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Proposed DRR plan with LP learnings

RCE Kyrgyzstan is promoting education for sustainable development, creating learning opportunities for all. Inclusive quality education is a long process and difficult to achieve. I would like to propose to organize a Youth Summer Camp in Kyrgyz Republic on the base of Arabaev Kyrgyz State University to learn and share knowledge's on disaster risk prevention. I want to encourage learners to solve issues related to biodiversity and ecosystems conservation, also, I want to remind us (professors, mentors, organizers and youth) about city ecosystem affiliation to the outside world. Assessment of the environment different from what we are used to evolves everybody to understand interrelationships and processes taking place in natural and human-induced ecosystems.

The Summer Camp will empower Youths by positive participating: cultivating friendship, consolidating of the previous knowledge with developed competencies related to disaster risk reduction. Proposed sessions are – Geomapping (by Hydrometeorological Agency under MES KyrgyzHydromet), Resilient Social Management Construction, Health and Safety Trainings, Acquaintance with Indigenous People' Knowledge, Environmental Assessment Tools. Attitude and Awareness, Sharing the local knowledge's experience with others will motivate Youths to become a part of change at national and global level.

Moreover, the project will focus on engagement of educators to promote Sustainable Development methodologies as participation and understanding of individuals at the local level, which refers to the preparedness for the disaster strikes; understanding the physical processes behind hazards and how they will interact with community infrastructure and activities; educating people about their risks, identifying vulnerabilities, and building people's capacity to devise and implement risk reduction measures. As it was repeated by every professor of the UP Diliman during conference the information and knowledge should not flow in only one direction, which means that community participation better support development and risk reduction and creates a dialogue between individuals, communities and sectors.

The selection of most appropriate SDGs (SDG 4 – Quality Education, SDG 15 – Life on Land,

SDG 17 – Partnerships for the Goals)¹ in several partner countries – vulnerable to the natural and human-made hazards should be based on the Ecological Approach (bottom-up). Combining traditional knowledge of the local communities - for a better coexistence with nature with the collaboration of the academic background is applicable to the Sustainability Compass in Central Asia. The project will create and strengthen collaboration between local community leaders, postgraduate students of participating Universities and leading professors of AKSU Geography, Ecology and Tourism departments in the Central Asian region, promoting SD at the national level.

Successful practices, as Rifa Conservation Camp in Zimbabwe² show the necessity of the extra-curricular activities for the broader environmental education. Therefore, with its SDG 4 quality education clean water and sanitation, SDG 6, SDG12 sustainable consumption and production, SDG 13 climate action/climate change, SDG 15 life on land/biodiversity conservation, all the participants will gain new knowledge on the ecological issues of the region through trainings, field studies, and case-study games. Youth have so much potential of becoming responsible citizens, users of natural resources, decision-makers. Their recommendations might be very beneficial to the governmental and NGO's procedures for DRR.


The main stakeholders and partners of RCE KG: State Agency on Environmental Protection of KR, Ministry of Education of KR, State Patent Department of KR, State Agency on Technical and Vocational Education, Institute of Biology National Academy of Sciences of the KR, Bishkek Humanitarian University, Kyrgyz State University, Ozone Center. RCE Kyrgyzstan has extensive experience in work with local communities and local people from Kyrgyzstan, Uzbekistan, Kazakhstan and Tajikistan.

Timeline of the Project

As much as RCE KG would like to have a Summer Camp for 3 years to have continuity in learnings and more of volunteers, we must first make sure the financial capability is available to cover the activity. Therefore, it will be clearer after meetings with partners.

¹ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

² Chapter 12, pg 129, Zimbabwe Case. Education to sustain the Zambezi, Kathy Greaves Stiles. Tilbury, Editors Daniella, Robert B Stevenson, John Fien, and Danie Schreuder. 2003. *Education and Sustainability: Responding to the Global Challenge. International Journal of Sustainability in Higher Education*. Vol. 4. <https://doi.org/10.1108/ijshe.2003.24904bae.007>.



Task Assignment	Cooperation	Camp Participants	Summer Camp	Completion Final report and evaluation
<ul style="list-style-type: none"> ✓ Situation analysis (development survey form/questionnaire, identify focus group) ✓ Preparation of a detailed work plan with agreed monitoring indicators ✓ Development Training Modules 	<ul style="list-style-type: none"> ✓ Reaching to each partner, discussions on project implementation ✓ Coordination of terms of cooperation ✓ Formation of trainings and activities ✓ Forming the expectations from project with partners ✓ Budget formation 	<ul style="list-style-type: none"> ✓ Dissemination of information about the upcoming camp ✓ Selection and approval of the candidates 	<ul style="list-style-type: none"> ✓ Arrival to the camp ✓ Trainings on DRR ✓ Discussion sessions ✓ Field trips ✓ Group work ✓ Returning safely home 	<ul style="list-style-type: none"> ✓ Ensuring public awareness ✓ Final procurement ✓ Final reports to all the partners

Right after the introduction of the Summer Youth Camp related to DRR, RCE KG team undertook the actions to broad the stakeholder list with Kazakh Universities network, successful ‘green movements’ of Kyrgyzstan, and international independent analytical agencies conducting research in the field of SD.

During next week, RCE KG Youth Coordinator will share the knowledge of ProSPER.Net LP with the students of AKSU and discuss the implementation of the project with the administration and superintend faculty. It is also a big plus that KSU already has resource base for camping at the Issyk-Kul lake.

The Leadership Programme Learnings I would like to share are:

- The Local Community Empowerment and Multistakeholder Participation in DRRM as was described by Ramon Mapa (PILCD, Philippines) in example of Zambales Province (northern part of Philippines): capacity building while training teachers and community-based youth and adult education³.
- It is never too late to increase awareness between educators and youth about culture of peace, sustainable life-style, human rights, and a global citizenship. The University of Diliman has video materials available for these learnings on their website: disability inclusive disaster preparedness and response, training of the facilitators, development of inclusive information and education materials for DRRM⁴.
- The importance of the local governance developed by building capacities of local communities and advocacy (during the typhoon in the Philippines, there were many fund-raising activities

³ Strengthening the Capacities of Philippine Local Governments in Disaster Risk Reduction (SCPLG-DRR). Local Government Academy Journal Publication. April 20, 2016.

<https://lga.gov.ph/article/strengthening-the-capacities-of-philippine-local-governments-in-disaster-risk-reduction-scplg-drr>

⁴ Mapa, Ramon. 2019. *Local Community Empowerment and Multistakeholder Participation in the Community Reconstruction Process*. ProSPER.NET Leadership Program lecture. November 25 - 29, 2019 University of the Philippines, Diliman.

improving the recovery process for the rehabilitation and building back better⁵). Livelihood restoration in Typhoon affected Community in Benguet (the Barangay of Pasdong, Atok Municipally – ‘cash for work’⁶ practice and cooperation practices between community organizations, regional, provincial governmental agencies, governmental units and schools, academic and church).

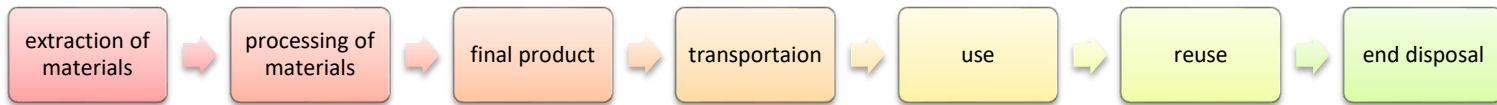
- The Home-Driven Reconstruction Approach successfully used by Philippian Catholic Relief Services (shared with participants during lecture of the Local Community Empowerment and Multistakeholder Participation in DRRM) is also applicable as a guidance for introduction of any actions towards sustainable development in the Central Asian region:
 - learn first
 - research and design
 - build local capacities
 - stimulate local demand
 - facilitate access to the capital
 - multi-stakeholder partnerships
- The Complexity of Communities should be taken into consideration at every stage of the project development and its implementation: how power relations within groups and communities circulate and affect each other, political climate (dynamics of the interventions differ and rely on the political will).
- For any capacity building there could be used a Systems and Industrial Engineers approach⁷ for evaluation of the outcomes for a big-picture and possibilities for improvement and innovations:
 - System thinking (everything is connected)
 - Customer Centricity (customer is always right)
 - Process thinking (an organization is a collection of processes)
 - Continuous improvement (there is always a better way)
 - Metric Based (measure everything that result in customer satisfaction)
- In contrast, Life Cycle Thinking is more about creativity, production, use, end of the product and its efficiency. The main stages and the PL extension strategy described by prof. Virginia Soriano (UP) are related to all producers of goods and services and its’ end users, in order to make a conscious and responsible actions towards SDGs.

⁵ During 8th of November, 2013 in Philippines, 16.1 mln people got affected by typhoon in 44 provinces. The new adding to the Sendai Framework was introduced – "Build Back Better". www.pilcd.org

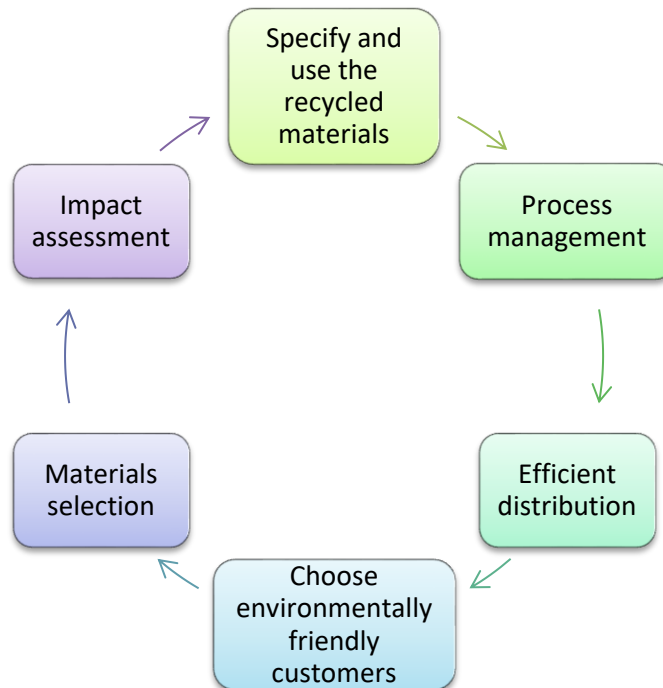
⁶ Mapa, Ramon. 2019. *Local Community Empowerment and Multistakeholder Participation in the Community Reconstruction Process*. ProSPER.NET Leadership Program lecture. November 25 - 29, 2019 University of the Philippines, Diliman.

⁷ Soriano, Virginia. 2019. *Introduction to Systems Analysis, Life Cycle Analysis, and Multi-Criteria Decision-Making Tools*. ProSPER.NET Leadership Program lecture. November 25 - 29, 2019 University of the Philippines, Diliman

Stages of a Product Life Cycle



Product Life Extension Strategy

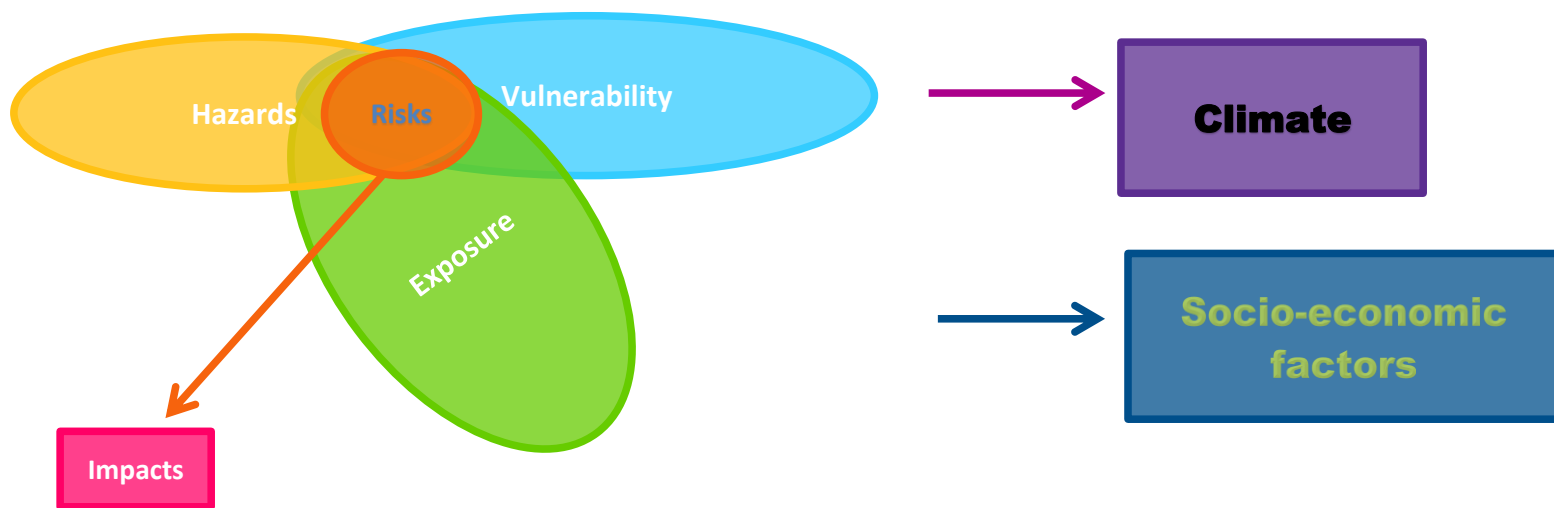


- The Vulnerability have various types and should be used as a tool for investigating possible harmful occurrences in the specific regions, layer of population, or time.⁸



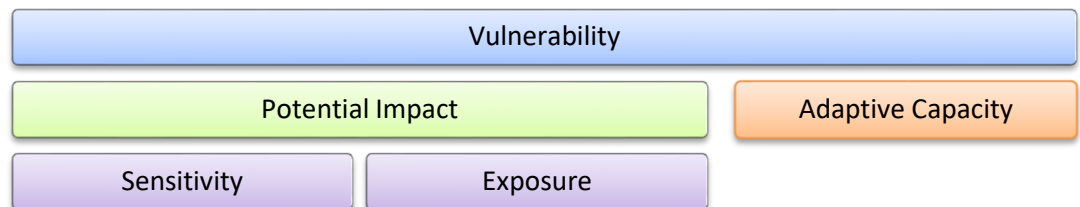
- Risk Assessment. In econometrical definition: risk is defined as a function of hazard (in the Philippines example – proxied by the ETR). The importance of monitoring vulnerability on monthly and yearly basis (making the baseline and ensuring periodical access and publicly available).

⁸ Blanco, Ariel. 2019. *Geomatics (Applied Geodesy) for Vulnerability Mapping*. ProSPER.NET Leadership Program lecture. November 25 - 29, 2019 University of the Philippines, Diliman



Risk Assessment is the underlining factor for the social and infrastructural vulnerability⁹

Combined Risk to the Climate and Geophysical Disasters



- **Social Vulnerability** is counted by multicriteria decision analysis (hierarchical structure)¹⁰ and represents the basic correlation between disaster risks variables.



- During the Sustainable and Resilient Energy Systems lecture I would like to note the practical example - advantages the Integrated Environmental System in hospitals of Philippines¹¹, which best represent energy efficiency practices.¹²
- And of course, the best practice for the DRRMO – Rescue 161 – Marikina City Rescue and their experience:
 - The Marikina City Rescue was established since 1993 as a line unit of Oplan Ligtas-

⁹ De Sherbinin et al. (2019) Potential storm search, maps to climate vulnerability: malaria, etc.

¹⁰ Malczewski 2006

¹¹ Aftermath of Typhoon Haiyan November 2013, Kapatid of the Philippines' National Electrification Administration

¹² Rizalinda de Leon. 2019. *Sustainable Energy Technologies*. ProSPER.NET Leadership Program lecture. November 25 - 29, 2019 University of the Philippines, Diliman.

Bayan

- City Mayor Bayani F. Fernando introduced “reactive approach”
- Pro-active approach since 2012yr – is a well-equipped and efficient provider for emergency situations
- Community awareness at public and private schools
- Contingency planning, mass protocol
- Daily weather monitoring – early warning system

The successful practices for the emergency situations preparedness introduced after devastating typhoon Ketsana, known in the Philippines as Tropical Storm Ondoy:

- ✓ First aid
- ✓ Basic Water emergency
- ✓ Basic life support
- ✓ BDRD trainings
- ✓ Publications/booklets
- ✓ Central Communication and Command Center
- ✓ Ambulance strategic staging areas
- ✓ Modulate tents
- The Public Participation incorporation into practice will enforce the collaboration between all parties involved and could be done by these steps¹³:



If the local community does not conduct the monitoring, they do not understand the importance of participation. This refers to the Social Engineering:

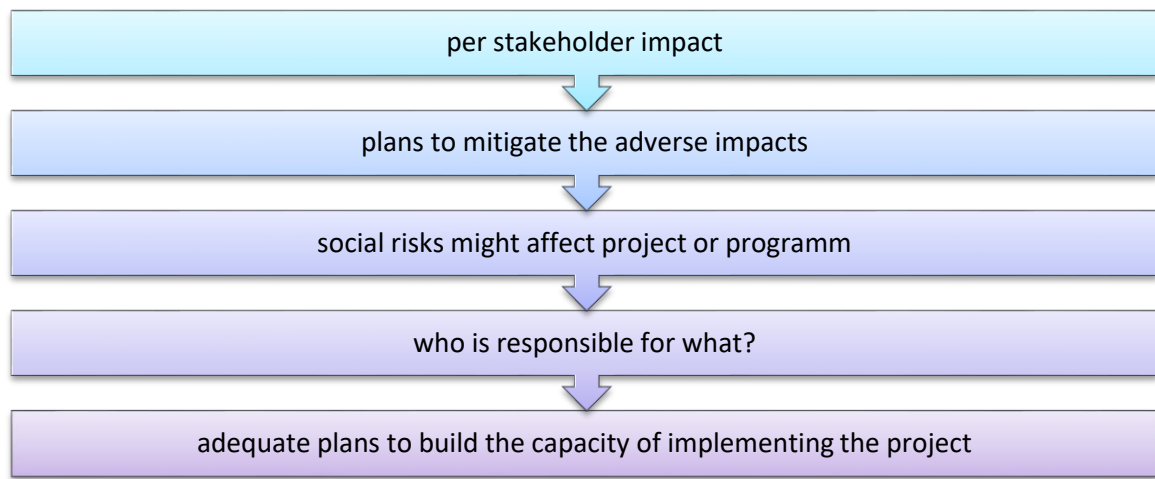
- ✓ Social preparation / Involving all the stakeholders
- ✓ Identification and full representation of stakeholders and all the concerned parties
- ✓ Implication of procedures or protocols are acceptable to all parties

¹³ Castor, Nestor. 2019. *Social Impact Assessment*. ProSPER.NET Leadership Program lecture. November 25 - 29, 2019 University of the Philippines, Diliman.

- ✓ Issues that emerged are stated clear

Identification of the opportunities affecting population

(SIA) as a tool for decision makers to frame development strategies¹⁴



- ✓ Details of the scope of the area of impact can often be determined from an analysis of the technical specification of the project.

The new project stakeholders to be involved in the upcoming project are under discussion stage. After National Forum for Green Economics and Climate Adaptation Practices (17 Dec 2019) RCE KG will collaborate with some new stakeholders. They are German-Kazakh University, Ecological Movement Agency “BIOM”, “Green Alliance”, Hydrometeorological Agency (KyrgyzHydromet), and the Ministry of Emergency Situations of the Kyrgyz Republic. The project will benefit countries through building capacity, sharing knowledge and best practices among participants (community organizations, NGOs, academic and governments units) and universities in the area of education for sustainable development.

RCE KG will facilitate the creation of a platform for exchange of experiences and opportunities for the communication and cooperation between the governmental agencies, academic and business sector, representatives of regional communities as Youth. According to the Agenda 2030 (17 SDG)¹⁵, education is the driving force and essential tool for reaching the Goal №4, therefore, formal and informal education on the open-space platform will encourage critical-thinking, problem-solving and a team-spirit. Built dialogue during the Camp will promote cooperation and awareness

¹⁴ Philippine EIS Procedural Manual, 2003. Environmental Mangement Bureau. 2008. “Revised Procedural Manual for DAO 30-2003” 2007 (1586): 1–57.

¹⁵ 1.2.4. SDG 4 | Quality Education | Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, pg 19. Rieckmann, M. Mindt, L. and and Gardiner, S. 2017. *Education for Sustainable Development Goals Learning Objectives*.

about DRR, ensuring the sustainable activities in the long term in the country and the region. As was described by prof. Fumiko Noguchi during the Lecture on SD, ESD and SDGs, (UNU-IAS) has –The Leadership approach¹⁶ for coping with Man-made and Natural Disasters is not only for leaders. The Leadership Approach includes: facilitation, coordination, resolutions of conflicts, necessity in translation on the regional language for better communication and spreading of the useful information on ongoing situation, monitoring and evaluation, and the last but not the least – compassion. It is for everyone because every person involved in this mechanism supports conscious and responsible actions towards saving our living capacity and harmonized coexistence with the world.

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¹⁶ Noguchi, Fumiko. 2019. *SD, ESD and SDGs*. ProSPER.NET Leadership Program lecture. November 25 - 29, 2019 University of the Philippines, Diliman.

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