



RAUN 2018 – 2019 Research Topics

1. UNIDO I - Differentiation of Industry 4.0 models and their implications for development work

The massive transformation of the fourth industrial revolution, also referred to as Industry 4.0, will alter the way we work, consume and interact; thereby changing the wealth distribution and creating new winners and losers. Countries take different approaches on how to embark on Industry 4.0, such as focus on software as in many countries of Latin America, engineering in Germany, and Artificial Intelligence in Japan. We have a particular research interest in learning more about the different pathways that countries take towards Industry 4.0 and, ideally, how this is beneficial in the development context. Depending on the country background, which model should developing countries follow? What are the associated risks and challenges?

2. UNIDO II - Digital technologies for rural economic advancement in developing countries

Mobile phones, the Internet, remote sensing, agricultural big data and cloud computing, and the like have the potential to transform agriculture, improve market access and agricultural supply chain management, and create business opportunities for rural communities in all sectors, including creative industries, cultural tourism and nature conservation. At the same time, digital technologies have the potential to spur rural development by lowering production costs, increasing the efficiency of markets, improving access to education, health, and services. However, the adoption of these technologies is scaling up at a pace less than expected and the development of adequate business models related to these new technologies is proving more complex than expected. Moreover, empirical evidence shows that rural women have significantly lower technology participation rates than men, and hardly make use of digital technologies for employment and entrepreneurship, which may widen the gender gap in many countries. This research project should explore the potential benefits of digital technologies in a development context, outline potential challenges, and develop innovative solutions aiming towards a more equal access to the technologies.

3. UNIDO III - UNIDO's public-private development partnership (PPDP) approach to vocational training

Economic development through structural change requires that workers, enterprises and the economy as a whole learn to adopt increasingly complex technologies. Technological evolution and the diffusion of new technologies are inevitably accompanied by evolving demands for skills. Key to meeting the demand for such skills are vocational training institutions. Vocational training enables more workers to benefit from technological progress and increase their labor productivity which contributes to general productivity growth. However, unless vocational training institutions are able to keep up with these changes, a skills gap between what the vocational training systems develop and what industry demands will grow. This can put a break on economic growth and limit otherwise available and important opportunities for employment, particularly for youth. UNIDO has been implementing an innovative approach to vocational training in various projects since 2011. The public-private development partnership (PPDP) approach provides a means of delivering and funding public

services with wider development impact. The investment, risks, responsibilities and rewards are shared between the public sector, the private sector and a development partner. In a typical PPDP, the private sector brings in equipment and know-how; the public sector contributes buildings and staff-time; and the development partners provide funding for the development objectives and linkages to the government. Moreover, the development partner acts as a neutral body bringing the different parties together. The common goal in such projects is to create a highly skilled workforce that supports business growth on the one hand, and reduces unemployment and poverty on the other. To what extent do public-private development partnerships in vocational training succeed in creating a win-win situation for employers and employees and in facilitating access to skilled workforce at the local level? Can they serve as an innovative role model for spurring development in different regions?

4. UNIDO IV – The impact of creative hubs on development

Around the world a dynamic network of enterprising people are convening in creative hubs to test new ideas, ventures and start the global economy. Creative hubs, known as hotspots for innovation, provide young people with relatively cheap working spaces and enable them to develop their skills. Hubs are ideal locations for the creatives to flock to and the creative industries to flourish. The aim of this research is to assess whether the creative hubs around the world attain the desired effect, facilitating favorable conditions for the creative industries. To what degree can creative hubs and creative industries as a whole impact development? Are there spill-over effects from the creative sector to other industries and are there common barriers for the creative sector to be successful?

5. UNIDO V - Blockchain and SDGs: Programming a sustainable world

Blockchains have the great potential to a) help countries in the Global South in achieving the SDGs and b) to form new business collaborations between “north and south” for translating the SDGs into the daily life of business. Nevertheless, we still lack both, a concrete fundament of linking Blockchain’s potential with sustainability and applied analyses of existing blockchain projects in areas related to the SDGs. Based on benefits of blockchains such as “transparency”, “incentivising” and “reduced transaction costs”, these technologies can be beneficial in particular related to sustainable and inclusive development. The overarching objectives of the project are: a) to provide an analysis of the blockchain technology and its potential for the SDGs and b) identifying ways to communicating this information to relevant stakeholders in order to translate this knowledge into concrete “Blockchain / SDGs pilots” in selected countries.

6. UNIDO VI – The role of social entrepreneurship as a key driver of the Agenda 2030

The adoption of the Agenda 2030 and the Sustainable Development Goals (SDGs) has been met with increased global efforts for improved alignment with the SDGs. This includes efforts by governments, organizations at national, regional and international level, civic society, as well as by the private sector, all leveraging their respective comparative advantage. In this context, impact driven businesses (social enterprises) have shown to be the driving force in the private sector for the achievement of the SDGs. By default of their business model, which is guided by combining profit with a specific social impact objective, social enterprises naturally contribute to the achievement of the SDGs. Social entrepreneurship has proven to hold great potential in filling gaps left by local governments and institutions and to address prevailing social, economic and environmental challenges. This is of particular urgency with today’s prevailing high levels of unemployment and other pressing societal challenges, including engagement in vulnerable or informal employment, increased levels of economic- and crisis- driven migration as well as unsustainable rural and urban movements, large-scale environmental degradation and civil unrest. This research project shall explore the potential benefits of social entrepreneurship for development and identify challenges and risks of the concept. How can social entrepreneurship be strengthened on national and local levels?

7. IOM - Current development of the Global Compact on Migration (GCM)

The Global Compact for Safe, Orderly and Regular Migration (GCM) is expected to be the first, inter-governmentally negotiated agreement, prepared under the auspices of the United Nations, to cover all dimensions of international migration in a holistic and comprehensive manner. It presents a significant opportunity to improve the governance on migration, to address the challenges associated with today's migration, and to strengthen the contribution of migrants and migration to sustainable development. The process to develop the GCM started in April 2017. The research focus of the project is the current development of the GCM as an innovative agreement in the field of migration. Is the Global Compact fulfilling its aim and to what extent can greater coordination and global governance on migration create benefits? What are challenges associated with the agreement process? What is the relation between the GCM and the development of the relations between the European Union and African Union regarding development policy? To what extent was the civil society involved in both developments and what was the impact of this involvement (comparative analysis)?

8. UNDP I – Gender (and youth) dimension of electoral reform

In many countries, women's political participation and representation is still low. A variety of instruments have been proposed in the literature to improve the situation. Two countries that have succeeded in promoting gender equality in the political spheres are Tunisia and Rwanda. The two cases can provide useful lessons with regards to improving female representation in the legislature and in the elections (both as voters and candidates). Many countries have quotas for women but how did Rwanda and Tunisia manage to close loopholes and actually increase the number of elected women significantly? The research project will particularly focus on improving the situation in Haiti, a country which is in the process of reforming their electoral law and organizing their next elections in 2019. What lessons can be learned from the Tunisian and Rwandan case for Haiti? Currently, Haiti has a women quota of 30% in the constitution but this does not translate into higher legislative representation. Despite the legal provision, Haiti only has three female members of parliament and there is only one female senator. As a bonus, in addition to gender, it would be great if the research team could also explore the youth dimension in their study: What can Haiti do to increase the percentage of young people participating in the elections as voters and candidates. What are lessons to be learned from other countries (not necessarily Tunisia or Rwanda as they have no related legislative efforts) in this regard?

9. UNDP II – The development of anticipatory regulation for emerging technologies

Technological progress is altering development processes, industries, interpersonal relationships and the way humans relate to nation states in developing and developed countries. Advances in fields such as artificial intelligence, geo-engineering and robotics are likely to disrupt economic paradigms and the ways societies define value creation. The speed of technological progress is historically unprecedented and Governments across the globe struggle with keeping up with this pace while citizen's satisfaction with public services and trust in established institutions is further declining. In 2017 the Edelman Trust Barometer found a 'decline in trust across all institutions,' with two-thirds of 28 countries surveyed saw general population that did not trust the four key institutions to 'do what is right.' The average level of trust in the key four (academia, media, government, NGO) sectors combined was below 50%. As a reaction to this trend, a small number of countries is increasing their investments in foresight capabilities and anticipatory regulation, also in order to be better able to deal with future technological change and associated (often unforeseen) technological risks. What effects did these investments yield to date? What can other countries learn from these cases and how could this be further improved, particularly in developing countries?

10. OSCE - Gender development impact on violence against women

While the world has achieved progress towards gender equality and women's empowerment under the Millennium Development Goals (including equal access to primary education between girls and boys), women and girls continue to suffer discrimination and violence in every part of the world. Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world. Providing women and girls with equal access to education, health care, decent work, and representation in political and economic decision-making processes will fuel sustainable economies and benefit societies and humanity at large. The topic will deal with Goal 5 of the Sustainable Development Goals: Achieve gender equality and empower all women and girls. Geographically speaking, the research should limit itself to the 57 OSCE participating States. The objective is to conduct a thorough research on the correlation of statistics related to the gender gap in political empowerment, the participation of women to the economy and the education of girls with Gender based violence. Other main gender indicators could also be considered if argued. For each indicator, an analysis of the state of research should be carried out. The final paper shall analyse if there is a correlation between the level of societal gender development and gender-based violence. How does improved gender equality affect violence against women and what are the mechanisms?

11. UNOOSA - Gender equality and women's empowerment in education

UNOOSA is working on the establishment of a space for women project. During an expert meeting one of the clear recommendations received was on 'Evidence based awareness raising' to promote a factual basis of the importance of more women in Space-related Science, Technology, Engineering and Mathematics (STEM) fields and consequently in the Space Sector. Women are still heavily underrepresented in these fields and a broad literature from different disciplines has studied this persistent underrepresentation suggesting that it is deeply influenced by different factors, such as gendered stereotypes, culture, role models, attitudes towards competition and risk. Importantly, the "STEM gap" becomes visible already at an early age, starting at childhood, solidifying by middle school, and affecting women and men as they progress through school, higher education, and into the labor market. This research project should study innovative solutions that can help increasing the share of women in the STEM fields. What are common reasons in different countries explaining the low representation of women in these areas and what are possible ways to narrow the gap? How does specifically the space sector – education, research and industry – benefit and change when more women are actively contributing?

12. UNEP - Social innovation in rural areas

Despite rapid urbanization processes in many regions, large parts of the world's population (~45%) still live in rural areas, which are often characterized by low access to infrastructure and low levels of development. Rural populations have unique socio-economic characteristics and needs and are faced with different risks than urban populations. These particularities need to be taken into consideration in development policies and interventions. UNEP Vienna is interested in case studies and good practices as well as the development of a critical assessment of the situation in the Carpathian region with an analysis of what international cooperation can concretely do to improve development outcomes. In particular, the research shall study the role of social innovations, i.e. new strategies, concepts, and ideas that help meeting the particular social needs of rural populations. How can social innovations help with fostering sustainable and inclusive development in rural areas, with a particular focus on the Carpathian region? This research would be directly connected to UNEP's activities on Sustainable Agriculture and Rural Development (SARD) and the newly adopted SARD Protocol to the Carpathian Convention.

13. UNODC I – The impact of civil society anti-corruption work in advancing the SDGs

Civil Society Organizations play a fundamental role in the implementation of the Sustainable Development Goals (SDGs) as they enable addressing specific goals on the community level, thus allowing the SDGs to be better aligned with local realities. Corruption is a global challenge which undermines democracy and denies citizens their civil, economic, political, social and cultural rights. In addition to its impact on development, corruption has significant consequences for businesses as it undermines fair competition, distorts investments and deprives governments of the resources needed to promote economic growth, and development. Neither governments nor companies can fight corruption alone: the private and public sector, as well as civil society need to work together in this effort. UNODC works with the public and private sectors, as well as civil society, to address challenges corruption poses to the fabric of societal, political and economic institutions. What are innovative solutions to better involve civil society in political processes and support its fight against corruption? What impact does UNODC have in supporting civil society in their anti-corruption work? As a result of UNODC's support, what impact does civil society anti-corruption work have on the ground (on various UNODC-related SDGs)? What indicators do NGOs use to measure their success (SDG indicators)?

14. UNODC II – Drug use prevention and drug use disorder treatment

Drug use prevention programmes are effective when they respond to the needs of a community, involve all the relevant sectors, are based on scientific evidence, and incorporate strong monitoring and evaluation components. Scientific studies have shown that if well implemented, such prevention programmes can be highly cost effective. It has been shown that, for every dollar spent, good programmes for the prevention of drug use among youth can save up to 10 dollars! According to the 2017 World Drug Report, over 29.5 million people who use drugs are estimated to suffer from drug use disorders, and of these, 12 million are people who inject drugs (PWID). The magnitude of the suffering caused by drug use is underlined by the estimated 28 million years of "healthy" life (disability-adjusted life years (DALYs)) lost worldwide (2015) as a result of premature death and disability caused by drug use. Overdose deaths represent approximately one-third to a half of all drug-related deaths, which in most cases are attributable to opioids. Yet, only one in six problem drug users have access to drug dependence treatment services - thus pointing to the large gap in service provision that still remains to be closed. Global public health approaches in drug dependence treatment and care have been the springboard of existing good practices and remain the most fertile ground for the development of innovative and effective responses. This research shall deal with the impact of the work of UNODC on drug use prevention and drug use disorder treatment. How can comprehensive multidisciplinary approaches and interventions reduce the use of drugs, particularly among highly vulnerable populations? How can global health approaches better respond to the different needs of drug users? How can effective policies support these processes?

15. UNODC III – UN Agencies' Cooperation in the framework of the SDGs: Changes and future trends

The adoption of the 2030 Agenda and its SDGs represent a change of paradigm of the international policies on development cooperation. As far as the SDGs are concerned, Goal 17 is related to strengthening the means of implementation and revitalization of the global partnership for sustainable development. In this regard, the United Nations agencies have aligned themselves with specific goals which are cross-cutting in nature, allowing for greater cooperation among different agencies to ensure effective implementation. However, given the nature of the complexity of the UN system, are these goals really the magic bullet for kick-starting a much-needed cooperation within the UN agencies? What are some of the innovative approaches being undertaken to overcome the inherent challenges of the lack of cooperation? The research should analyse a system-wide impact of the SDGs on inter-agency cooperation, and identify best practices and gaps.

16. UNODC IV – The role of education in preventing child trafficking

Trafficking in human beings and, more especially, trafficking in children has been high on the international agenda for more than a decade. The trafficking of children is a serious human rights violation. Only recently, however, has the international community recognized that child trafficking is also undeniably a labour issue. The 2030 Sustainable Development Agenda embraces goals and targets on trafficking in person. These goals call for an end to trafficking and violence against children. According to the 2016, children make up almost a third of all human trafficking victims worldwide. Many children are moved away from their homes and are exploited in the informal economy, where they are even more difficult to trace and at high risk of many forms of violence. Criminal networks and individuals exploit children in begging, street hawking, car window cleaning and other street-based activities. Some children are exploited as drug couriers or dealers or in petty crime such as pick-pocketing or burglary. The researchers should aim to conduct a literature review and field research (in the form of interviews) to analyse the impact of the lack of education to human trafficking. What is the link between education and child trafficking and how can educational and other interventions provide solutions for this issue?