RAUN
Regional Academy on the United Nations

2014-2015Regional Academy on the United Nations

The Post 2015 Development Agenda

Papers' Summaries

Edited by

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Preface

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RAUN Head of Program

The Regional Academy on the United Nations (RAUN) was established in January 2012 in Vienna, Austria by the Academic Council on United Nations System (ACUNS) in close collaboration with United Nations Information Service (UNIS) Vienna, the Comprehensive Test-Ban Treaty Organization (CTBTO), Czech United Nations Association, and partner universities – University of Economics Prague, University of Szeged. Other partners include the Hague Institute for Global Justice, University of Vienna, Diplomatic Academy Vienna, Webster University Vienna, Faculty of Law of the University of Belgrade in Serbia, and the Faculty of Social and Economic Sciences of Comenius University in Slovakia. RAUN was endorsed by the United Nations Deputy Secretary-General, Jan Eliasson in December 2013.

RAUN's aim is to train young scholars in issues related to the United Nations and international system through interactive lectures and workshops on current issues conducted by experts and high level UN and government officials. At the same time, RAUN enables students to develop their academic research writing in English by conducting topical research projects related to UN agencies and other international institutions. The research papers are reviewed and evaluated by experts which gives them added quality assurance and relevant importance in today's competitive academic environment where outstanding academic writing in English plays a crucial role in a successful academic and professional career. Similarly important, RAUN allows students to create strong connections and networks with their like-minded peers, academics, and experts from various fields in an environment that fosters openness, diversity, mutual respect, tolerance, as well as cultural learning and understanding, all of which are attributes of a 21st Century global education. In doing so, RAUN is empowering young scholars to contribute to finding solutions to contemporary global challenges in this age of sustainable development while forging relationships for personal friendship as well as academic and professional collaboration.

As a mobile academy, RAUN consists of three sessions per year starting in April/May until January. The program takes place in all participating countries (Czech Republic, Hungary, Serbia, Slovakia and Austria) on a rotation basis.

In addition, students get the opportunity to experience United Nations institutions in Vienna and interact directly with experts and practitioners. Throughout the program participants work in groups of different nationalities from interdisciplinary academic fields on topics including human rights, international security, international development, international law, and nuclear issues amongst others.

During the last session which takes place at the UN Head Quarters in Vienna, participants present the outcome of their research projects, including recommendations, to a group of jury experts who, after reading the papers in advance, evaluate their content, the relevance and usefulness to the current discourse, the strength and coherence of the argument, and the academic contribution as well as students' oral presentation performance.

The 2014-15 RAUN academic year's research projects were centered on topics related to UNIDO, UNODC, UNOOSA, UNCITRAL, IAEA, CTBTO, SE4ALL, UN WOMEN, and IOM which are featured in the following section. Please note that the content of the papers reflect only the views of their authors.

For interest in reading the papers in their entirety and learning more about RAUN and how you can get involved please contact us at info@ra-un.org and visit our website at www.ra-un.org

Evaluation of battery storage technologies for sustainable and rural electrification in Sub-Saharan Africa

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Empowerment through rural electrification

Providing energy in general and electricity in particular, is broadly recognized to directly support the achievement of the Millennium Development Goals, as we assume that gaining sustainable access to modern energy technologies facilitates economic and social development and improves the quality of life. However, the area of Sub-Saharan Africa, where only 11 percent of the population uses electricity, is still suffering from low electrification rates.[1] Moreover, energy access is primarily a rural problem. 1.1 billion out of 1.3 billion or 85% lacking electricity access are found in rural areas. Likewise, more than 2.2 billion out of 2.7 billion or 81% without clean cooking energy access live in rural areas.[2] These disparities are typical for low-income countries, especially in Sub-Saharan Africa.[3]

The essential role of rural electrification to trigger both social and economic development has been widely acknowledged. Yet, in order to achieve successful provision of electricity, certain requirements must be fulfilled for the system to be functional in specific settings and be sustainable over time. As the research conducted by the World Bank indicates, the key to successful electrification projects may be found outside the framework of market efficiency and of sustainability.[4] As the evidence reveals, providing modern electricity technologies does not automatically lead to development. Thus, integrated development and coordination between actors are needed for access to electricity to achieve economic growth and sustainable development. As Ahlborg points out, the essential part of the modern renewable

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[1] Gunther Bensch et al., 'Impacts of rural electrification in Rwanda' (2011) Vol. 3 No. 4 Journal of Development Effectiveness 567.

[2] 'Energy access database' (on IEA website) <http://www.worldenergyoutlook.org/resources/energydevelopment/energyaccessdatabase/> accessed 14 October 2014.

[3] Subhes C. Bhattacharyya, 'Energy access programmes and sustainable development: A critical review and analysis' (2012) Vol. 16 No. 3 Energy for Sustainable Development 263.

[4] Annabel Yadoo; Heather Cruickshank, 'The value of cooperatives in rural electrification' (2010) Vol. 38 Energy Policy 2941-2942.

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energy projects is to invest into capacity training and productive activities and thus support local initiatives and business. Moreover, on the national level, the governments need to focus on strengthening and developing rural markets, as stable rural market foundations encourage the productivity of rural communities. In addition, studies undertaken by anthropologists underline the importance of local specifics for success of technology transfer between societies.[5] For instance Wilkins, concentrates on the technology transfer, particularly on the adoption of diverse small-scale renewable energy technologies in rural areas worldwide. According to Wilkins, the success lies beyond the transfer of the necessary equipment. "The information, skills and know-how, which are needed to fund, manufacture, install, operate and maintain the equipment" are equally important.[6]

Photovoltaics (PV)

The use of PV systems in off-grid installations has multiple advantages. PV provide convenient payback period comparing with other sustainable energy sources, their installation is often fast and feasible even in rural or remote regions and they can be surprisingly durable with minimal demands on service.[7] There are however huge untapped opportunities for the development of off-grid PV systems in Sub-Saharan Africa. The countries of Middle East and Africa altogether do not constitute even one percent of the global installed capacity.[8] This is despite the fact that amounts of average solar irradiation are, in the case of Sub-Saharan Africa, predominantly much higher than in Europe.

Batteries

The essential part of the off-grid systems is the storage of energy because the power of PV fluctuates independently from demand.[9] Currently, several types of electricity storage sys-

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[5] Helene Ahlborg, 'Electricity for better lives in rural Tanzania and Mozambique – understanding and addressing the challenges' (2012) Chalmers University of Technology 11-22.
[6] Gill Willkins, *Technology transfer for renewable energy. Overcoming barriers in developing countries* (Earthscan Publications Ltd 2002) 44.
[7] Fabio Monforti-Ferrario,'Renewable energies in Africa – current knowledge' (2011) JRC Scientific and Technical Reports 11-13.
[8] EPIA,'Global Market Outlook Photovoltaics 2014-2018' (2014) 17.
[9] Hussein Ibrahim et al. 'Energy Storage Systems – Characteristics and comparisons' (2008) Vol. 12 No. 5 Renewable and Sustainable Energy Reviews 1223.

tems exist, e.g., pumped-storage hydroelectricity, that creates almost the whole storage capacity worldwide.[10] However, a better option for off-grid PV systems in Sub-Saharan Africa provides battery storage as other methods are generally not very suitable for micro grids in rural areas. Batteries generally provide better ratio between performance and cost and are especially far more feasible to implement. The application of batteries offers various advantages and risks as well. Lifetime of lead acid and lithium-ion battery types is limited, for instance, and they also carry potential risks for the environment.[11]

Creating a set of indicators

In order to achieve sustainable development through technological innovation, technology and sustainable development (its environmental, social and economic aspects) have to be combined and so needs to be their evaluation. As storage is one of the most crucial elements for sustainable electrification, it is important to compare various storage technologies and depict deficiencies, which can be improved once found. Hence, we decided to create an holistic storage evaluation, including technological, socio-economic and environmental indicators.

Application and analysis

Due to a profound literature review, two-battery storage technologies were selected that offer the greatest potential for off-grid areas in Sub-Saharan Africa, namely lead acid and lithium-ion batteries. In order to evaluate which of them is best suited to increase energy access, the selected indicators are applied to both battery types. In that way, they are compared not only from a technical but also from a socio-economic and environmental viewpoint. The application results of the indicators show that both technologies offer benefits as well as drawbacks. The lead acid battery performs better among socio-economic and environmental indicators whereas the lithium-ion battery offers technological advantages. In total, the lead acid battery receives a higher overall score and thus is best suited to improve

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[10] IEA, 'Technology Roadmap: Energy Storage' (2014) 17.
[11] Hussein Ibrahim et al. 'Energy Storage Systems – Characteristics and comparisons' (2008) Vol. 12 No. 5 Renewable and Sustainable Energy Reviews 1247.

sustainable rural development and energy access in Sub-Saharan Africa. Its maturity, affordability and recyclability are some of its strongest benefits, which makes it capable to enhance rural electrification. Nevertheless, this goal cannot be achieved solely through the allocation of the appropriate technology but only through the involvement of the local community in the process.

Conclusion

Overall the three main findings are: First, the issue of energy cannot be treated as isolated. It is interrelated and connected to environmental and socio-economic aspects. Especially electrification is an important factor when it comes to sustainable development.

Second, still, many technological advancements are required if we want to seize the full potentials of renewable energies to make the goal of sustainable energies for all a reality. In relation to this, one of the most crucial technological challenges is energy storage. Hence, developing and improving storage for off-grid uses further needs to be put into focus more often.

Third, although storage is emerging as a pressing issue, it usually is discussed mainly from the technological and sometimes from the economic perspective. In the near future, it is possible that the results of this paper will become obsolete, as existing battery technologies could improve greatly and new technologies could arise. However, also new technologies should be assessed using a broader range of indicators than their technological performance.

Irregular Migration in the Mediterranean

Problems, Questions and Possible Solutions in the Light of the Proposed SDGs

Bojan BAJALOVIC, Nóra SANDOR, Hannah KENTOUCHE, and Lenka KISSOVA

The issue of irregular immigration is one of the most challenging legal, economic and socio-logical phenomena of the 21st century. Despite various international documents regarding migration both with binding and non-binding character, a number of international organiza-tions, different modes of interstate or inter-organizational cooperate actions and numerous state or non-governmental programs specifically developed to face this rising problem, the consequences of lacking an integrated and coherent approach to this issue are nowadays becoming more than evident. For creating a worldwide answer to the problem of irregular migration, the 2014 Outcome Document of the Open Working Group on Sustainable Devel-opment Goals has given the international academic community a solid foothold to start de-veloping new or re-arranging existing methods. This paper intends to research what oppor-tunities are coming to light with the proposed SDG's, in order to offer to the professional and general public new ways of dealing with the issue of irregular immigration.

Knowing the large size of the chosen topic, this paper is focusing on a single case, which is the Lampedusa Island immigration problem. The authors have given an extensive amount of attention to the factual immigrant position on the island, regarding the number of Lampedu-sa immigrants, certain migratory trends during the past decade, their socio-economic back-ground – urban middle class provenance; well educated, secondary or higher – and motives that stand behind their decision to immigrate by irregular means. Besides the mentioned, additional focus is directed to the island's detention facilities regarding their appalling condi-tions, which by no means fulfil the required detention standards set by international trea-ties.

To this day there is no universally accepted definition of irregular immigration, nor a single international law instrument of binding or non-binding character, which deals with the issue. Besides "*irregular*", terms such as "*undocumented*", "*unauthorised*" or, finally, "*illegal*" im-

migration are in frequent use.[12] A major theoretical standpoint, however, views the phenomenon as "*movement that takes place outside the regulatory norms of the sending, transit and receiving countries*".[13] From the EU perspective, an irregular immigrant is a ,,*third-country national present on the territory of a Schengen State who does not fulfil, or no longer fulfils, the conditions of entry as set out in the Schengen Borders Code*".[14]

Despite the difference between an illegal and irregular immigrant, states consider an irregular entry or stay as a criminal offence,[15] which is in direct contradiction to the stance of the UN Working Group on Arbitrary Detention, which argues that "*criminalizing illegal entry into a country exceeds the legitimate interest of States to control and regulate illegal immigration and leads to unnecessary detention*".[16] UN Special Rapporteur on the human rights of migrants shares this view by emphasizing that "*irregular entry or stay should never be considered criminal offences as they are not per se crimes against persons, property or national security*".[17] The outermost singularity of the Lampedusa immigration problem is the so-called "*mixed migratory flow*" phenomenon.[18] Vast numbers of Lampedusa immigrants migrate for different reasons – war or social upheavals; no perspective for self-realization; fear from persecution or violence – which, on the other hand, to a large degree determine their legal status. Lampedusa immigrants are often considered as asylum seekers, refugees or economic immigrants. However, these legal statuses are frequently merged in a single person.

From 31,000 irregular immigrants who had arrived in the EU using the Lampedusa immigration route in 2013, 75% are asylum seekers,[19] of whom, on the other hand, many are eligible

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[12] European Migration Network, *Asylum and Migration*, 3rd Edition, 2014, p. 173.
[13] International Organization for Migration, *Glossary on Migration*, 2nd Edition, 2011, p. 54.
[14] European Migration Network, *op. cit.*, p. 172.

[15] Report of the Special Rapporteur on the human rights of migrants, Human Rights Council, 2012, p. 5.
[16] A/HRC/7/4, par. 53.
[17] Report of the Special Rapporteur on the human rights of migrants, p. 5.
[18] Complex migratory population movements that include refugees, asylum-seekers, economic migrants and other migrants, as opposed to migratory population movements that consist entirely of one category of migrants. International Organization for Migration, *op. cit.*, p. 63.
[19] Praesidium Project, *Recommendations and good practices in the management of mixed migratory flows by sea*, 2011, p. 10.

to be refugees according to the Geneva Refugee Convention.[20] Both refugees and asylum seekers, as persons who seek international protection, cannot be refused entrance at borders nor be returned to a third country if there is a risk of persecution nor other serious harm, which is the famous *non-refoulment* principle. However, it is often difficult for EU or Italian authorities to determine at arrival whether Lampedusa immigrants are simply irregular or, in fact, persons who seek international protection.[21] This issue to a large degree depicts the complex nature of the Lampedusa problem.

The Lampedusa Island immigration problem has a very strong legal side. There are treaties, conventions, international legal principles that states must respect, both on international, EU and national level.[22] The aforementioned *non-refoulement* principle is one of the most well-known international principles in order to protect irregular immigrants. This principle precludes states from returning a person where he or she might be tortured or face persecution, factors are present in migrants' countries of origin who try to cross the Mediterranean Sea and reach Italy.[23] This principle must apply extraterritorially based on the European Court of Human Rights judgment, which increases the level of protection definitely. However, practice does not always reflect the rules laid down in treaties, conventions, there are many things to do in order to improve people's situation.[24]

In order to be able to save migrants' lives, Italy has made huge effort, it has launched the Operation Mare Nostrum (OMN), which saved lives of more than 150.000 people.[25] Because of the high costs, it was cancelled and replaced by Frontex Triton, whose scale is smaller in

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[20] "The term "*refugee*" shall apply to any person (…) who owing to well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside
the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country (…)". Convention Relating to the Status of Refugees, 1951, Art. 1(2).

[21] European Parliamentary Research Service, *Irregular immigration in the EU*, 2013, p. 3.

[22] *Universal Declaration on Human Rights* (1948), Article 14; *International Covenant on Civil and Political Rights* (1966) Article 7. and 13; *International Covenant on Economic and Social Rights*, Article 12; *Convention Against Torture and Other Cruel, Inhuman and Degrading Treatment or Punishment* (1984), Article 3.

[23] Duffy, Aoife: *Expulsion to Face Torture? Non-refoulement in International Law*. International Journal of Refugee Law. 20 (3) (2008) p. 373.

[24] Hessbruegge, Jan Arno: *European Court of Human Rights Protects Migrants Against Push Back Operations on the High Seas*. American Society of International Law. Volume 16: Issue: 14. (2012) p. 1-2.

[25] Mare Nostrum Operation. Ministero della Difesa. http://www.marina.difesa.it/EN/operations/Pagine/MareNostrum.aspx Accessed 31 October 2014.

comparison to the OMN, therefore concerns are growing from human rights groups regarding migrants' lives who cross the Mediterranean Sea.[26]

Knowing the complexity of the migratory phenomena in the Lampedusa Island, organizations and NGOs made effort to manage the situation and to protect migrants' rights.

The very best possible example of how an integrated interagency action backed by governmental organizations can make a praiseworthy result is the Praesidium Project. Launched in 2006, previously followed by individual agreements between the Italian Ministry of Interior and IOM, UNHCR, Italian Red Cross and NGO Save the Children Italy, Praesidium, as time has shown, brought into being a unique multi-agency model designed for a protection-sensitive reception system for immigrants arriving by sea in the context of irregular mixed migratory flows to southern Italy. Praesidium can be regarded as a temporary joint venture where a couple of renowned organizations conduct numerous activities in order to achieve an efficient and adequate response to various challenges posed by the phenomenon of the Lampedusa mixed migratory flow. The complexity of the Lampedusa problem, regarding different social backgrounds of the Island's immigrants, the problem of determining their legal status, special needs of various vulnerable groups and, lastly, the sheer number of immigrants travelling each year to the Island, stipulates partnerships of this kind in order to face the problem efficiently. None of the organizations involved in Praesidium have the capacity to address the problem alone, for which reason orientating towards such collaborations is logical. On the other hand, it frequently turns out that some of the partners have complementary roles.[27] Although the Praesidium Project was rated as extremely positive,[28] some report suggest a lack of coordination between these organizations regarding the question of monitoring the Lampedusa detention facilities, in which the detention conditions are miserable.

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[26] European Developments. Operation Mare Nostrum to end – Frontex Triton Operation will not ensure rescue at sea of migrants in international waters. ECRE Weekly Bulletin, 10 October 2014
[27] Praesidium Project, *op. cit.*, p. 6-7.
[28] Policy Department C – Citizen's Rights and Constitutional Affairs, *op. cit.*, p. 238.

Due to insufficient capacity of the detention facilities, local authorities and other ground players seek various legal alternatives to reduce the number of immigrants residing on the Island. One of the activities conducted in order to meet such a goal was repatriation of those irregular immigrants who did not request or whose request for asylum was rejected were repatriated or issued an expulsion order to leave the country within five days.[29] IOM, however, put an accent on managing the return process of immigrants who voluntarily applied. Three ad hoc Assisted Voluntary Return and Reintegration (AVRR) Programmes, which were developed and conducted in cooperation with the Italian government in order to respond to the sudden influx of immigrants running from the "Arab Spring" upheaval in 2011, is a good example of such practice.[30] These AVRR Programmes provided the immigrants with modest financial support to cover their eventual expenses right upon return. However, there are no permanent AVRR programmes tailored according to the Lampedusa specificities.[31]

Based on the 8 month long research process, the authors of this paper have made some recommendations with due attention to the newly proposed Sustainable Development Goals. The recommendations were moulded in such a manner so they could be regarded as tangible ground manifestations of the proposed SDG's, which can, by our opinion, revivify the somewhat broad political statements mentioned in the Outcome Document of the Open Working Group on SDG's.

In certain areas, roles of the organizations are largely complementary. The highest level of complementarity exists between IOM and UNHCR, who both have asylum seekers, unaccompanied children, and victims of torture, human trafficking and smuggling under their jurisdiction. Furthermore, these two agencies monitor reception procedures and detention conditions on the Island.[32] Acknowledging the abovementioned, in order to enhance the efficiency of Praesidium, each stakeholder, including IOM, has to have a clear and precise legal framework of competence. For avoiding complementary roles between IOM and UN-

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[29] UN Human Rights Council, *op. cit.*, p. 18.
[30] International Organization for Migration, *Assisted Voluntary Return and Reintegration*, Annual Report on Activities, 2011, p. 35.
[31] International Organization for Migration, *Assisted Voluntary Return and Reintegration*, Leaflet, 2011, p. 2.

[32] UNHCR, p. 26-29; Praesidium Project, *op. cit.*, p. 6-8.

HCR, we recommend signing a Letter of Understanding on the basis of Art. 5 of the Memorandum of Understanding between UNHCR and IOM (1997), in order to create an interagency framework for cooperation and divide complementary activities considering the singularities of the Lampedusa situation.[33]

On the other hand, the authors recommend developing an IOM standardized manual of monitoring standards, policies and practices based on recommendations made by UN Human Rights Council and European Parliament regarding the necessary enhancement of Lampedusa detention conditions.[34] It is recommended to tailor such a manual according to the requirements set by the UN Body of Principles for the Protection of All Persons under Any Form of Detention and Imprisonment (1989).[35]

Having in mind the sheer number of such immigrants and complex motives on which their decision to immigrate by illegal means is based, the authors find current IOM activities embodied in ad hoc AVRR Programmes to a large degree inappropriate. Activities regarding this issue, which were so far conducted by IOM, from our perspective, do not meet the above-mentioned requirements. With the previous in mind and as alternatives to re-admission agreement based repatriation and expulsion orders are more than needed, we encourage IOM to consider developing a permanent Lampedusa reintegration programme in order to achieve sustainable return of rejected immigrants with due regard to international law principles and standards concerning migrants and a more coherent reintegration strategy tailored by Lampedusa singularities. Furthermore, this recommendation is in full alignment with UN Human Rights Council Special Rapporteur on the human rights of migrant's opinion, who states that, such programmes "can be a humane alternative to detention and deportation and, in certain circumstances, can allow a prepared, dignified and sustainable return and reintegration".[36]

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[33] "This MOU can be expanded upon in separate agreements between the two organizations, as and when required, to cover specific operational situations. In each instance, related planning and proposed initiatives, whenever appropriate and feasible, shall be the subject of a field-level Letter of Understanding which reflects the particular circumstances (...)". Memorandum of Understanding between the United Nations High Commissioner for Refugees and the International Organization for Migration, 1997, Art. 5.

[34] Policy Department C – Citizen's Rights and Constitutional Affairs, *op. cit.*, p. 142; Report of the Special Rapporteur on the human rights of migrants, p. 18.

[35] UN A/Res/43/173

[36] Report of the Special Rapporteur on the human rights of migrants, p. 17.

The Humanitarian Dimension of Nuclear Testing - How the nuclear test-ban treaty adds to the realization of the UN Post-2015 Development Goals and how international humanitarian law can be applied to enforcing nuclear non-proliferation

David SCHWOB, Mirjana LUKIC, and Dusan ROGIC

The Comprehensive Nuclear-Test-Ban Treaty (CTBT) is a multilateral treaty that was created with the purpose of banning all nuclear testing activities in the atmosphere, underwater, underground and in the space. It was adopted by the [United Nations General Assembly](#) on 10 September 1996, but it has not yet entered into force due to its verification regime, which prescribes that eight states (China, Egypt, India, Iran, Israel, North Korea, Pakistan and United States) must sign and ratify the Treaty with no exceptions. In this paper, the authors examine the humanitarian dimension of nuclear testing, arguments derived from the international law that could serve as a legal basis in favour of banning nuclear testing and a possible contribution of CTBT to the realization of the UN Post-2015 Development Goals.

The Comprehensive Nuclear-Test-Ban Treaty and its respective verifications regime, in addition to the Non-Proliferation Treaty, have served as an effective tool in the struggle for non-proliferation by the means of ensuring an injunction on nuclear testing. For over ten years by the time this paper was written, no state, apart from the DPRK, has conducted nuclear tests, thereby proving the treaty's *de facto* enforcement.[37]

The absence of nuclear testing, effectively enforced by the CTBT, enables regions previously suffering from the effects of such tests to now take full advantage of development possibilities. In addition to its traditional military dimension, the CTBT can therefore also provide a humanitarian dimension by serving as a tool for two main trajectories of development:

I. The dependable and prolonged absence of nuclear testing provides the basis for economic, environmental and human health development. The specific implications for each factor and their interdependency, e.g. the long-time environmental effects of nuclear testing on agri-

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[37] Nuclear Testing 1945 - Today." *: CTBTO Preparatory Commission*. N.p., n.d. Web. 29 Oct. 2014.
<http://www.ctbto.org/nuclear-testing/history-of-nuclear-testing/nuclear-testing-1945-today/ >

cultural production and health related consequences in Kazakhstan and its strain on the economy, are analyzed in this paper, supported by exemplary cases and data.

II. The verification regime, with its four monitoring technologies (seismology, hydroacoustics, infrasound and radionuclide), can be expanded from its military purpose to also providing early warning competency and forensic support in scenarios such as nuclear power plant accidents, tsunami warnings, plane crash investigations, aviation hazards, climate change research and many more.

Previously used nuclear tests caused dire consequences for vast populations, e.g. the Semipalatinsk test site in Kazakhstan —affected more than a million and a half people... and contaminated vast regions of the country.[38] Although a vast number of problems, especially in terms of agriculture and public health, prevail for many generations to come, the pure absence of future nuclear explosions already helped those regions to achieve progressive development, eager to catch up with neighboring economies. With precedents like the government of Kazakhstan deciding to close down its Semipalatinsk test site in 1991, a global momentum for the halt of nuclear testing has been initiated. In order to further support the condemnation of these tests and the subsequent abolition of nuclear stockpiles, policy decisions like the one in Semipalatinsk can be supported by arguing against nuclear testing through two trajectories:

Firstly, through a legal framework such as international law, the act of carrying out nuclear tests can be delegitimized as a violation of the rights to life, health and safety, and an intact environment. As to humanitarian law The Additional Protocol to the Geneva Conventions (1977) in the Articles 35[39] and 55[40] proscribes employing and prohibition methods or means of warfare which are intended, or may be expected, to cause widespread, long-term, and severe damage to the natural environment and thereby to prejudice the health or survival of the population. The best example is the complaint filed by Marshall Island against nine nu-

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[38] Saudabayev, Kanat. Proc. of International Conference on the Humanitarian Consequences of Nuclear Weapons, Oslo. N.p.: n.p., 2010. 1-4. Print.

[39] Protocol Additional to the Geneva Conventions (1949), and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 1977, Article 35, paragraph 3.

[40] Protocol Additional to the Geneva Conventions (1949), and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 1977, Article 55, paragraph 1.

clear weapon states.[41] The Marshallese islanders say they have been suffering serious health and environmental effects as a result of nuclear testing.[42] Although the biggest obstacle is that only three of the nine states, the UK, India, and Pakistan, accept the compulsory jurisdiction of the ICJ, this case draws attention not only to the damaging effect on human health and environment caused by nuclear testing, but also to the fact that the weapons states were in the process of modernizing their nuclear weapons, which it portrays as a clear violation of the NPT. The humanitarian consequences of nuclear testing, let alone of actual nuclear warfare, such as vast emigrational flows, multi-generational health effects, destruction of economic infrastructures and environmental downfalls are, with the right legal framework on an international and national level, the basis for a comprehensive prohibition as they affect individuals and national societies alike. A first global shift towards emphasizing the humanitarian dimension of nuclear weapons is evident and, in the broader scheme of the Non-Proliferation Treaty, can indeed be imbedded into the argument, as the NGO Reaching Critical Will stated in its report on the Oslo Conference on the Humanitarian Impact of Nuclear Weapons in March 2013.[43]

The second trajectory in an argument against nuclear testing is tying the absence of such tests as well as the CTBTO's verification regime to the United Nations' Post 2015 Development Agenda. As set out by the UN Millennium Development Goals Summit in 2010, the post-2015 agenda shall continue the gained momentum of the MDGs and further advance global development after the year 2015. Among others, some of the main objectives of this agenda include eradicating extreme poverty and hunger, ensuring environmental stability and enhancing global partnership for development.[44] The present absence of nuclear testing and a reliable deterrent on future testing could contribute significantly to achieving these

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[41] The Marshall Islands' Nuclear Zero Cases in the International Court of Justice, (The Lawyers Committee on Nuclear Policy INC, website), <http://lcnp.org/RMI/index.html>, accessed on 05.12.2014.
[42] J. Borger, _Marshall Island sues nine nuclear powers over failure to disarm', (The Guardian, website), <http://www.theguardian.com/world/2014/apr/24/marshall-islands-sues-nine-nuclear-powers-failure-disarm>, accessed on 20.09.2014.
[43] Beatrice, Fihn, and Acheson Ray. Proc. of Conference On The Humanitarian Impact Of Nuclear Weapons, Oslo. Reaching Critical Will, n.d. Web. 28 Oct. 2014. <http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/oslo-2013/HINW-report.pdf >
[44] "United Nations Millennium Development Goals." *UN News Center*. UN, n.d. Web. 29 Oct. 2014. <http://www.un.org/millenniumgoals/>

objectives. Combating extreme poverty will be feasible with industrial development returning to abandoned testing-regions. An enhanced environmental stability without the downfalls of nuclear detonations adds to food security and agricultural development. Radioactive fallout could make large areas unsuitable for food production for a very long time. Depending on the explosive yield of the warhead, the location of the explosion and other conditions specific to the incident, radioactive fallout might affect several countries, or even whole regions. Lastly, a fully ratified and implemented verification regime serves as a basis for geopolitical trust-building on a comprehensive international level and constitutes a launch pad for increased global partnership on other issues, i.e. development. Apart from the mere absence of nuclear tests and ensuing benefits to the economies and the environment of the affected regions, the CTBTO's verification regime can be expanded from its military dimension to also providing civilian benefits such as early warning competency and forensic support in scenarios such as nuclear power plant accidents, tsunami warnings, plane crash investigations, aviation hazards, climate change research and many more. By arguing for the multi-purpose nature of the verification regime, applicable not simply to monitoring nuclear tests but also using its technological dimensions for providing direct support to member states, it could directly add to the achievement of the Post-2015 Agenda on an array of additional levels, thereby automatically gaining a new layer of legal legitimacy and political support. The CTBT's unique role, in combination with its rigid verification regime, can therefore serve as a vital aid to the realization of the United Nations post-2015 sustainable development goals.

It is to expect that the absence of nuclear testing as well as the application of the CTBT and its International Monitoring System (IMS) will significantly contribute to achieving the Post-2015 development goals, especially in the areas of food security, eradication of poverty, maintaining environmental stability and enhancing global cooperation. Using the IMS e.g. for climate change research can significantly help developing nations to prepare their societies for inevitable environmental consequences. Most importantly, among many benefits, economic growth in affected regions will be vast as compared to the impediments caused by nuclear explosions and radiation. Furthermore, the desired global partnership for development receives a solid basis since relations among states will be more transparent and trust-

ing on a global level with a dependable test-ban treaty in force. Humanitarian crises will be partially avoidable with the application of the IMS's vast capabilities and mutual trust-building among nations reduces the need for nuclear proliferation. In addition, the new legal approach to banning nuclear testing through the lens of humanitarian law will be more convincing, binding and give less room for dispute and evasion as compared to the current strategic approach conducted from a military standpoint. Apart from the benefits of non-proliferation to the Post-2015 development goals, an international system free of nuclear testing also grants the endorsement of the basic human rights, i.e. the right to life and safety, thereby including environmental stability and food security. With the argument that nuclear testing severely infringes the human rights of the individuals affected by such, a new and sustainable path towards global nuclear non-proliferation can be embarked upon.

Inclusive and Sustainable Business Strategies in Low- and Middle-Income Countries: Barriers and Drivers of Self-Regulation

Roman HOFFMANN and Ilona REINDL

Introduction

With the Post-2015 Development Agenda the UN has initiated a process towards more equality, inclusiveness and sustainability in development. For the successful implementation of the new agenda the involvement of the private sector is crucial.[45] A key question is how companies can be best motivated to include social and environmental goals in their business strategies. In the past 20 to 30 years companies have started to develop own standards for their business operations with regard to labor conditions, environmental issues, human rights, or the management of natural resources.[46] Through this so called self-regulation, companies react to missing governmental regulations on one side and an increasingly conscious consumer culture demanding more sustainable business practices on the other side. The concept of self-regulation means that companies undertake voluntary measures to improve their social and environmental performance beyond what is mandated by national and international legislation. Self-regulation can take very different forms, for example commitments to pay fair wages and provide fair working conditions or to produce in an environmentally sustainable, energy- and resource-efficient way. Certificates such as the Fairtrade certificate or the ISO 14001 standard for environmental management are important in this context because they allow companies to communicate their social and environmental engagement to a wider public.

Today, self-regulation is a common phenomenon in high-income countries, but it is also gaining importance in low- and middle-income countries (LMIC). With globalization on the rise, a significant share of industrial production has been shifted to LMIC, for example

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[45] UNIDO, 2011. UNIDO Green Industry. Policies for Supporting Green Industry, p. 34
[46] Marx, A., 2008. Limits to non-state market regulation: A qualitative comparative analysis of the international sport footwear industry and the Fair Labor Association. Regulation & Governance 2, p. 253

through sub-contracting or outsourcing. The raise in production levels comes with costs such as rapid urbanization, increased pollution, ecological damages, and enlarged social inequality with a share of the population being excluded from the benefits of economic growth. The governments in LMIC often lack the resources, expertise, and incentives to effectively address these problems. Against this background, private sector self-regulation can help in bridging the gap by initiating changes from within the sector.[47] Our research project gives an overview of the main drivers and barriers of self-regulation for companies in LMIC, underpinning the arguments with empirical evidence whenever available. We have identified four main spheres which affect the private sector's decision to self-regulate: (1) internal and organizational aspects; (2) consumers and the public; (3) supply chains and international markets; (4) government and legislation.

Internal and organizational aspects

Companies are economic actors whose decisions are based on cost-benefit-calculations: A profit-oriented company will only undertake self-regulatory measures if the expected benefits outweigh its costs. The costs may vary widely and depend among others on the type and extent of self-regulation, the company's size and internal capacities, and if pursued, the type of certification. Obtaining certification has been found to be particularly costly for companies in LMIC, because they are capacity constrained and often have to cover a larger gap between current business practices and certification standards than companies in high-income countries.[48] In light of the increasing demand for certified suppliers – also from the public sector (public procurement) – concerns have been raised that the substantial costs of certification form a de-facto barrier to trade for companies from LMIC.[49]

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[47] Graham, D., Woods, N., 2006. Making corporate self-regulation effective in developing countries. World Development 34, p. 868
Haufler, V., 2001. A public role for the private sector: Industry self-regulation in a global economy. Washington, DC: Carnegie Endowment, p. 2
[48] Auld, G., Gulbrandsen, L.H., McDermott, C.L., 2008. Certification Schemes and the Impacts on Forests and Forestry. Annual Review of Environment and Resources 33, p. 197;
Durst, P., McKenzie, P., Brown, C., Appanah, S., 2006. Challenges facing certification and eco-labelling of forest products in developing countries. International Forestry Review 8, p. 197-198
[49] UNIDO, 2002. Corporate Social Responsibility. Implications for Small and Medium Enterprises in Developing Countries, p. 49-50

Despite the often substantial costs of self-regulation and certification, companies in LMIC undertake voluntary measures to improve their social and environmental performance. Interestingly, the prospect of being able to charge a price premium on products and services seems to play a minor role as a driver for self-regulation.[50] Instead, building up a competitive advantage on international supplier markets has been identified as the most important motivation for companies to self-regulate. There is vast empirical evidence showing that export-oriented companies in LMIC have a significantly higher probability to adopt self-regulation standards.[51] In addition, self-regulation may also help companies to improve their production processes, to avoid fines from regulatory authorities[52], and to gain access to environmentally and socially conscious investors and employees[53].

Consumers and the public

Reputation is one of the major driving forces for companies to engage in self-regulation. In the past years there has been an increasing trend in high-income countries towards sustainable purchasing behavior, also referred to as ethical consumerism. Similar to high-income countries, studies find high levels of consciousness towards environmental and social issues in LMIC. Yet, sustainable purchasing is not a common phenomenon in these countries due to several factors. First, the share of sustainably produced products is still very low in many

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[50] Carlsen, K., Hansen, C.P., Lund, J.F., 2012. Factors affecting certification uptake - Perspectives from the timber industry in Ghana. Forest Policy and Economics 25, p. 87

Durst, P., McKenzie, P., Brown, C., Appanah, S., 2006. Challenges facing certification and eco-labelling of forest products in developing countries. International Forestry Review 8, p. 196

[51] Fikru, M.G., 2014. International certification in developing countries: the role of internal and external institutional pressure. Journal of Environmental Management 144, p. 294

Blackman, A., Lahiri, B., Pizer, W., Planter, M.R., Piña, C.M., 2007. Voluntary environmental regulation in developing countries. Resources for the Future Discussion Paper, p. 254

Montiel, I., Husted, B., 2009. The Adoption of Voluntary Environmental Management Programs in Mexico: First Movers as Institutional Entrepreneurs. Journal of Business Ethics 88, p. 360

[52] Fikru, M.G., 2014. International certification in developing countries: the role of internal and external institutional pressure. Journal of Environmental Management 144, p. 293

Alemagi, D., Oben, P.M., Ertel, J., 2006. Implementing environmental management systems in industries along the Atlantic coast of Cameroon: drivers, benefits and barriers. Corporate Social Responsibility and Environmental Management 13, p. 226-227.

[53] Fikru, M.G., 2014a. Firm Level Determinants of International Certification: Evidence from Ethiopia. World Development 64, p. 289

Graham, D., Woods, N., 2006. Making corporate self-regulation effective in developing countries. World Development 34, p. 873

LMIC and the offered products often come with high price mark-ups.[54] A lack of financial resources, low education levels, and little knowledge about environmental and social issues can partly explain the low degree of sustainable purchasing behavior.[55] Above of all, however, in many cases it is the lack of adequate information that is the major barrier. Only if information about business practices and conduct is publicly available consumers can form an informed preference and build up pressure on the companies. In this respect, independent reporting and auditing of company practices is crucial.[56]

Several non-governmental organizations, such as the Coalition for Environmentally Responsible Economies (CERES) or the Global Reporting Initiative (GRI), work for the establishment of independent reporting and auditing standards in LMIC in order to increase the transparency of private sector actions. In general, the role of civil society for companies' engagement in self-regulation in high-income countries as well as LMIC cannot be underestimated. Civil society initiatives help to disclose information about business conduct, to raise awareness among consumers, and to build up pressure on companies. Importantly, it is not only on the international level, but also on the community-level that civil society can play a major role on self-regulatory efforts, as various studies have shown.[57]

Supply chains and international markets

The supply chains of multinational corporations can serve as important transmission channels for self-regulatory standards and initiatives. On one hand, large multinationals can demand from their suppliers in LMIC to fulfill certain minimum standards such as paying fair wages, creating good labor conditions, or producing in an environmentally friendly way. By exerting coercive pressure and dictating conditions, multinationals ensure that their prod-

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[54] Thøgersen, J., Zhou, Y., 2012. Chinese consumers' adoption of a 'green' innovation – The case of organic food. Journal of Marketing Management 28, p. 315

[55] Wheeler, D., 2001. Racing to the Bottom? Foreign Investment and Air Pollution in Developing Countries. The Journal of Environment Development 10, 233

[56] Chan, R., Lau L., 2008. Explaining Green Purchasing Behavior. Journal of International Consumer Marketing 14, 24-32

[57] Wheeler, D., 2001. Racing to the Bottom? Foreign Investment and Air Pollution in Developing Countries. The Journal of Environment Development 10, 233

ucts meet sustainability criteria at all production stages and thereby fulfill the requirements imposed by their own customers or home governments.[58]

Besides exerting direct coercive pressure, foreign companies can positively influence their suppliers through the transmission of knowledge and sustainable innovations (organizational and technical). Studies have confirmed the existence of such vertical spillover effects, which are particularly strong for supplying companies in LMIC (backward vertical spillovers).[59] A crucial moderator of the spillovers is the absorptive capacity of the domestic companies. The larger the technological gap and the smaller the capacity of the local company the more difficult is the technology and knowledge transmission. In this regard, smaller primary production industries in LMIC often face difficulties. [60] Here we would also like to emphasize the role of business networks and platforms as well as south-south cooperation for an effective transmission of standards to companies in LMICs.

Government and legislation

Governmental regulation is supposed to facilitate business operations and, at the same time, to protect people and the environment. In a globalized world with businesses operating internationally this can be a significant challenge. On the paper there is often no actual lack of governmental regulations in many LMIC. However, a lack of financial and human resources as well as expertise impedes an effective implementation and enforcement of existing laws.[61] At the same time, some governments abstain from implementing and enforcing

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[58] Ayuso, S., Roca, M., Colomé, R., 2013. SMEs as "transmitters" of CSR requirements in the supply chain. Supply Chain Management: An International Journal 18, p. 498
Ciliberti, F., Pontrandolfo, P., Scozzi, B., 2008. Investigating corporate social responsibility in supply chains: a SME perspective. Journal of Cleaner Production 16, p. 1580

[59] Havránek, T., Iršová, Z., 2011. Estimating vertical spillovers from FDI: Why results vary and what the true effect is. Journal of International Economics 85, p. 242

[60] Ciliberti, F., Pontrandolfo, P., Scozzi, B., 2008. Investigating corporate social responsibility in supply chains: a SME perspective. Journal of Cleaner Production 16, 1582

[61] Graham, D., Woods, N., 2006. Making corporate self-regulation effective in developing countries. World Development 34, p. 879
Durst, P., McKenzie, P., Brown, C., Appanah, S., 2006. Challenges facing certification and eco-labelling of forest products in developing countries. International Forestry Review 8, p. 196

mandatory regulations because they fear to harm the domestic companies' international competitiveness and to put the country's economic growth at risk.[62]

Besides mandatory regulation, there are several other ways how governments can influence the social and environmental performance of the private sector. They can facilitate self-regulation ex ante by setting economic incentives such as subsidies or taxes, or through capacity building in public-private partnerships. As large-scale purchasers of products and services national bodies can further incentivize sustainable as well as inclusive production and serve as a role model for consumers encouraging them to follow their example.[63] Finally, the evolvement of public pressure on companies to engage in self-regulatory measures requires an active civil society. In this respect, governments can substantially contribute by providing an enabling legal environment and support.[64]

Conclusion

Private sector self-regulation depends not only on internal and organizational aspects, but also on external factors such as the public, supply chains and international markets, or the government. Importantly, private sector self-regulation is not substituting traditional governmental regulation. Instead, both concepts are complementary to each other. The private sector can and should take a share in the implementation of the Post-2015 Development Agenda, as has already been recognized in the proposal for the Sustainable Development Goals by the UN Open Working Group, e.g. in the goals 8, 9, and 12.[65] In this respect, international organizations can further encourage and support self-regulation efforts by compa-

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[62] Bulut, T., Lane, C., 2010. The Private Regulation of Labour Standards and Rights in the Global Clothing Industry: An Evaluation of Its Effectiveness in Two Developing Countries. New Political Economy 16, p. 43
Coglianese, C., Keating, E.K., Michael, M.L., Healey, T.J., 2004. Role of Government in Corporate Governance. Cambridge, MA: Center for Business and Government, John F. Kennedy School of Government, Harvard University, p. 8
Graham, D., Woods, N., 2006. Making corporate self-regulation effective in developing countries. World Development 34, p. 869

[63] Gond, J.-P., Kang, N., Moon, J., 2011. The government of self-regulation: On the comparative dynamics of corporate social responsibility. Economy and Society 40, p. 646-649
Van Calster, G., 2002. Green Procurement and the WTO – Shades of Grey. Review of European Community & International Environmental Law 11, p. 298

[64] Graham, D., Woods, N., 2006. Making corporate self-regulation effective in developing countries. World Development 34, p. 879

[65] UN Open Working Group for Sustainable Development Goals, 2014. Open Working Group Proposal for Sustainable Development Goals. https://sustainabledevelopment.un.org (accessed 2015.02.16)

nies, e.g. through multi-stakeholder initiatives (e.g. UN Global Compact), by defining clear-cut international standards, by disseminating knowledge and resources among companies, and by building capacities on country-level, i.e. among governments and national institutions. Such efforts can help to integrate the private sector more strongly in the international development process and through this to reach long-term social, environmental, and economic improvements.

What are the benefits of nuclear energy to overcome the challenges of climate change?

A view into the current nuclear energy ambitions of China

Anna LVOVSKAIA, Katarzyna ROTTERMUND, and Katerina VLCKOVA

Access to affordable, reliable, sustainable, and modern energy for all is goal number 7 as proposed by the Open Working Group for Sustainable Development agenda. It has become obvious that a change in the mind-set and approach towards energy generation is needed to achieve this goal and reduce the environmental risks and consequences associated with energy consumption. In the past, an increasing shift from coal- based energy towards low- carbon technologies has taken place promoting the use of renewable energy, biomass, and hydropower. Especially those nations, that account for a large part of the global energy demand, need to create new strategies for the implementation and development of more sustainable energy sources.

China, a developing country with a population of 1.3 billion people, has experienced a rapid economic boom with a massive growth in energy demand as a consequence thereof. Generation of primarily coal-based energy has extended its economic footprint with the result of impelling climate change and other negative impacts such as severe air pollution. In order to mitigate further serious consequences in the long run, new, elaborated strategies are needed. Nuclear power has been extensively discussed as a low- carbon option that could be used to meet the energy demand on the one hand and mitigate climate change on the other hand.

China is the global leader of energy consumption and production as well as one of the largest oil importers in the world. China's energy demand is subjected to an average population growth of 8% consuming 1.7 billion tonnes of coal per year which was around 69% of the total energy consumption in 2011.[66] According to the forecast for the next 20 years, Chinese

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[66] Paul Crompton and Yanrui Wu, 'ENERGY CONSUMPTION IN CHINA : PAST TRENDS AND FUTURE DIRECTIONS' (2005) 27 Energy Economics 195–208, p.2; U.S. Energy Information Administration, 'China,' 2014 < http://www.eia.gov/countries/cab.cfm?fips=ch > accessed 17 October 2014> p.2

economy is expected to rise by 247% by 2035 and predicted to overtake the U.S. superpower in the oil consumption by 2027 and therefore become the major oil consumer. Moreover, the amount of energy consumed in power generation activities is about to increase by 95%.[67]

This growth cannot be only ascribed to the domestic demand of produce but also the global demand, which is reflected in the high energy consumption by the manufacturing sector. Without any doubt, China is one of the biggest and most important exporters of manufacturing goods and since "made in china" conquered the world, the international exports have been reported as the main driver of CO_2 emissions.[68] The consequences for the Chinese population are fatal: severe air pollution is posing a tremendous threat to China's public health concurrently to the progress of climate change. If the situation will not change in the next years, decreasing yields for agricultural crops and reduced water supply for millions of people will be the result.[69] China is very vulnerable to climate change as it does not have the techniques to prevent and handle catastrophes.[70] To diminish the impact of climate change, the IPCC recommended nations not to exceed 550 ppmv (parts per million by volume) or even 450 ppmv of atmospheric concentrations of carbon dioxide by the year 2050.[71] However, this goal can be reached if the global community and especially China set extensive programmes in motion to start reducing carbon dioxide emissions.

Investigating China's position in the global debate on climate change, it can be stated that the country displays active interest in tackling the problem. As one of the first developing

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[67] 'BP Energy Outlook 2035 China,' 2014 <http://www.bp.com/en/global/corporate/about-bp/energy-economics/energy-outlook/country-and-regional-insights/china-insights.html> accessed 10 October 2014

[68] Kuishuang Feng, Steven J Davis, Laixiang Sun, Xin Li, Dabo Guan, Weidong Liu, Zhu Liu, and Klaus Hubacek, 'Outsourcing CO2 within China.' (2013) 110 Proceedings of the National Academy of Sciences of the United States of America 11654–9, p.11656

[69] IPCC WGII AR5 Summary for Policymakers, 'Climate Change 2014: Impacts, Adaptation, and Vulnerability' p.7-8 < https://ipcc-wg2.gov/AR5/images/uploads/IPCC_WG2AR5_SPM_Approved.pdf> accessed 1 December 2014

[70] 'China faces a unique challenge in adapting to climate change' (Chinadialogue) <https://www.chinadialogue.net/article/show/single/en/6809-China-faces-a-unique-challenge-in-adapting-to-climate-change> accessed 1 December 2014

[71] Yun Zhou, 'Why is China going nuclear?' (2010) 38 Energy Policy 3755–3762, p.3758

countries, it drafted and implemented a national climate change programme. In 2013, China was able to achieve a reduction of the carbon intensity by 28.5% compared to 2005.[72] During the 2014 Climate Change Summit in New York, China indicated its awareness of having particular responsibilities as a major country[73], however it also underlined the developed counties' obligation to reinforce emission reduction and contribute annual financial support of $100 billion as well as provide a technology transfer to developing countries by 2020 due to their historical responsibility.[74]

Nuclear power has several advantages that can prove effective to mitigate climate change. For instance, this technology has been extensively used by several nations to generate power with no carbon or other harmful emissions. Further, it might be used on a large scale for several centuries as it is interlinked with the deposit of uranium that exists abundantly in the earth's crust. Finally, over the past decades of exploitation, technology has been significantly improved resulting in higher standards for safety and underlying economics.[75] In order to limit its pollution, China plans to reduce the fossil energy and to promote sources of low carbon instead.[76] Thus, it aims at increasing its investment in nuclear energy capacity (from 1.4% to 4% by 2020) and in its nuclear capacity by 30% from 2010 level equaling 10.8 gigawatts to 42.8 gigawatts in 2014.[77] Moreover, it plans to have almost 60 gigawatts of nuclear energy by 2020 and up to 150 gigawatts by 2030. [78]

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[72] UN Climate Change Summit (2014) < http://statements.unmeetings.org/media2/4628014/china_english.pdf> accessed 20 October 2014

[73] Ibid.

[74] Ibid.

[75] Ioannis N. Kessides, 'Nuclear power: Understanding the economic risks and uncertainties' (2010) 38 Energy Policy 3849–3864, p.3849

[76] Lewis, Joanna 'Energy and Climate Goals of China's 12th Five-Year Plan.' <http://www.c2es.org/international/key-country-policies/china/energy-climate-goals-twelfth-five-year-plan> accessed 10 October 2014

[77] Blazey, Patricia 'Will China's 12th Five Year Plan Allow for Sufficient Nuclear Power to Support its Booming Economy in the Next Twenty Years.' *Pac. Rim L. & Pol'y J.* 21 (2012), p.461.

[78] Dugan, Jennifer 'China working on uranium - free nuclear plants in attempt to combat smog' <http://www.theguardian.com/world/2014/mar/19/china-uranium-nuclear-plants-smog-thorium> accessed 19 October 2014

Being even more ambitions, China intends to become a world leader in terms of nuclear energy. It is about to use its nuclear development as a way of political influence in its region and outside of it.[79] The focus will be on advanced nuclear reactors, third - generation of nuclear power, and large and advanced pressurized - water reactor and high temperature gas - cooled reactor nuclear power stations.[80] Nevertheless, the biggest concern remains on safety which needs to be maintained at any time and under any circumstances.[81] Some other key points of Chinese nuclear energy policy include international cooperation, however, the country wants to become self - reliant when it comes to its own design, manufacturing, specialized personnel, and project management.[82] Another idea is to develop a nuclear power plant that would generate energy mainly by fission of thorium instead of uranium, a radioactive metal nowadays commonly used.[83] The reason for China to support the innovation development of thorium is certainly connected to economy, environment, and sustainable development of energy but also to a political race in the international arena.

Stating some critical aspects of the nuclear power sector, uranium and thorium supply, power plant locations, lack of educated workforce can be mentioned.[84] Another serious issue is that despite several years of experience with nuclear power, China still lacks a legal system to regulate the safe use of nuclear energy and an efficient political structure.[85] Furthermore, the role of the IAEA in China's nuclear energy development is crucial since the Agency seeks to help its member states in the field of nuclear energy, laying down expertise, and advising the states to use the newest nuclear technologies. China announced to establish a Center of

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[79] Asia Pacific Foundation of Canada 'China's Nuclear Development in the 13th Five Year Plan (and What This Means for Canada.' <http://www.asiapacific.ca/blog/chinas-nuclear-developments-13th-five-year-plan-and-what> accessed 20 October 2014

[80] Ibid.

[81] U.S. Energy Information Administration, 'China' < http://www.eia.gov/countries/cab.cfm?fips=ch > accessed 17 October 2014, p.34; Y.C. Xu, 'The struggle for safe nuclear expansion in China' (2014) 73 Energy Policy 21–29

[82] World Nuclear Association 'Nuclear Power in China' <http://www.world-nuclear.org/info/Country-Profiles/Countries-A-F/China--Nuclear-Power/ > accessed 29 October 2014

[83] The Economist 'Thorium Reactors: Asgard's Fire' < http://www.economist.com/news/science-and-technology/21600656-thorium-element-named-after-norse-god-thunder-may-soon-contribute > accessed 15 October 2014

[84] Xu, 'The struggle for safe nuclear expansion in China' (2014) 73 Energy Policy 21-29; Yuan, Xu, Zhang, Hu, and Xu, 'China's 2020 clean energy target: Consistency, pathways and policy implications' (2014) 65 Energy Policy 692-700

[85] Yun Zhou, Christhian Rengifo, Peipei Chen, and Jonathan Hinze, 'Is China ready for its nuclear expansion?' (2011) 39 Energy Policy, p. 778

Excellence on Nuclear Security which will begin its service in 2015 and will certainly evolve to an important partner for the IAEA.[86]

Nevertheless, despite being viewed as a green energy, nuclear power cannot be expected to solve the problem of global warming alone but can certainly help to meet the target of holding the increase in global annual average temperature below 2 degrees Celsius compared with pre- industrial times as agreed on the COP 15 in Copenhagen in 2009.[87] It needs to be employed on a large scale to achieve the required effect which is associated with high costs as well as special profound education and expertise. China has demonstrated that it is willing to diversify its energy sector in order to cut its CO_2 emissions, as it perceives a certain responsibility towards climate change.

Generally, other developed countries need to support China in its transition as they highly benefit from the loose regulations regarding the environmental protection and the low manufacturing costs. This support can be performed in financial terms, for example with the Green Climate Fund and additionally with an enhanced exchange of best energy practices by organizing a round table or panel of experts coordinated by the IAEA. Additionally, since the Fukushima accident it has become increasingly important to fulfil the safety standards and to seek for further possibilities to reinforce safety. In particular, the establishment of new nuclear power plants create many challenges primarily with regards to safety standards in light of the various nuclear power plant designs and hazards such as seismic and tsunami events are serious issues that need to be addressed.[88] It is beyond question that the IAEA is playing a pivotal role in China's eagerness to scale up its nuclear power system and the focus should be on improving the cooperation and mutual exchange of resources. It remains to be seen how dominant nuclear power will be in the energy mix of China having in mind that the decision- making has remains in control of the government without involving the public opinion. That, however, might change in future.

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[86] Speech at the Ministeral Conference on Nuclear Securiyty by Yiren Wang, Vice Chairman of CAEA (2013) <http://www.caea.gov.cn/n360680/n360749/n360899/572206.html> accessed 1 December 2014

[87] 'The Emissions Gap Report- Introduction' (UNEP website) <http://www.unep.org/publications/ebooks/emissionsgapreport/chapter1.asp> accessed 1 December 2014

[88] X. Jin Xiang, Donghui Zhang, Mi Xu, Jinying Li, 'China's Nuclear Power Goals Surge Ahead' (2013) in Letters edited by Jennifer Sills Vol. 340 Science, p.142

The Future of Cities: Sustainable Development and Personal Security

Ferenc KULIGA, Kristina JANKOVA, Darrah LUSTIG, Karolina NAJMONOVA

Urbanization is a global phenomenon with varied expression across regions. 54% of the world's population currently lives in urban areas.[89] By 2050, it is estimated that 66 % of the world's population will be urban.[90] Africa and Asia remain home of majority of the world's rural population, however this is due to change significantly in the near future. Consequently, the rising number of the cities' inhabitants will bring big challenges for planning and development.

This article argues in favor of the continued commitment to attaining the goals of sustainability and personal security championed in the UN post-2015 development agenda. [91] In particular, goals 11 and 16 envision the future of urban areas, which are;

- Proposed goal 11: Make cities and human settlements inclusive, safe, and sustainable.

- Proposed goal 16: Achieve peaceful and inclusive societies, access to justice for all, and effective and capable institutions.

The concept of sustainability has been evolving steadily since 1970s. The main concerns in this context are environmental, social and economic aspects of sustainability. Diesendorf describes these concerns as finding the "balance between the economic, environmental and social necessities…between human inhabitants and the natural resources…by employing a system combining the participation of citizens and scientific knowledge provided by scientific analysis." Important is also the concept of "human sustainability", which is comprised of social and economic aspects of sustainable development and whose main goal is overall hu-

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[89] The Department of Economic and Social Affairs of the United Nations Secretariat estimates that approximately 3.9 billion people currently reside in cities. UN DESA doc ST/ESA/SER.A/352, *World Urbanization Prospects: The 2014 Revision, Highlights*, New York 2011, 2

[90] Ibid

[91] "Millennium Development Goals and post-2015 Development Agenda" (United Nations website) < http://www.un.org/en/ecosoc/about/mdg.shtml> accessed 19 July 2014

man wellbeing. We see the evolution of sustainable development as an important milestone for UN Habitat.

The main area of interest here is the issue of sustainable cities, which refers to the proper use of resources, protection of the natural environment, the least possible use of non-renewable resources, economic growth and community's self-confidence, individual welfare, and the satisfaction of human needs.[92] Since the 1990s the concept is increasingly coming to the attention of scholars and international organizations – an example being the Aalborg process, City Alliance. Nowadays, the UN Habitat and the World Bank define city development strategies differently respectively, who are two of the most important international agencies in this debate.

The areas covered by the concept of sustainable cities also indirectly refer to the "right to the city" proposed by Henri Lefebvre in 1968, which represents the core of the World Charter for the Right to the City. It is generally defined as the ability of all groups and individuals to live in the city and enjoy it in all its parts which includes decision-making abilities that shape the city using its spaces to exercise their citizenship.[93] We see personal security as one of the most crucial challenges for the cities in future.

Personal security must not be overlooked in any proposed plan of the sustainable city. Cities are an appropriate space for protecting personal security and fighting violence and crime. However, it is necessary to define the roots of violence such as poverty, social inequality, corruption, unemployment, and mental diseases. The goal of the sustainable city project thus should be to improve citizens' personal security.

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[92]   Li-Yin Shen, J Jorge Ochoa, Mona N Shah, and Xiaoling Zhang, "The application of urban sustainability indicators – A comparison between various practices" [2011] 35/1 Habitat International <http://www.sciencedirect.com/science/article/pii/S0197397510000263> accessed 9 November 2014 or Manoj Roy, "Planning for sustainable urbanization in fast growing cities: Mitigation and adaptation issues addressed in Dhaka, Bangladesh" [2009] 33/3 Habitat International <http://www.sciencedirect.com/science/article/pii/S0197397508000684> accessed 9 November 2014
[93] Edésio Fernandes, "Constructing the 'Right to the City' in Brazil" [2007] Social Legal Studies 201, p 208

Population growth and urbanization are more and more frequently occurring trends, which pose challenges planning and urban management have to overcome. They could be divided into two sets of challenges: external and internal.

One of external challenges is the failure of urban planning and the construction sector, which has resulted in a housing backlog that has led to the development of slums. Another demographic problem is rural-to-urban migration. Integration of migrants into the city is often quite problematic. In this respect it is important to mention generation 1.5 - a term used to describe migrants who arrive in the US as children or adolescents. This generation faces a serious set of problems related to their inclusion to the society. Due to these issues with the host society they very frequently create separate communities. The second set of challenges is environmental – such as climate change, rising ocean level and pollution. The third and final set of challenges, which are crucial for future development, are socio-economic. In this respect, the impacts of globalization have to be faced, which may lead to reshaping economies and labor markets.

While the sustainable development of urban areas faces many risks and challenges, it also has the potential to benefit from a large number of opportunities and ultimately contribute to a new era of human prosperity.[94] Solutions to the challenges that face the sustainable and secure development of cities are within the reach of policy-makers. It is important to start with a change in urban planning, a strong political will to conduct it, and a vital corporate commitment to include social and environmental concerns in future business operations.

To address demographic challenges such as slums etc., urban productivity must embrace innovative and creative capacity of all of its inhabitants. Moreover, corporations are in a good position to realize and identify the challenges of building sustainable and safe cities by modifying their practices to pave the way for an environmentally and socially conscious industry. The best solution to answer to socio-economic challenges, however, is political par-

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[94] UN-Habitat, State of the World's Cities 2012/2013: Prosperity of Cities

ticipation. Yet, in order to give politicians the power to do so, laws regarding citizenship must be revisited – they must include diverse populations and ensure that all members of society are subjects rather than objects of policy.[95]

Following the previous thoughts, it appears clear that the sustainable city project has the task of decreasing the crime rates in urban areas. Globally, challenges in security issues are increasingly present in the developing world. In order to provide readers with better explanation, several case studies were chosen. However it is exceedingly important to introduce basic approaches of achieving greater personal security first.

We recognize four models or ways how it could be done. The first model is community policing for urban crimes, its main aim is to tackle crime in an alternative manner. The second is the problem-solving approach to urban crimes. The third model is similarly important-speaking out about the involvement of policing strategies in urban places. The fourth and last model deals with information and communication technologies.

The first case study deals with Hollygrove, New Orleans. Though this area is located in the developed world, it is a low income area in the United States of America. In the past, Hollygrove suffered from a high level of crime. To address this issue, residents took local actions to improve their living conditions. The efforts have led to a new sense of neighborhood pride and crime rates have declined in the city as a result.

Another example is South Africa, where, as a consequence of decades of separation of citizens and the creation of a two-class system, racism and violence persisted, even after the end of Apartheid. In order to solve immediate problems, a people-driven process was developed to deal with ongoing security challenges. They identified their immediate issues to be

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[95]   Timothy Garton Ash, Edward Mortimer, and Kerem Öktem, 'Freedom in Diversity' [2011] <http://www.sant.ox.ac.uk/esc/FreedomRev10.pdf> accessed 2 December 2014

environment-related and developed responses accordingly. Residents organize themselves to safeguard their communities with local-based initiatives.

In Mexico City, high levels of crime and insecurity accompany the recent processes of democratization in the country. Unfortunately, the overall contribution of the Mexican police force to improve the local security environment is falling short of what is expected. The last case study shows that the training of the police and to improve state capacity play a significant role to overcoming personal security challenges within a country and this can, in turn, facilitate the formation of sustainable cities.

To conclude our research, we see the concept of sustainable city as highly important, as it holds potential solutions to the challenges that the world is encountering to rapidly increasing extents. We argue that the concept of the sustainable city as an integral part of the Sustainable Development Goals and must not be left out.

The Role of Female Offenders in Sex Trafficking Organizations

Julia KIENAST, Márton LAKNER, and Agathe NEULET

Introduction

When looking at the statistics on sex trafficking one encounters a surprisingly high number of female participation in the offender's role.[96] However, the reasons behind this phenomenon remain veiled behind biased professional and public discourses, disavowing the public and policy makers from grasping the complexities of the issue. These narratives would be often ideologically and morally charged instead of motivated by a genuine desire to understand the motivations and desires of those most affected by this 21st century form of slavery.[97] Our paper aspired to raise awareness on the many – morally often confusing - issues hidden behind the subject by 1, mapping women's pathways to becoming sex traffickers 2, exploring their roles within the trafficking organizations and 3, by discussing the challenges in prosecuting female offenders.

Victimization

It is crucial to explore the social fetters that push/pull women to become involved with sex trafficking for subsequently better grasping their roles as offenders. The most common modes of victimization can be distinguished into three categories:[98]

1. *Deliberate submission*. Prevalent among the most marginalized and impoverished where the sole mode of survival is the willing submission to humiliating and degrading conditions.[99] These victims would identify themselves as a dutiful member of their family.

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[96] Kleemans, Edward R., Edwin W. Kruisbergen, Ruud F. Kouwenberg, 'Women, brokerage and transnational organized crime. Empirical results from the Dutch Organized Crime Monitor' (2013) Vol. 16 Is. 2 *TOC* 22.

[97] Edward Snajdr, 'Beneath the master narrative' (2013) Vol. 37 Is. 2 *DA*; Dina Siegel, Sylvia de Blank, 'Women who traffic women' (2010) Vol. 11 Is. 4 *GC* 436; Elžbieta M. Goždziak, 'Empirical Vacuum: In Search of Research on Human Trafficking' in Rosemary Gartner, Bill McCarthy (ed), *The Oxford Handbook of Gender, Sex and Crime'* (Oxford University Press, Oxford 2014) 613-614.

[98] Andreas Schloenhardt, Genevieve Beirne, Toby Corsbie, 'Trafficking in persons in Australia: myths and realities' (2009) Vol. 10 Is. 3 *GC* 229.

[99] Lisa Sanchez, 'Gender Troubles' in Claire M. Renzetti, Lynne Goodstein (ed), *Women, Crime and Criminal Justice* (Roxbury, Los Angeles 2001) 66; Ashley G. Blackburn, Robert W. Taylor, Jennifer Elaine Davis, 'Understanding the Complexities of Human Trafficking and Child Sexual Exploitation: The Case of Southeast Asia' (2010) Vol. 20 Is. 1-2 *WCJ* 115-116.

2. *Deliberate submission: deceived about the conditions*. Here, sex work is perceived as a viable way of social advancement and emancipation. Many victims, after having found themselves deceived about the conditions of sex work would nevertheless endure, considering it is still preferable to what their home country has to offer.

3. *Deceived about the very nature of work*. Here, victims find themselves completely deceived about the type and conditions of work they are to undertake. Coercion and threats are widely employed.[100] Usually, the more impoverished the more probable victims will lack the sufficient knowledge to recognize these deceptive traps.[101]

Conclusively, societal and familiar pressures, dissatisfaction with one's own socio-economic conditions, as well as pervasive gender, political and economic discrimination and non-emancipation are the primary inducing factors that make women more vulnerable to victimization.

Pathways to Offending

Little solid empirical research has been done on the *why*'s and *how*'s with respect to women's involvement with sex trafficking organizations. Generally, the burden of self-sufficiency and the simultaneous hindrance on the access to legitimate opportunities for making a living gives rise to anomalous behaviors. Two prevalent pathways to becoming sex trafficking offenders were identified:

1. *Indirect/direct involvement*. An uncaring, pedagogically neglectful familial environment may thrust many young girls to find refuge on the street.[102] Here pimps are ready to exploit their yearnings for caring by posing as either genuine or fake

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[100] Tatyana A. Denisova, 'Trafficking in women and children for purposes of sexual exploitation: The criminological aspect' (2001) Vol. 6 Is. 3-4 *TOC* 33.
[101] Chenda Keo, *Human Trafficking in Cambodia* (Routledge, Oxon, New York 2014) 28.
[102] Kathleen Daly, *Gender, Crime and Punishment* (Yale University Press, New Haven, London 1994) 43-61; Mary E. Gilfus, 'From Victims to Survivors to Offenders: Women's Routes of Entry and Immersion into Street Crime' (1992) Vol. 4 Is. 1 *WCJ* 70-78.

lovers. A complex relationship is developed where women become interested in supporting the male partners-in-crime as their sole mode of survival.[103]

2. *Climbing the ladder*. Most female offenders in sex trafficking were found to be former prostitutes.[104] Fearing further humiliation and abuse, many would gradually move towards the organizational side of the organization.[105] In most cases, victim's options to exit are hindered by coercion, systemic dependency, and lack of prospects outside the sex world or by fear of societal stigmatization. However, some consider the climbing of the organizational ladder as a career advancement – a more convenient way of making money.

The Role of Female Offenders in Recruitment

The role of female offenders in sex trafficking is increasing in various activities. However, due to gendered stereotypes generally associated with women such as innocence, caregiving or sensitivity, women are still perceived as non-agential victims.[106] These stereotypes by society also play a role in the victim's trust towards female offenders – women are more likely to trust and be seduced by female rather than male offenders. Three regionally diverse profiles of female traffickers depict various and culturally special methods to handle the illegal activities:

1. *Nigeria*. Here "madams" represent a Western ideal of success for young girls. While many victims are recruited by deceptive means, some of the recruits clearly understand that they will work in the field of prostitution. Familial pressures and the cultural perception of young girls as less valuable than men make them more vulnerable to victimization.[107]

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[103] Marion van San, 'The appeal of 'dangerous' men. On the role of women in organized crime' (2011) Vol. 14 Is. 4 *TOC* 292.

[104] Tatyana A. Denisova, 'Trafficking in women and children for purposes of sexual exploitation: The criminological aspect' (2001) Vol. 6 Is. 3-4 *TOC* 34.; Chenda Keo, *Human Trafficking in Cambodia* (Routledge, Oxon, New York 2014) 25.; Analysing the Business Model of Trafficking in Human Beings to Better Prevent the Crime (OSCE, UN.GIFT 2010) 43-44.

[105] Eva Lo Iacono, 'Victims, sex workers and perpetrators' (2014) Vol. 17 Is. 1-2 *TOC* 116-117.

[106] R. Murray Thomas, *Recent Theories of Human Development*. (Sage Publications, 2000), 248; Lina A.Ricciardelli, Robert J. 'Desirable and Undesirable Gender Traits in Three Behavioral Domains' (1995) Vol. 33 *Sex Roles* 637–655.

[107] Marie Herbert, 'De plus en plus de femmes proxènetes en France' (Le Figaro, July 2010) <http://www.lefigaro.fr/actualite-france/2010/07/30/01016-20100730ARTFIG00626-de-plus-en-plus-de-femmes-proxenetes-en-france.php> accessed on 04/12/14.

2. *Eastern Europe*. The profile of female traffickers in these countries is that of a businesswoman: they work independently without male partners-in-crime. Some female recruiters are recognized for being educated businesswomen, with good negotiation, communication or seduction skills.[108] Furthermore, while many Eastern European victims know what will be their future job and have an agreement with their recruiter, traffickers often take away their identification documents for greater coercion.

3. *Thailand*. For Thailand sex trafficking represents an important part of the economy. Families are also highly dependent on their members' incomes doing sex work.[109] Here the "mama-sans" are partners in crime, helping their husbands or their family members to recruit the victims, generally from the lower-class rural society, often via social media or the Internet.[110] Some Thai victims are sent abroad where they are restrained by debts and passport confiscations. The traffickers keep them under control by threatening to take their family properties.

These examples underline that the process of recruitment can take different pathways connected to the culture and social identities of the actors. Also, the new social media and new technologies of information and telecommunication facilitate the prospection of victims.

Positions of Women in Sex Trafficking Organizations

Women are involved in all stages of the organizations, from the recruitment to the supervision of prostitutes and finances up to the leading positions.[111] The former or actual prostitutes possess a good knowledge of the business, which facilitates the recruitment and the establishment of control over new prostitutes.[112] Nationality, ethnic or religious ties with the

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[108] Jana Arsovska, Popy Begum, 'From West Africa to the Balkans: exploring women's roles in transnational organized crime' (2014) Vol 17 *TOC* 9.; Dina Siegel, 'Recent Trends in Women Trafficking and Voluntary Prostitution: Russian-speaking Sex-Workers in the Netherlands' (2005) No. 4 *TC* 18.

[109] Dulcey Simpkins, 'Rethinking the Sex Industry: Thailand's Sex Workers, the State, and Changing Cultures of Consumption' (1997-1998) Vol 12 Is. Unequal Exchange: Gender and Economies of Power, *MFS* <http://quod.lib.umich.edu/cgi/t/text/text-idx?cc=mfsfront;c=mfs;c=mfsfront;idno=ark5583.0012.005;rgn=main;view=text;xc=1;g=mfsg> accessed on 16/12 /14.

[110] Danah Boyd et al, 'Human Trafficking and Technology: A framework for understanding the role of technology in the commercial sexual exploitation of children in the U.S.' (2011) 4 <http://research.microsoft.com/en-us/collaboration/focus/education/htframework-2011.pdf> accessed on 13/12/14.

[111] UNODC, Global Report on Trafficking in Persons 2012 (United Nations publication, Sales No. E.13.IV.1), 33.

[112] Jørgen Carling, 'Migration, Human Smuggling and Trafficking from Nigeria to Europe' (Report to the International Organization for Migration, 2004) <http://www.humantrafficking.org/publications/442> accessed on 09/12/14.

victims can further increase the bond between them - hence the efficiency in terms of recruitment and control.[113] Women can be involved in the transportation and migration processes, in the financial aspects of the exploitation, but also in the making of administrative steps such as renting houses.[114] Furthermore, they might also be involved in managing and handling the prostitutes, guarding them in the brothels by means of creating a link with the women they exploit, being able to control them without the intervention of men. This link is usually emotional and based on manipulation. The relationship between the victim and the madam can create mixed emotions for the victim, who find themselves between actions of affection and violence. These complicated relations between victims and offenders might even generate Stockholm syndromes.[115]

In conclusion, it is obvious that women are involved differently in the process of human trafficking for sexual purposes. Furthermore, not only one specific profile of female offenders exists, but the profiles are diverse. However, similarities can be established in terms of general behavior, recruitment and suppression methods especially according to the nationality or cultural and social background.

Prosecution of Female Offenders

There are several aspects, which may either enhance the probability of women to be charged (deployment in the lower ranks) or reduce its likelihood (female stereotypes).

1. *Unwillingness to testify*. One reason behind this phenomenon is the intimate relationship that might have developed between the victim and their trafficker, being afraid of losing their financial and emotional support network.[116] Another complicating factor can be the fear of being prosecuted or losing their illegal residency after having come out – prostitution remains outlawed in many countries and exposed

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[113] Margaret Beare, 'Women and organized crime' (Research and National Coordination Organized Crime Division Law Enforcement and Policy Branch Public Safety Canada, Report No. 013, 2010) 49, <http://publications.gc.ca/collections/collection_2012/sp-ps/PS4-106-2010-eng.pdf> accessed on 13/12/14.

[114] Jana Arsovska, Felia Allum, 'Women and transnational organized crime' (2014) Vol. 17 Is. 1 *TOC* 4

[115] Michael Bradley, 'Human trafficking: Why do so many victims refuse help?' (BBC News England, October 2013) <http://www.bbc.com/news/uk-england-24548143> accessed on 04/12/14.

[116] Heather Clawson et al, *Prosecuting human trafficking cases: Lessons learned and promising practices* (2008 Washington DC: ICF International) as cited in William Adams et al, 'Identifying Challenges to Improve the Investigation and Prosecution of State and Local Human Trafficking Cases' (Report to the National Institute of Justice, April 2012) 15, <https://www.ncjrs.gov/pdffiles1/nij/grants/238795.pdf> accessed on 09/12/14.

trafficking victims often end up deported. The lack of trust in law enforcement agencies and the fear of further humiliation during interrogations are additional compounding factors.[117]

2. *Victims as perpetrators*. The fact that many female offenders in trafficking of persons are also former victims of sexual exploitation creates a great challenge for the prosecution. While many female perpetrators are under pressure and coercion they still contribute to the running of the organization. Generally victims carrying out criminal activities under coercion should not be punished. However, judging by the victims/perpetrators motivations, some actions could remain inexcusable. Therefore, the fact that a person is a victim in some aspects does not necessarily conclude that the same person cannot be a perpetrator in others – the line remains fine.[118]

3. *Female stereotypes during prosecution*. Women are still prevalently perceived by prosecution bodies as passive bystanders or unknowing partners unequipped for committing crimes. Irrelevant gender biases thus influence the decision whether to press charges and to prosecute or not. Women would often receive shorter sentences because they are seen as mothers, daughter or simply, women.[119] Instead of *a priori* stereotypes, unbiased inquiry on the motivations and circumstances in which the crimes were committed should be undertaken.

Conclusively, the challenges for the prosecution of trafficking in persons are countless. However, gender specific issues exist. Women develop strong bonds with their female oppressors. Many stereotypes exist which influence decisions of law enforcement bodies and thus can alter the percentage of women charged, prosecuted and convicted. Furthermore, the right balance between the principles of non-impunity for perpetrators, and non-punishment for victims form a great challenge since female perpetrators are usually both, often even simultaneously.

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[117] Crown Prosecution Service (CPS), 'Policy for Prosecuting Cases of Human Trafficking' (2011) 14, <http://www.cps.gov.uk/publications/prosecution/> accessed on 09/12/14.
[118] UN. GIFT, '016 Workshop: Profiling the Traffickers' (The Vienna Forum to fight Human Trafficking 13-15 February 2008, Austria Center Vienna, Backround Paper) 6, <http://www.unodc.org/documents/human-trafficking/2008/BP016ProfilingtheTraffickers.pdf> accessed on 10/10/14
[119] Ramón Rivera as cited in Núñez, Claudia, 'Women Are the New Coyotes' (New America Media, 23. December 2007) <http://news.newamericamedia.org/news/view_article.html?article_id=170fbf6eecdd019ad7e93f66eda8d6b8> accessed on 09/12/14.

Conclusions

Sex trafficking for most implicated actors often remains their sole opportunity for improving their precarious economic position – it can thus be considered as merely the tip of the iceberg, an expression of pervasive social inequalities and of the lack of female empowerment. Furthermore, several examples underline that it's imperative to understand the multi-dimensional profile of women involved in sex trafficking. In doing so, cultural and regional differences must be taken into account. Moreover, the strengthening of the rule of law is essential in the area of human trafficking. As long as the costs and risks for perpetrators stay low, the business remains tempting for potential perpetrators. In doing so, police officers, prosecutors, judges, expert witnesses, social workers – simply every link in the chain must be well aware of the complexities of the issues in order to avoid stereotypical thinking and wrong judgments and ensure appropriate handling of victims and "victim-perpetrators". Finally, there is a desperate need for further research to be done on the issue, as currently not many genuine empirical studies exist on the phenomenon.

Sustainable Development Goals within the United Nations gender policy framework: Towards a future without violence against women

Markéta HESSOVA, Renáta KALMAN, and Bojan PEROVIC with the contribution of Michaela KOSTOVA

Violence against women (VAW) is recognized as one of the crucial factors that prevent developed and developing countries to achieve stable and equal society.[120] In the light of the upcoming 70th anniversary of the UN but also the anniversaries of various gender relevant UN declarations and resolutions, the authors of this research paper focus on the policy side of the problem and deal with the question, how it is possible that despite the relatively rich policy framework United Nations have developed so far in its long history, dealing with VAW still seems to be one of the most problematic challenges. By analysing and making comparisons of the most important United Nations documents which address gender-based violence, the idea of this project is to point out the discrepancy between the existing framework offered by the United Nations and the post-2015 development agenda.

One of the major issues that the UN policies, as well as the implementation efforts of the UN Member States, are facing is the fact that there is no single universally recognized definition of what violence against women is, which makes especially the attempts for an effective international monitoring system close to impossible.[121] Despite the growing concern about this issue, it took many years before violence was officially identified as a form of discrimination. First in the Declaration on the Elimination of Violence Against Women (1993) violence against women was finally defined as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including

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[120] Claudia Garcia-Moreno, 'Violence against Women: International perspectives' (2000) American Journal of Preventive Medicine 19(4), p. 330-333; Gaby Ortiz-Barreda, Carmen Vives-Casesa, Diana Gil-Gonzáleza, 'Worldwide violence against women legislation: An equity approach' (2011) Health Policy 100; Naila Kabeer, 'The Beijing Platform for Action and the Millennium Development Goals: Different processes, different outcomes' (2005) EGM/BPFA-MD-MDG/2005/EP.11.
[121] UNICEF, 'Domestic violence against women and girls' (2000) Innocenti Research Centre, p. 2

threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life."[122]

By undertaking in-depth analysis of the Convention on the Elimination of All Forms of Discrimination against Women (1979) (CEDAW), Declaration on the Elimination of Violence against Women (1993) (DEVAW), Platform for Action of the Fourth World Conference on Women in Beijing (1995) and the UN Security Council Resolution 1325, Peace and Security (2000), authors firstly point at some critical issues and similarities of the documents and then discuss and challenge the final draft of the Sustainable Development Goals (SDGs) within the existing UN framework and ask what position SDGs can take within the post-2015 agenda.

CEDAW is recognized as the first instrument which improves women's rights and which has been effectively used as an advocacy tool for national laws.[123] On the other hand, CEDAW fails to include VAW as one of the forms of discrimination[124], and its language tends to be overbroad with provisions formulated as "any discrimination", "in any field committed by anyone"[125] which has caused reservations on some of the crucial articles along with inconsistent state reports.

DEVAW, on the other hand, seemed to be a major step the international community took to fight VAW. Many legal scholars agreed that this document represents international consensus and would finally lead to drafting a legally binding Convention but this has not happen until today.[126] Moreover, the only definition of VAW presented in this document has been subject to some crucial disputes.

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[122] 'UN General Assembly, Declaration on the Elimination of Violence against Women' (20 December 1993)
[123] Anne Bayefsky, ,CEDAW: Threat to, or Enhancement of, Human Rights: Remarks' (2000) American Society of International Law Proceedings, Vol. 94, p. 197
[124] Meiraf Girma, 'Violence against Women: Inadequate Remedies under the CEDAW' (2009) Mizan Law Review, Vol. 3, Issue 2, p. 351-357.
[125] 'Text of the Convention' (UN website) <http://www.un.org/womenwatch/daw/cedaw/cedaw.htm> accessed 15 June 2014
[126] Donna J. Sullivan, ,Women's Human Rights and the 1993 World Conference on Human Rights' (1994) 88 AM. J. INT'L L. 152, 164-65, as cited in Elizabeth Misiaveg, 'Important Steps and Instructive Models in the Fight to Eliminate Violence against Women' (1995) Washington and Lee Law Review, Vol. 52, Issue 3

Platform for Action of the Fourth World Conference on Women in Beijing (1995) is often perceived as the most comprehensive policy about violence against women when compared to other documents. It represents an explicit agenda of transformational change and names specific actors who are assigned responsibilities in implementing that agenda.[127] One of the biggest contributions of the Beijing Platform is that it serves as a tool to develop concrete national strategies and also helped to create international and national networks. However, despite all that the gender paradigm is still less influential than the poverty paradigm in the development discourse[128] and since the Beijing Platform has no binding force, the progress has been uneven across regions and within countries.[129]

Finally, the UN Security Council Resolution 1325, Peace and Security (2000) is the first legal document that stresses the importance of women's equal and full participation as active agents in the prevention and resolution of conflicts, peace-building and peacekeeping.[130] However, apart from the missing monitoring system and slow implementation process[131], among academics and practitioners there has been a strong disagreement as to the actual meaning of the text as well as to its potential impact. It is believed that it rather strengthens the perception that women are victims and vulnerable.[132]

Much effort has been done in order to improve the life conditions for women all around the world. However, in its first attempt to establish a common development strategy, the UN continued to view gender equality only as a "peripheral" issue. The Millennium Development Goals (2000) failed to address the gender-related side of sustainable development as something more than eliminating gender disparity in primary and secondary education in

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[127] ECOSOC, 'Review of the implementation of the Beijing Declaration and Platform for Action, the outcomes of the twenty-third special session of the General Assembly and its contribution to shaping a gender perspective towards the full realization of the Millennium Development Goals' (2010) Report of the Secretary-General, E/2010/4 E/CN.6/2010/2

[128] Rosalind Eyben, ,The road not taken: International aid's choice of Copenhagen over Beijing' (2006) Third World Quarterly for publication in Vol. 27, no. 6.

[129] ECOSOC (n 8), p. 30

[130] Aurelie Sicard, ,UNSCR 1325: "Recalling" CEDAW and DEVAW. An analysis of the genesis of UN resolutions on Gender-Based-Violence' (2014) paper presented at the BISA Conference, p. 1

[131] C. Cora True-Frost, ,The UN Security Council Marks Seventh Anniversary of Resolution 1325 on Women, Peace and Security with Open Debate' (2007) American Society of International Law, Volume: 11, Issue: 29, 12 <http://www.asil.org/insights/volume/11/issue/29/un-security-council-marks-seventh-anniversary-resolution-1325-women>

[132] Aurelie Sicard (n 11)

the Goal number three.[133] This situation has changed with the recent arrival of the Sustainable Development Goals that are to be adopted in 2015, and which are supposed to be more effective in involving gender equality as a comprehensive topic of sustainable development.[134] Indeed, the process of drafting the SDGs and the structure of the stand-alone Goal number five have shown much improvement in comparison to their precursors (explicitly including the need to eliminate all forms of violence against all women and girls, eliminate all harmful practices, such as child, early and forced marriage and female genital mutilations, and ensure universal access to sexual and reproductive health and reproductive rights). Furthermore, the SDG 5 directly refers to other UN documents such as the Programme of Action of the ICPD and the Beijing Platform for Action, which represents a crucial step in seeing the UN gender policy as whole.[135] However, there are still critical opinions on how gender equality is incorporated in the post-2015 development agenda. Additionally, the SDGs still neglect the need to end impunity for gender-based violence and to acknowledge the role men and boys play in ending violence against women and girls.[136]

In its conclusions, the paper stresses out a number of common challenges that can be observed when studying the existing UN gender policy framework and the planned post-2015 agenda. The impediments in monitoring and reporting systems that remain one of the biggest problems[137] also in the case of SDGs are viewed together with the lack of political will and inability to achieve international consensus on common practices as the major shortcomings of the UN system. In order to ensure a strong position of the UN and enforceability of its conclusions, the binding force of its documents has to be reconsidered. The SDGs will be adopted as a resolution, so the implementation is not going to be obligatory to the Mem-

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[133] Rosalind Eyben (n 9), p. 16
[134] 'Sustainable development goals' (UN website) <http://sustainabledevelopment.un.org/?menu=1300> accessed 10 November 2014
[135] United Nations, ‚The Road to Dignity by 2030: Ending Poverty, Transforming All Lives and Protecting the Planet - Synthesis Report of the Secretary-General On the Post-2015 Agenda' (2014) <http://sustainabledevelopment.un.org/content/documents/5527SR_advance%20unedited_final.pdf> accessed 14 December 2014
[136] Emilia Reyes, ‚Comments to Zero Draft Proposed Goal 5' (2014) <http://sustainabledevelopment.un.org/content/documents/10499reyes.pdf> accessed 30 October 2014; ‚Major Groups' Statement on Gender Equality 11th Session of the Open Working Group on Sustainable Development Goals' (2014) <http://sustainabledevelopment.un.org/content/documents/9094majorgroups.pdf> p. 1, accessed 30 October 2014
[137] ECOSOC (n 8), p. 26-28

ber States; nevertheless, this new agenda will influence the future of the United Nations and of many people all around the world for the next fifteen years.

Therefore, if anything is to be changed then gender equality and VAW have to be understood as a comprehensive, structural issue, which lies at the core of social equality and development. To achieve this, more work has to be done in linking the existing UN gender-related policies and the post-2015 development agenda and engaging wider social structures into the whole process of planning and achieving sustainable development objectives. These should not be understood only as measurable or economic targets that either are or are not fulfilled.[138] More likely the whole UN development agenda has to demonstrate the understanding of the linkages between existing frameworks already in use and the need of relational perspective when pursuing social change. Social change often occurs through contest and challenge rather than through a consensus established by the powerful ones.[139]

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[138] Rosalind Eyben (n 9), p. 26
[139] Ibid., p. 20

New Eyes: 'A look from above' on the post-2015 Development Agenda, and the growing relevance of UNOOSA

Boris BRKOVIC and Marek KRISTOF

Abstract

The United Nations together with its member states and agencies have set out on defining a new set of goals for the Post-2015 era. This paper will deal with the role of the United Nations Office for Outer Space Affairs in the Post-2015 Development Agenda. The relationship between space technology and the Sustainable Development Goals will be analysed in respect to the original assignment, which highlighted water, natural resources and disaster management. Certain commonalities in all three fields, which can be addressed within UNOOSA's mandate, will be identified and the possibilities for improvement of coordinative and educational factors in the Post-2015 era will be highlighted.[140]

Introduction

The space age begun less than 60 years ago and during this time humans expanded their knowledge of space and its benefits for the people on planet Earth. This rapid development raised a need to coordinate efforts of nations in a global and interconnected way, to achieve the full potential and expand the benefits not only to few main players in this industry but to everyone. J. F. Kennedy said: "The nation that will conquer space will be the master on Earth, as well."[141] For over 40 years the United Nations Office for Outer Space Affairs (UNOOSA) has provided practical assistance on the use of space technology for peaceful purposes throughout the world, through its workshops, initiatives, fellowships and regional centres[142].

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[140]The article is a summary of the research paper. The authors may be contacted for additional information

[141] Ján Azoud, Úvod do medzinárodných vzťahov a medzinárodného práva, (UMB FPVaMV, Banská Bystrica 1996), 114

[142] United Nations Office for Outer Space Affairs, Bringing the benefits of space to humankind´, Promotional video 1:14-1:50 (UNOOSA website) <http://www.unoosa.org/>, accessed 18 June 2014,

UN-SPIDER

Most satellites point inwards rather than outwards and they are launched to provide services to people on Earth. They are also important for cost-effective monitoring of remote and dangerous areas.[143]

That is exactly what United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) is doing - combining the disaster management knowledge with space technologies in order to prevent loss of lives or property. We see the interconnection for example with following Sustainable Development Goals (SDGs): 1.5 - ending poverty caused by disasters; 2.4 - ending hunger by providing quality land and soil, which is affected by disasters.

UN-SPIDER performs several activities. We describe a few of them just as examples. UN-SPIDER is able to dispatch a team in particular country, where it assesses a disaster response system of a given country and will advise by developing a whole disaster response chain.

The Sudan Technical Advisory Mission was carried out in 2011 and one of the recommendations from the mission was to hold a training workshop targeting staff from the government and from other agencies working in disaster risk reduction in Sudan.[144]

UN-SPIDER´s Bonn office contributed to the update of guidelines on *Tsunami Risk Assessment and Mitigation for the Indian Ocean* in 2014.[145]

The web-based *Knowledge Portal* of UN-SPIDER is a well-established source of information for many practitioners in disaster risk reduction and emergency response.[146] The portal pro-

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[143] United Nations Office for Outer Space Affairs, Space Solutions for the World´s Problems (UNOOSA, Austria 2006) 2

[144] Denis Macharia, 'RCMRD´s partnership with UN-SPIDER as a Regional SUpport Office' (2014) Vol. 2 UN-SPIDER Newsletter <http://www.un-spider.org/sites/default/files/Newsletter_online_0.pdf> accessed 5 December 2014,5

[145] UN-SPIDER, November Updated 2014, <http://www.un-spider.org/sites/default/files/UN-SPIDER_Updates_Nov14.pdf>, accessed 5 Decemebr 2014, 2.

[146] Luc St-Pierre, 'UN-SPIDER and its Regional Support Offices: The way ahead' (2014) Vol. 2 UN-SPIDER Newsletter <http://www.un-spider.org/sites/default/files/Newsletter_online_0.pdf> accessed 5 December 2014, 6

vides databases on freely available satellite data, derived products and software, as well as compilations of all relevant maps and resources for selected major disasters. The knowledge portal of UN-SPIDER is a very important tool of communication, knowledge transfer and dissemination of information in cases of increased demand as disasters strike (e.g. in Central Europe in summer 2013).[147] Between 1 September 2012 and 31 August 2013, the monthly visits to the knowledge portal experienced a general upward trend, averaging about 10,000 visits per month.[148]

Any organisation that wants to make a change on a global level needs a global network to support it. Therefore also UN-SPIDER is strengthening its network of 16 regional support offices.[149]

Precision agriculture

We will now showcase some alternative areas in which, through its competences, UNOOSA can work towards the achievement of the proposed SDGs.

It is estimated that arable land will decrease from 0.23 ha/per capita in 2004 to approximant 0.15 ha/per capita by the end of this year. This is why our paper considered new, and more productive ways of agriculture to contra-weight these changes.[150]

So how can space technology provide an answer to this problem? One proposed approach to this issue would be precision agriculture.

Conventional methods assume that a field is consistent and apply a uniform application of inputs to the field as a whole.[151] On the other hand precision agriculture uses remote-sensing applications that are based on the interaction of electromagnetic radiation with soil or plant material to divide the field into management zones that receive customized inputs

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[147]United Nations, Report on activities carried out in 2013 in the framework of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN doc. A/AC.105/1057, 2013) 9

[148] United Nations, Report on activities carried out in 2013 in the framework of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN doc. A/AC.105/1057, 2013) 10

[149] United Nations, Coordination of space-related activities within the United Nations system: direction and anticipated results for the period 2014-2015 – addressing the post-2015 development agenda (UN doc. A/AC.105/1063, 2014) 17.

[150] Fopal, N et al.(2013): Using geospatial technology to strengthen data systems in developing countries: The case of agricultural statistics in India; Applied Geography, (43), p. 99

[151] Nahry, E. et al. (2011): An approach for precision farming under pivot irrigation system using remote sensing and GIS techniques; Agricultural Water Management, 98, p. 517

depending on soil types, landscape, management history etc.[152]

However, farmers and crop consultants are not aware of what is available, nor of its economic value. We will come back to the economic value in our recommendations. National Aeronautics and Space Administration´s (NASA) Synergy program, realizing this, established training classes to ensure a smooth transition of technology from the academia to the user domain. They found that the early involvement of the users was critical for the success of application development and realizing an impact on decision-making.[153] Here we are talking about the transformation of data to usable information done by the farmers themselves.

Some scholars view this approach with a bit more criticism when saying that precision agriculture cannot be applied to small-scale farms, and that because of this it is not as useful for developing countries. However, countries such as Japan, China, and the Republic of Korea are developing web-based Geographic Information Systems (GIS), which will be adapted for the use of small farms.

The additional benefit to society, that is not clear at first glance, would be the creation of highly technical job. The market in Japan is estimated at US $100 billion for GIS and an additional US $50 billion for Global Positioning System and remote sensing (RS).[154]

Rainwater

The essence of agriculture is water. The problem of freshwater scarcity is becoming more serious in several parts of the world, especially in developing countries. This is why water is in the heart of the 6th, 12th, 14th and 15th proposed SDGs.

The most obvious use of water within agriculture is irrigation. It is estimated that approximately 70% of withdrawals of freshwater are from irrigation. We must point out that irriga-

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[152] Seelan, S. et al. (2003): Remote sensing applications for precision agriculture: A learning community approach; Remote Sensing and Environment, 88, p. 157

[153] Kalluri, S. et al (2003): The potential of remote sensing data for decision makers at the state local and tribal level: experiences from NASA's Synergy program; Environmental Science and Policy, (6), p. 495

[154] Basu, M. , Mondal, P. (2009): Adoption of precision agriculture technologies in India and in some developing countries: Scope, present status and strategies; Progress in Natural Science, 19, p. 665

tion produces 30-40% of the world's food crops.[155] Runoff harvesting is a potential solution. To mention one example, in Tanzania rainwater harvesting (RWH) is widely practiced, and through many years of experience they have developed harvesting sites across the whole country. One study developed a suitability map using RS technology and found that most of the RWH sites were found within the very high suitable locations (40%) and highly suitable locations (41.4%). This evidence shows that GIS and remotely sensed information can reliably be used to predict potential sites for RWH in developing countries.[156]

Here as well as in the case of precision agriculture there is a spill over effect, in this case in regards to disaster risk management. Through the creation of these sites, disasters that may occur further downstream can be prevented through harvesting the access water before it reaches the river basin.

Conclusion

We identified that UNOOSA's activities could be divided into two main groups: coordination and education. UNOOSA takes part in each of those directly (coordination) or indirectly (education). For example UNOOSA organizes an event, where government representatives and expert from space industry meet to discuss space related issues and exchange knowledge, so they in fact educate themselves. From that point on, experts establish contacts and continue creating their own networks on national or institutional levels.

This is done also with a focus to eliminate poverty. The SDGs bring new opportunities for UNOOSA in the fields of education and coordination. This might seem as a tough task to achieve, but we identified enough potentials within UNOOSA for such new activities.

One good example is the mentioned project of NASA. It involves the user of space technology already in stage of application development, which represents a form of early education that could be developed further. As Mr. Mandela once said: *"Education is the most powerful weapon which you can use to change the world."*

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[155] Bastiaanssen, W. et al. (2000): Remote sensing for irrigated agriculture: examples form research and possible applications; Agricultural Water Management, 46, 137-155
[156] Mwita, E. et al. (2013): Mapping small wetlands of Kenya and Tanzania using remote sensing techniques; International Journal of Applied Earth Observation and Geoinformation (21), p. 174

Therefore we are looking for universal applicability. Once a system was tested under certain conditions, it could be applied in another country, region, system etc. Therefore it is good to search for such synergies, where one plus one equals more than two. Fortunately for UNOOSA, there is enough space for further development.

Recommendations

From the 12 recommendations we have proposed in our paper, we will only mention 4 in this summary to show how they are interlinked:

1) Promote the development of cost-benefit analyses for the implementation of geospatial technologies in various fields.

We found that these sorts of analyses are missing. Clear figures are needed to be able to promote space technology within the user domain. Once this has been achieved, we can more easily:

2) Support a creation of an early user group that could showcase the benefits of remote sensing over conventional methods.

And through this:

3) Assist developing countries in attaining trained personnel resources for the transformation of raw data into usable information for the decision making process and promote them actively.

We highlight the difference between data and information.

And as a final step we can:

4) Enhance North-South, South-South and triangular regional and international knowledge sharing in the field of space technology.

Why should space find itself in this development agenda? Why not wait for another 15 years and see how the technology will develop and where we will be in the year 2030? We strongly advocate the international community to acknowledge the use of space technology for the benefits of humankind through effective federation and collaboration across states, government agencies, non-governmental organizations, industries, academia, and the public. This should be done to prevent a phenomenon, a brainchild of our research, of coming into

existence. We are talking about a new term, a term called *Earth Locked Countries*. Yes land locked countries inspired this term, and similar to the geographical disadvantage of these countries, *Earth locked countries* would have the disadvantage of not being capable to use space technology in its full capacity. The international community is in a position to prevent this from happening. The exploration and the benefits of space are an achievement of us all and no single nation should be excluded from the sustainable development of outer space and all its assets.

Financing youth entrepreneurship: financial inclusion of youth-led and young enterprises

Monika Anna AUSTALLER and Àgnes BIBOK

The paper has the aim to present a specific solution to the problem of youth unemployment. After setting a theoretical framework of the topic, a global study will be presented in details that is currently in progress in the implementation of UNIDO and which the authors of this paper contributed to.[157]

The issue seeks for an urgent solution as 40% of the world's unemployed labor force is young.[158] Countries of the Global South find it difficult to absorb the always-growing number of young jobseekers due to the limits of the public sector and recent financial cuts in the area. That is why a viable solution for the creation of new employments could be found in the private sector, however, youth often meet serious hindrances entering the sector or enlarging a business. Both social and financial constraints hinder them in starting and managing their enterprises.[159]

Tackling youth unemployment is naturally an important element of the Post-2015 Development Agenda[160] and it aims to improve the situation through important targets. The goal connected to the topic *par excellence* is Nr. 8 intending to promote the private sector and to boost entrepreneurship. Furthermore, a target of Nr. 5 recommends creating the financial independence of women inter alia by promoting entrepreneurship for them. Finally, goal Nr. 9 has a target to increase the access to financial services including affordable credit of small enterprises.[161]

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[157] Gordon F. van der Veen, 'Entrepreneurial Finance. Phase I.'

[158] 'Switch on your future. UNIDO program for productive work for youth' (UNIDO website) <http://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Business__investment_and_technology_services /ITU/BIT_ProductiveWorkForYouth_Factsheet_ituemail_01.pdf> accessed 13 December 2014.

[159] Kebiri, Abdelkarim 'Youth Entrepreneurship as a solution to youth unemployment. Past and ongoing efforts and way ahead to tackle youth unemployment in Tunisia and the MENA region'<http://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Business__investment_and_technology_se rvices/ITU/TUN_MENA_Youth_Conference_Background_paper_FINAL.pdf> accessed 13 December 2014.

[160] 'Open Working Group proposal for Sustainable Development Goals'

http://sustainabledevelopment.un.org/content/documents/1579SDGs%20Proposal.pdf accessed 13 December 2014.

[161] The mentioned goals are 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all' (nr. 8); 'Achieve gender equality and empower all women and girls' (nr. 5) and 'Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation' (nr. 9). Naturally, further goals and

In addition to the Post-2015 Development Agenda it is also important to highlight the specific vision of UNIDO on economic development[162] as according to the agency's the key drivers of economic growth are the private sector and entrepreneurship.[163] That is why a wide research activity is conducted by UNIDO and the result of it is the already mentioned 'global study'[164] focusing on the needs and difficulties of young entrepreneurs when accessing finance and deciding which kind of finance to choose.

The study has two main phases: after desk research, data collection and evaluation, the second phase will be dedicated to capacity building. The study aims to determine the best options to support young enterprises via financial and non-financial measures as well as to find what needs and difficulties young entrepreneurs face when starting up a business or accessing finance. In order to contribute to the fulfillment of the aims of the study, the authors of the paper have constructed the following research question. *What are the main difficulties and challenges that young entrepreneurs and young enterprises face when accessing finance, and which best practices should governments follow in order to facilitate financial access for young entrepreneurs?*

To find well-based and relevant answers to the proposed research question, a wide data collecting survey was implemented with the use of a questionnaire composed of 40 questions. The form to fill in − available in the Survey Monkey online questionnaire system − collected quantitative and qualitative data as well. The selection of the potential respondents was based on several criteria and the contacts to them were found through the internal database of UNIDO.

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targets can be specified regarding the topic of tackling youth unemployment, the scope here was only to draw an overview on some relevant measures proposed to be done in the Post-2015 world.

[162] Abdelkarim Kebiri, 'Youth Entrepreneurship as a solution to youth unemployment. Past and ongoing efforts and way ahead to tackle youth unemployment in Tunisia and the MENA region' <http://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Business__investment_and_technology_services /ITU/TUN_MENA_Youth_Conference_Background_paper_FINAL.pdf> accessed 13 December 2014; 'Productive Work for Youth in Africa. Thematic Paper'

[163] 'Productive Work for Youth in Africa. Thematic Paper' <http://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Business__investment_and_technology_services /ITU/Productive_work_for_youth_paper_Nov_2013.pdf> accessed 13 December 2014.

[164] The term 'global study' is used in reference to the following study: Gordon F. van der Veen, 'Entrepreneurial Finance. Phase I'.

The data collection was planned to be conducted from 18 November 2014 to 15 January 2015. Since we had to submit the research paper in December 2014, we could take into consideration only the first 59 results which arrived until the deadline. Thus, the following considerations can only be evaluated as initial tendencies and not as final results.[165]

The questionnaire was divided into two main parts. The first one was interested in the respondent and the company profile while the second one collected data on accessing finance. Let's start with the respondent profile. Who are the addressed people? Most of the respondents are between 30 and 34 years old, 41% of them are female. 80% of them are highly educated and finished a graduate school; a considerable number even have a bachelor's or master's degree. 95% have already had working experience, 40% of them more than 10 years.

Passing to the company profile, respondents mentioned ten different countries of operation and by chance, almost half of the companies are located in Brazil. Furthermore, European countries, such as Greece, Belgium, France, Germany, UK, Poland, Romania, Italy and Spain make 25% together, while African countries (more specifically Malawi and Nigeria), North America (Barbados), Australia are represented by 4% of the replies. None of the answers are from Asian countries. The majority of the respondent companies is active in the field of business and management and in the consulting sector. Regarding the life cycle of the company, respondents could indicate start-up, established or expansion stage of their business. Most of the enterprises are already in the established stage, which is characterized by stable sales, the employment of 2-5 employees and a period of operation for 3-5 years. The gender distribution of the employees is highly variegated, as two fifth of the enterprises has max. 25% males of their employees, 18 % of the companies have equal percentage of the two genders and 38% has maximum 25% females among its employees.

After the presentation of the respondent and the company profiles let us come to the results regarding access to finance. Do young entrepreneurs currently have access to finance, why

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[165] The results which serve as the basis of the data evaluation presented in the paper are available on the site https://drive.google.com/file/d/0B_BHlkdDGrvQaFUyYmRQTEpmZGM/view?usp=sharing.

and why not? It is remarkable that 60% currently have access to it: besides personal funding (44%), one third receives short-term loans and another third comes from long-term loans. Of those who do not enjoy access to finance, the majority does not even need any. Regarding the preferences of the different types of finance, most of the entrepreneurs prefer long-term loans, due to low interest rates, the longer period of paying-back time and the perception of safety banks create. A common reason for not applying for a loan is the long and complex procedure, which is perceived literally by a respondent as "It is almost as if it is designed to discourage the applicant."[166] The main reason for the rejection of applications by the credit institutions are considered to be the instability of the economic environment, a lack of trust in the company and a poor business plan as well as a highly perceived risk. On the contrary, the personality of the entrepreneur, the business idea, transparency and the demand of the product or the service seem to be the main decisive factors for receiving financial support, for which chances increase as a result of professional assistance.

To conclude, the results of the study can serve as a starting point for the governments to facilitate access to finance for young entrepreneurs and youth-led enterprises. The most relevant needs of the entrepreneurs expressed in the survey are easier access to information about education and the market, provision of professional assistance and advice about how to access finance. Besides the needs designed, the survey gives information on the possible ways of improvement in the form of advice given to colleagues. It is highly recommended to build a solid business plan, adduct a mentor and to be well informed about the market and own company's potential. Furthermore, finding partners and joining networks are also proposed.

As an outlook, it will be highly interesting to see how the results of the survey can develop with a broader amount of respondents and which practical advice the conclusion of the global study will provide to improve the situation of youth-led and young enterprises and as an effect also for employment, overall in countries of the Global South

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[166] Answer no. 11 to Q15 (p. 21).

Transparency and Data Revolution in Treaty-based Investor-State Arbitration

Jelena TODIC, Florentin KERSCHBAUMER, Nóra JUHASZ, and Maroš Martin GUOTH

In the paper we tried to provide an outlook on the connection and interdependence between the new Rules on Transparency in Treaty-based Investor-State Arbitration[167] (ISA) and Data Revolution[168] for Sustainable Development. United Nations' Data Revolution is aiming at providing better data and statistics in order to facilitate the tracking of the progress and making sure that decisions are evidence-based. More precisely, the Data Revolution for Sustainable Development is defined in the "Word that Counts Report" as "[t]he increase in the usefulness of data through a much greater degree of openness and *transparency*, avoiding invasion of privacy and abuse of human rights from misuse of data on individuals and groups, and *minimizing inequality in production, access to and use of data*."[169] Unlike Data Revolution, which has been officially initiated by the UN in November 2014, the "Transparency Revolution" we refer to derives from the necessity of spontaneous and instinctive revolution which we believe is necessary for the purpose of the successful implementation of the new United Nations Commission on International Trade Law (UNCITRAL)'s Rules on Transparency in Treaty-based Investor-State Arbitration (the Transparency Rules).

In this rather disputed field of transparency in investor-State arbitration, one of the main problems is that the awards, information on the commencement of arbitral proceedings, submissions by a non-disputing party to the treaty and relevant other documents of the involved tribunals, are hardly ever fully published. The data is thus not made transparent to the public. Although in regular commercial arbitration processes confidentiality and secrecy are the cornerstone traditional principles, in issues like these where the state is one of the parties, there arises the need for transparency. If foreign investors have the possibility to

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[167] "UNCITRAL Rules on Transparency in Treaty-based Investor-State Arbitration", <http://www.uncitral.org/uncitral/en/uncitral_texts/arbitration/2014Transparency.html>, last accessed on 19 February 2015.
[168] See "UN Data Revolution", <http://www.undatarevolution.org/>, accessed on 19 February 2015.

[169] "A World That Counts: Mobilising the Data Revolution for Sustainable Development", Data Revolution Group, United Nations, p.6, accessed on 19 February 2015. Emphasis added.

challenge policies adopted by a state without having the need to make these disputes public, defining features of liberal democracy itself are possibly challenged.

We believe that UNCITRAL Transparency Rules could possibly be a tool for providing the best practice framework on how to deal with the transparency problems and data accumulation and harmonization associated with this kind of arbitration. We argue that if implemented widely and collectively, Transparency Rules could contribute to the improvement of transparency and thus data issues in investor-State arbitration and may therefore serve a relevant purpose for implementation of the Sustainable Development Goals. However, the challenge itself lies both in creating a "data/transparency revolution" but also in stimulating a capacity to use data. Once we have data about the arbitral processes, in order to use it, we need to organize it, structure it and use it wisely.

UNCITRAL produced the document, which provides the possibility to contribute to the better governance and rule of law in international trade law, this being closely connected to its mandate. In the same light, the possibility of implementing these Rules provides faith for successful collection of data and moreover better, improved and harmonized data, which could guarantee accountability. Moreover, as foreign direct investments have inevitably proved to be a successful tool for the long-term sustainable growth of developing countries, the new Transparency Rules could possibly provide regulatory framework for all the produced data to help future investors to assess objectively the investment potentials of the relevant States.

Above all, this paper has for its aim to emphasize the role of the new Transparency Rules in becoming a window towards sharing data, and if possible more harmonized data, on investor-State arbitration. It explains the need for transparency from the context of the traditionally confidential arbitration. Furthermore, it tries to illuminate relevant points of intersection between the two revolutions and to emphasize, even though rather briefly, the reasons for the necessity of these revolutions and how one contributes to the achievement

of other. Particular emphasis is given to the possible problems that confidentiality poses for the achievement of better and improved data for sustainable development.

It can be firmly stated that these revolutions have capacity to generate harmonized data, possibly prevent further deficiencies of the ISA system and also provide possibility for having consistent information on the overall costs involved in arbitration. For its consequence we argue that this might cause the evolution into precedential character of awards or at least reduction of the number of inconsistent conclusions on the same merits and preclusion of unnecessary new cases, which have already been solved.

The paper also shows that transparency in this kind of arbitration is beneficial both in the economic sense as well as from the legal perspective. The analysed issues connected to transparency in investor-State arbitration encompass inconsistency of the information on the cost involved in arbitration, precedential feature of the published arbitral awards, deficiencies in the regime of treaty-based investor-State arbitrations or public registry of all arbitrations. The paper shows that although the position of the individual investor might be worsened by publicity, the community of investors is better off as their collective investment opportunities have increased. Even if States might initially be reluctant to adopt these rules, the UNCITRAL laws can be seen as a "gold standard" which gives incentives to the parties involved in arbitration to adopt them. In more and more cases, which involve States as parties, both access to information as a fundamental human right has been recognized and also the fact that with increased transparency also the consistency and uniformity rise, which leads to the reduction of risk and creation of reasonable expectation for every party involved. Transparency and harmonized data thus help in reducing information asymmetry between the involved parties.