (Anna Bruna Menghini) co5.05 Il cibo tra cura e responsabilità (Sara Bornatici) co5.06 Comunicazione per la sostenibilità: Environmental and Educational HUB (Matteo Fabio Viadana Piovesan) co5.07 Sviluppo umano e ambiente. Processi formativi e conoscenza scientifica per custodire il creato (Simona Sandrini)</p>
	<p>PARALLEL SESSION P6: <i>Sustainable policies for urban development</i> <u>Moderators:</u> Silvia MACCHI (University of Rome “La Sapienza”), Daniela DE LEO (University of Rome “La Sapienza”), Raffaele PALOSCIA (University of Florence) <u>Oral presentations:</u> co6.01 The role of civil society in the process of pacification: the case of Complexo da Mare (Elena Esposto) co6.02 “Universidades Estratégicas”- Il ruolo della cooperazione internazionale nel promuovere rapporti tra Università e Territorio per una pianificazione strategica partecipata (Claudia Gatti) co6.03 Preliminary Flood Risk Mapping of River Niger in Niamey, Niger: A Snapshot Decision Making Tool (Maurizio Tiepolo)</p>

	<p>co6.04 Water and Megalopolis: uses, conflicts, and projects in Mexico City (<i>Benedetta Caprotti</i>)</p> <p>co6.05 Proposte di auto-miglioramento per gli slum di Freetown (Sierra Leone) (<i>Federico Monica</i>)</p> <p>co6.06 Percorsi formativi sperimentali e patrimonio territoriale. Caritalents: un progetto di cooperazione con le West Indies (<i>Raffaele Paloscia</i>)</p> <p>co6.07 The gecekondu origin of Gazi and Zeytinburnu in Istanbul: the informal city made possible (<i>Michele Morbidoni</i>)</p> <p>co6.08 Understanding the complexity of urban informality: from the dichotomy legal/illegal to the Heterotopia (<i>Elena Tarsi</i>)</p> <p>co6.09 From global climate governance to resilient infrastructure in sub-Saharan cities (<i>Liana Ricci</i>)</p>
	<p>PARALLEL SESSION P7: Participatory Approaches and Context Analysis in Development Cooperation</p> <p><u>Moderators:</u> Elena BRESCI (<i>University of Florence</i>), Mirella LODA (<i>University of Florence</i>)</p> <p><u>Oral presentations:</u></p> <p>co7.01 Do participatory visual methods contribute to transformative change and social justice? Benefits and challenges in engaging Indigenous communities through participatory video (<i>Elisa Bignante</i>)</p> <p>co7.02 Effective participatory processes and multi-disciplinary approaches for the analysis of a territory and the fostering of durable and sustainable self-managed strategic planning: the Ma.Sa.Ma. project, a rural case study in El Salvador (<i>Silvio Cristiano</i>)</p> <p>co7.03 What does “Flood” stand for? Flood Risk and Flood Based Farming: the case of spate irrigation in Ethiopia (<i>Giulio Castelli</i>)</p> <p>co7.04 Analyzing participatory interventions using social network analysis: a case study in Northeast Brazil (<i>Carla Inguaggiato</i>)</p> <p>co7.05 Managing innovations in a traditional system under distress: the process of participatory cultural assimilation in the case of an agriculture development project in the Swat District of Pakistan (<i>Salvatore Farfaglia</i>)</p> <p>co7.06 Assessing Aid Effectiveness within a Multi-Level Governance Perspective: the Case of an Italian Cooperation Value Chain Project in Rural Ethiopia (<i>Federico Ciani</i>)</p>
12.00 – 13.45	ROUND TABLE: Students and international development cooperation
13.00 – 14.30	POSTER SESSION (S2)
14.30 – 16.30	<p>PARALLEL SESSION P8: Training in Cooperation for Development</p> <p><u>Moderators:</u> Giampiero CAROSI (<i>University of Brescia</i>), Egidio DANSERO (<i>University of Torino</i>), Marco FRASCIO (<i>University of Genova</i>)</p> <p><u>Oral presentations:</u></p> <p>co8.01 Capacity Building on Water and Sustainable development (<i>Angela Renata Cordeiro Ortigara</i>)</p> <p>co8.02 An intervention to promote the human capital of Ethiopian professionals working with HIV affected-children (<i>Guido Leonti</i>)</p> <p>co8.03 Sviluppo delle risorse umane (Human Resources Development) e sistema sanitario: il caso Etiopia e l’assistenza tecnica della cooperazione internazionale negli ultimi 10 anni (<i>Carlo Vittorio Resti</i>)</p> <p>co8.04 SI Parte: contenuti, metodologie ed esperienze per avvicinarsi al mondo della cooperazione internazionale (<i>Giovanna Dell’Amore</i>)</p> <p>co8.05 Course in education for interculturalism and cooperation for development - a case study (<i>Giulio Maternini</i>)</p>

<p>co8.06 Corso di Ateneo in Cooperazione internazionale e Sviluppo (<i>Valentina Valle</i>)</p> <p>co8.07 Training young doctors in Africa. Experience of non-formal education for Italian medicine students (<i>Chiara Cavagna</i>)</p> <p>co8.08 Cooperare assieme tra docenti e student (<i>Clelia D'Apice</i>)</p> <p>co8.09 Learning through experience in an interdisciplinary and multicultural context (<i>Daria Quatrada</i>)</p> <p>co8.10 Esperienze di collaborazione tra Italia e Vietnam: l'ingegneria idraulica tra formazione e ricerca (<i>Roberto Ranzi</i>)</p>
<p>PARALLEL SESSION P9: <i>International Cooperation and Migrations</i> <u>Moderators:</u> Cristina CASTELLI, Maddalena COLOMBO (<i>"Sacro Cuore" Catholic University</i>), Luciana GUAGLIANONE (<i>University of Brescia</i>) <u>Oral presentations:</u></p> <p>co9.01 Local integration and the pathology of xenophobia: A study of refugees in Cape Town (<i>Rachele Rivetta</i>)</p> <p>co9.02 Le associazioni dei migranti come nuovi attori della cooperazione: note di una ricerca di campo (<i>Francesco Marini</i>)</p> <p>co9.03 Immigration and Asylum in EU: Understanding the Challenge to the Protection of Human Rights (<i>Chiara Di Stasio</i>)</p> <p>co9.04 Treatment suffered by migrants in the Identification and Expulsion Centre in Lampedusa and petition to the Committee Against Torture (ONU) presented by the Brescia Legal Clinic (<i>Maria Laura Inzerillo</i>)</p> <p>co9.05 Il ruolo protettivo dei social worker nella presa in carico dei minori siriani rifugiati in Giordania: analisi di buone pratiche di intervento (<i>Francesca Giordano</i>)</p> <p>co9.06 The case of the "left-to-die boat" addressed by the students of the course of legal clinics at the university of brescia (<i>Matteo Domenighini</i>)</p>
<p>PARALLEL SESSION P10: <i>The Social Sciences and Anthropology in Development Cooperation: how Human Resources come into play</i> <u>Moderators:</u> Francesca DECLICH (<i>University of Urbino</i>), Anna CASELLA (<i>"Sacro Cuore" Catholic University</i>) <u>Oral presentations:</u></p> <p>co10.1 Ricerca partecipativa e progetti di cooperazione (<i>Giovanna Gasparello</i>)</p> <p>co10.2 Nature from Sumak Kawsay to Buen Vivir: from cosmovision to neoextractivism (<i>Salvatore Monni</i>)</p> <p>co10.3 Co-innovation for rural development in Africa: the AGRINOVIA training programme (<i>Valentina Callari</i>)</p> <p>co10.4 Decentralized cooperation programs as practices of territorial networks evolution: inclusive or centralized dynamics? (<i>Armin Wiedenhofer</i>)</p> <p>co10.5 "Negative benchmarking": what the western countries may really teach today to the south of the world, namely "what not to do" (<i>Igor Jelen</i>)</p> <p>co10.6 Il topo ha partorito la montagna (<i>Ezio Lorenzo Bono</i>)</p>
<p>PARALLEL SESSION P11: <i>Economy and Development</i> <u>Moderators:</u> Laura VIGANO' (<i>University of Bergamo</i>), Enrico MINELLI (<i>University of Brescia</i>) <u>Oral presentations:</u></p> <p>co11.1 West Bank: A feasibility analysis of the Jenin Sustainable Industrial and Logistic District (<i>Federico Perali</i>)</p> <p>co11.2 Sierra Leone: Smart Rice Village Economy (<i>Federico Perali</i>)</p> <p>co11.3 Women's empowerment and poverty reduction: the role of female producer groups in West Africa (<i>Astrig Tasgian</i>)</p>

	<p><i>coll.4</i> Rural household risk exposure and coping strategies in Ethiopia: evidence and potential improvement (<i>Veronica Vergani</i>)</p> <p><i>coll.5</i> Which competences for the remote villages? (<i>Antonio Perrone</i>)</p>
20.45 – 22.00	CONCERT offered by the “Luca Marenzio” Conservatory

SATURDAY 12 SEPTEMBER 2015	
TIME	SESSION
10.30 – 13.00	<p>ROUND TABLE (open to the public) <i>Development cooperation in a time of crisis</i></p> <p><u>Introduction:</u></p> <ul style="list-style-type: none"> • Sergio PECORELLI, <i>Rector, University of Brescia</i> <p><u>Moderators:</u></p> <ul style="list-style-type: none"> • Francesco CASTELLI, <i>Rector’s Delegate for Cooperation for Development, University of Brescia</i> • Roberto CAUDA, <i>Rector’s Delegate for Cooperation for Development, “Sacro Cuore” Catholic University</i> <p><u>With the participation of:</u></p> <ul style="list-style-type: none"> • Federico CINQUEPALMI, <i>Head of Unit II- Promotion and coordination of International Research, Directorate General for the Internationalization of Research, Ministry for Instruction, University, and Research (MIUR)</i> • Grammenos MASTROJENI, <i>Directorate General for the development cooperation, Foreign Affairs and International Cooperation Ministry (MAECI)</i> • Gian Battista PARIGI, <i>University of Pavia and Delegate of the Rectors conference of Italian Universities (CRUI)</i> • Lucio UBERTINI, <i>UNESCO Chair on Water Resources Management and Culture and Director of Honors Center of Italian Universities H2CU</i> • Lia QUARTAPELLE, <i>Member of the Foreign Affairs Committee of the Chamber of Deputies</i> • Coordinators of the various parallel sessions • Rapporteurs students’ session <p><u>Conclusions:</u> Maurizio MEMO, <i>Vice-Chancellor for Internationalization, Research and Higher Education, University of Brescia</i></p>