Self-Powered Community Concept (SPC)

(Stage of level of March 2019)

Introduction

The contemporary generation has no other shared and more serious task than preservation of diversity of life on our planet. Governments as well as non-governmental organizations as well as private sector participants are working on this task, and it is financed from the public and private sources.

These are investments into socio-economic development (SED) and investments into disaster risk reduction (DRR) in specific regions (provinces). SED is, in general, a planned program for future projects (initiated, for example, by recommendations from the country's (or provinces or city's) plan of economic development) while DRR projects are ad hoc outlays (usually generated in response to natural disaster, local armed conflict, etc.)

DRR projects support investments into local development, and they are not "humanitarian assistance". They are, as already mentioned, ad hoc. Time available for their preparation is different than time and options in solution available to SED projects. There is no time for developing strategy, the task is already given. Everything is subordinated to tactics as far as how to start the implementation. And it is precisely in the tactics where the main difference between SED and DRR project exists. But when the projects are already prepared, processes of their implementation are almost identical.

SPC Concept

The above-described situation is addressed by the Self-Powered Community (SPC) Concept. The principle is a simple one. It is about designing, building, and operating WEMAF infrastructure by using SPC Utility in specific regions anywhere in the world, specifically, in a province with about one million inhabitants. In the text the reader will find the necessary references and explanations.

For example, why the SPC Concept works only with WEMAF drivers and not with the entire infrastructure in each region? Or, how to understand SPC Utility in relation to SED programs and DRR projects?

The objective of the SPC Concept is to help provinces to use their own natural resources (not only energy resources) for development of its economy and preservation of social peace. SPC Utility is a revolving loan fund, center of advising on transfer of best practices, and partner to local public and private sectors, universities, and a platform supporting growth of knowledge and financial capital of the target groups (households and entrepreneurs in a province). SPC Utility is designed to function as "Center of Excellence" supporting SED programs and DRR projects in a province.

SPC Concept is, as already mentioned above, a simple one. The objective is to make for provinces possible to create value by using its renewable natural resources to grow local markets and thus strengthen their competitiveness and the ability to participate on global markets.

WEMAF Drivers

WEMAF drivers support access to water (W) – allowing life to exist; access to clean energy (E) – for mutual coexistence; utilization of locally-available materials (M) – basis for jobs and livelihood; clean air (A) – for sustainability of life on Earth, and value of finance (F) – foundation for socio-economic balance in turbulent life of growing human population. Criteria of these drivers determine the hierarchy of WEMAF infrastructure ("small infrastructure").

WEMAF drivers support basic human needs: food, job opportunities, health, education, and safety. They are an inspiration, and they create a room for science and research and support inclusion of manufacturing and services of developed and developing countries. They supplement large infrastructure represented by construction or upgrades of airports, sea harbors, highways, and roads. Large infrastructure is a room where developers, central and local governments operate. Small infrastructure (WEMAF) supplements that space with WEMAF drivers.

In this context, SPC Concept follows up on wisdom of our forefathers, two and half millennia ago. For example, Aristotle defined basic elements which man needs for life in this way: water, energy, soil, and air. Today's problems with access to water and to electricity are widely publicized. The soil today means access to materials (for example to biomass) necessary for enough of job opportunities and food. All that is marked with the need for human and nature's resiliency against pollution which is generated by humans themselves.

The air is a separate risk factor. It represents a real test of human solidarity; it is a test of ability of contemporary human generation to change its behavior to support its survival. Financial resources are being prepared (up to 100 billion dollars a year, starting with 2025), new ways of solutions to problem of global warming (for example, different variety of carbon tax) and new financial tools start appearing (for example, a proposal for Clean Energy Dividends). In that context, SPC Concept suggests how in provinces in developing countries effectively allocate thus secured financial resources (in the bottom-up manner, for about five billion people).

A separate chapter in WEMAF infrastructure is access to finances. The most known example of that are welfare payments and subsidies of all kinds. But those are accompanied by abuse, bureaucracy, corruption, and low efficiency. Other adventurous solutions, for example, the "basic income", are still repeated erroneous approaches to the problem.

Such wholesale distribution of money looks like simple solution, but it is not. On a contrary, they are still the same, repeated, simplistic approaches which ignore human nature, state of science and technology and globally developing legal services. People knew money even in Aristotle's' time, nevertheless there was plenty of natural resources around them and it was sufficient to link money to a "pocket" of its owner.

SPC Utility

SPC Utility is a share company. After settling obligations toward its creditors and payment of wages for the work rendered, it seeks to reinvest the money to benefit objectives of project portfolio. SPC Utility sees motivation factors for maximization of profit at three levels: a) financial remunerations for completed project (to managers and participating stakeholders), b) payment of dividends to shareholders in the province, c) expert assistance and financial participation on local government's budgets. SPC Utility has the task to support growth of capital of its target group, i.e. households and entrepreneurs in a province.

SPC Utility acts as a good custodian, controlled by lead bank (representing a blend of all participating donors). We expect that from the lead bank (lead donor) SPC Utility obtains the basic long-term loan (for 30 years) and a series of other long-term loans for financing its projects and that the lead bank will cooperate with local banks in a standard manners of regular commercial lending. The system of internal financial control and internal audit will be paid for from the share on the cost of approved projects. Expert oversight and their audits performed by financial supervision by the donor will be paid from the share on the basic long-term loan.

SPC Utility will be created based on the accepted portfolio of potential SED and DRR projects where WEMAF drivers apply, as approved by all parties. SPC Utility operates within its own set of rules set forth by sequence and completion of preparation of projects in the pipeline ("project funnel"). SPC Utility will take into consideration the way the administrative and legislative environment in a province is set up, as well as all basic principles spelled out in license issued for operation in a province.

It will cooperate with political representation and citizens within the province and respect terms of local and nationwide election cycles. Its portfolio of projects will reflect the needs of the local and central governments, local entrepreneurs, and civic initiatives.

SPC Utility will administer and manage revolving loan fund (RLF).

The fund should be able to offer financial services which are still in many provinces missing. For example, besides supporting investment into access to water and electricity, RLF has the mission to invest into development of micro and small enterprises (for example, coconut or other farms), invest into support of putting them into enterprise chains, and be ready to respond to their eventual bankruptcies and through investments into mergers and acquisition care for growth of enterprises in a province.

With a good brand name of "Center of Excellence" and through the RLF support the good image of the local and central government and all stakeholders in SPC Utility.

Project Portfolio

A precondition for building up project portfolio is respecting WEMAF drivers in approved SED programs in a province (linked to SED of the entire country) and also linked to political and socio-economic realities in a province

(absorption capacity and strength of the local private sector). Furthermore, linked to risks represented by impacts of disasters (usually caused by climatic changes or local war conflicts). These criteria must be reflected in a hierarchy in stock up of project portfolio and selection of alternatives for evaluation of individual projects entering the "project funnel" (i.e. the mechanism of project selection and preparation).

SPC Concept, WEMAF drivers, SPC Utility, and portfolio of projects in a province represent a multi-disciplinary task in international cooperation. It is a demanding task which requires that everyone participation on it understands each other. The good news is that these are projects and structured activities which have the potential to understand new technologies including the artificial intelligence.

Assigned task is the same for every province around the world: purposefully, efficiently, and economically absorb specific SED investments within their own socio-economic environment and in international cooperation successfully face impacts from disasters, especially due to climate change and risks caused by war conflicts.

Common Language

SPC Concept is returning to practical philosophy and dialectics as it proposes the way for conducting communication concerning province's readiness for digitalization. It proposes a specific approach to communication through identification of priorities among six elements and internal links among them in a single recording (in one hexagon). The issues such as how many hexagons (blocks) and in what hierarchy and with what priority it will be in the end necessary, is moderated by discussion leader. This part of the text is a contribution to solution of a problem as how to communicate and arrive to agreement. It follows on author's eBook "Infrastructure and SPC Concept".

Just a side note: Projects of investments into SED and DRR are taking place in 206 countries, which represent 7.5 billion people in an environment with more than 7,000 languages. Objectives of those projects are often common and projects themselves are unprepared for their implementation. Bureaucracy and excessive corruption practices are entering life cycle of SED and DRR projects.

Efforts to get involved existing financial sources failing (distrust into their use is growing) and therefore also the trust in sharing the risks is decreasing, for example, between the private and the public sector. A new phenomenon is growing distrust among donors even toward financing investments into infrastructure. The world needs to find new platform for communication about preservation of its existence by jointly made investments.

SPC Concept proposed to introduce into this communication a structure which would be able to keep limitless human fantasy (rational and irrational alike) within limits of logical steps (workflow) so that outputs of such discussions have a potential to be converted (digitalized) into language (binary system) of computers ("0;1"). In that context, we will subsequently talk about structured discussions. But they are still not expert analyses and syntheses; they are just applications of dialectical principles, about use and self-reflection on a healthy reason. Dialectics offers us principles of polarity, bipolarity, triads, bi0triades, and hexagons,

It is an offer for working with head; it is a model for conducting structured discussion (negotiation) about important questions. In such discussion we seek alternatives for hierarchy of criteria which participants of discussions are generally using as the initial position (structured discussion needs leader and initial agenda, information on why the participants got together and how they can participate). Nonetheless, nothing is set forth in advance, the layers (hierarchy) of the discussion as well as its elements (for example, titles of topics) must be sought and ultimately also found by the participants (they must reach an agreement).

Leader of the discussion suggests the first level for discussion and for it proposes two key elements (the main ad supplemental one) and to them linked opposite poles (in polarity, it is about contract, logics, or supplement to two elements). The leader explains her proposal and opens a discussion. Discussion about functionality of polarities is an instrument and a test using bipolarity links. If the discussion leader doesn't defend the given bipolarity link it is possible – under her guidance – change one or both key elements. Restructure the model and continue in a discussion (in modified or other composition of bipolarities).

Consensus among those in presence about priorities of elements 1 to 4 is a good outcome, when it opens the route toward another step. That one concerns itself with setting up and defending two triads. Leader proposes last two elements in positions at the tops of triangles where their opposite base is always determined by two – already set forth (defended) - elements.

The objective is to take the discussion to the goal, i.e. to find a suitable title for the elements at the top of the triads which – after projecting both triads over each other into a hexagon - determine the title of the given block. In the end, the leader evaluates its definition in such way that the ongoing discussion is taking place in two-way directional cycle, in two ways over the hexagon.

In the opposite direction (direct route) and clockwise (the project cycle route). Direct route should quickly and briefly indicate – to everyone – what the content of the bock is all about. The opposite route follows the path of elements and indicates what main milestones are on it. It is a summary of important information about the fact that elements create logical chains within the block and that the block contains basic elements which characterize it sufficiently. The outcome is a design of a block which serves as an evidence for the minutes of the just conducted structured discussion. The minutes address two areas of subsequent work:

- 1. It is a written record of discussion in a given uniform format.
- 2. It is a written evidence to be used in subsequent work and in production of a workflow for the given block.

Common language is a pre-requirement for people being able to arrive to agreement. Because SPC Concept has the ambition to serve provinces in developing countries where is – above all - a mother tongue, which is available, we are proposing the following approach:

- 3. At the very beginning, prepare the basic recording and written documents in two languages (bilingual versions); submitting them in English and in mother tongue.
- 4. Until the SPC Utility is founded, use already obtained recordings and documents for digitalization of operations being prepared (elaborate on additional details in English) and for marketing in support of SPC Concept, WEMAF drivers, and SPC Utility as well as the content of project portfolio and in provinces maintain communication in bilingual form.

Bilingual approach is explained and applied in the previously mentioned e-Book; approach to these discussions (negotiations) and recordings from them was resented above.

The following text is focused on more detailed description of blocks and elements (briefly themes0 of structured discussions and their mutual relations. It concerns itself with environments of tasks (up until now hidden, private as well as public) which accompany SED programs and DRR projects in provinces.

The text represents an overview of five blocks and in every block are six elements. A brief characteristic (purpose) of a block is presented, with graphic scheme, including characteristics of elements. The text offers for discussion the following view:

- 5. How to introduce SPC Concept and get an attention necessary for further work.
- 6. How to approach digitalization and thus also applications of new ICT into socio-economic development in an environment which is different when compared to the leading developed countries.

1. Behavior

The world is getting interconnected, and everyone wants to have still better life. We call that globalization. So that we are at the same time able to manage the consequences of globalization we must in our lives deal with an inclusion. It is apparent from SED and DRR activities at every level (local, country-wide, and supra-national).

The reason for that is not only the potential for synergy coming from cooperation but also a motivation for teamwork and shared utilization of results which were achieved. According to the World Bank, process of social inclusion represents improvement in abilities, opportunities, and dignity of persons disadvantaged due to their identity.

International Investment Fund goes even further and arrives to the need to discuss the questions such as: "Inclusive capitalism" to support growth of trust in equal opportunities on global markets". People in affected regions call for inclusive climate change mitigation and food security policy under 1.5 °C climate goal. Inclusion means more than we realize.

On one hand, it is a route to managing serious contradictions, local conflicts, and large wars. On other hand, it represents a hidden potential for balanced SED and effective responses to DRR around the world. SPC Concept has the potential to support the basic approaches toward Homo sapiens' own existence.

Human behavior in places with demand for SED and DRR operation (in provinces where people live and work) is in this article presented by using Aesop Fable about a dork and fox. Tricky fox wanted to amuse itself at dork's expense. It invited dork for a feast and served meal on two shallow plates. With its beak the dork couldn't eat anything. He returned home hungry and humiliated. But it was a smart dork and offered the fox the same favor. He invited her for a

feast. After he served meal in two vases with narrow necks it was clear to the fox that she will not eat anything and that she was humiliated. She got her lesson.

How one can with this analogy look at people? There are people who have their "dork nests" from which they fly around the world, they are thirsty for success and at the same time there are fixed in their ideas about world, coming up with tricks and schemes just that they can humiliate others (they live in holes and envy rules over them). Think about that over this chart.

Lesson Learned 01

In the fable, the fox and the dork have their instruments (place and vase): Fortunately, the fox has a place and not a weapon and the dork were not shot by the fox, and he was able to survive his humiliation. Nature has its rules (legislative, executive, judicial).

Nevertheless, in nature, a ruse is a route to life preservation (securing the necessary food), but people perceive ruse more broadly. In the worst case as the route to killing without any reason or need (directly by firearms, indirectly by air pollution).

Therefore, people must deal with exploration and application of moral dimension of their existence and ethics of their behavior. Dork and fox don't have a problem with inclusion; it is a part of the code ensuring survival of specie. Fox doesn't envy the dork that he has a vase, and she doesn't.

They don't know what the anger due to vanity is, what is an envy and hate. On other hand, man can note what the cooperation and on it based synergy are. People know that hate, anger, and wars are nonsense and, therefore, it is logical to seek the ways how this nonsense purge from human life.

2. Knowledge

According to the U.N., about 5 billion people (two thirds of mankind) have access to mobile phone; almost 4.4 billion of people actively use internet and 3.5 billion use social networks. 5G network is being created. Artificial intelligence addresses decentralized cooperation in SED programs and DRR projects above all with blockchain technologies and smart contracts. That is a good start.

Science increases quality of content of SED and DRR projects and, at the same time, their professional diversity and volume of demand for them are growing. So, it is appropriate to ask how to deal with this reality/ At local level (in provinces) by improvement of skills in designing, at national level in programming, and at global level policies which will be faster, more agile, and better managed by large number of people and institutions.

This block is about knowledge. It tries to demonstrate how its basic theme (knowledge acquired by education) runs into ceiling of practical use and how its practical use is moving into area of abilities (in a sense of thinking less and acting fast).

It reminds us that restrictions, eventually simplification of role of intelligence of individuals and organizations in decision-making processes where the most valuable value is pragmatism of fast clicking on number "O" or "1" is a route to irreversible deformation of free will decision-making. It is a treat to by many generations developed healthy reason in people who live in harmony with Nature.

Quick start of abilities strengthened by pragmatism is telling us that bringing digitalization into human lives and nature is not simple. Life of the nature and human development are taking place in evolutionary pace which –in general – don't absorb outcomes of human revolutions and if it does it does it insufficiently or not at all. It usually takes them as an excess in short circuit-like situations.

Therefore, pushing back against wild digitalization can be considered as a reasonable approach. One might proceed by applications into identifiable system, for example, into SED programs and DRR projects. Let's think also about this chart: Fig. 2

Knowledge block includes the following elements:

- 1. Science systematic way of rational and empirical discovering of facts.
- 2. Technology set of techniques, skills, methods, and processes in manufacturing, services and I fulfillment of objectives such as scientific research.
- 3. Education set of knowledge, skills, and abilities obtained by education, instruction, and study.
- 4. Ecology scientific discipline with coexistence of man and the nature in its forefront.
- 5. Inclusion is not a scientific discipline, it is an approach to life, the route to understanding what separates us from nature.

6. Skills – the correct, quality, fast, and efficient performance of activities linked to our responsibilities.

Lesson Learned 02:

The number of duplications in products and services is growing, top technologies are being offered, but the low absorption capacity of growing majority of population is still being overlooked. Products and services are missing on sustainability in capital competitiveness and that harms the trade. We are still marching forward, pursuing our profits and the will to stop every so often – and to see our footprints in new context - is missing. It is not possible to take education out of the specific context and environment because by doing so we would lose platform for its utilization and evaluation.

The problem is that we learn a lot of other things and at the same time we know that in the end we will not be able to manage to know and master everything. What is important is that data are not just lying around and getting old in storages, that digital data don't become alienated to healthy human reason. That is a shared task for every school in the world, not just for universities. A task for all of us is to support development and dissemination of philosophy, mathematics, physics, sociology, psychology, history, etc. Not allow that the privilege of being able to prepare oneself, evaluate one's potential, observe one's behavior and let others know about oneself. Not rely only on machines (for example, cars) and robots 9for example, media).

Science and applied research are focusing on industrial robotization (in search for replacing man with a machine everywhere where machine demonstrates better results). In this process, intellectualization of human participation is being neglected; seeking of the ways how to approach digitalization of existing production processes. That led to long-term neglect of digitalization of nonindustrial sectors (for example, in services and construction work). For advanced countries the production (industry) and its developmental stages, 1st era of steam, 2nd mass production, 3rd automation, dominate. But bay far not everyone went through these stages.

We know that when we are working in digital format, we can in its spectrum conduct online trading. Everything which remains analogous, including ownership rights and identity is waiting for digitalization. For example, corporate and banking operations, money, and financial transactions can then be conducted almost instantly, with very limited bureaucracy and corruption.

In that context we are talking about "blockchain" technology which has the potential to generate the trust in digitalization. What has been once written down can't any longer be modified or erased. This capability has never existed. Here a huge potential for universities in developing countries exists. They can develop new disciplines which increase quality of investing in SED and DRR in their homes, their provinces.

Worthy of mentioning are two sectors: financial and enterprise architecture. It is obvious that content of what's being taught in both subjects, under same label, will be completely different for some work done on the Wall Street as compared to work done at a province of a developing country. Despite that, applications of new technologies and entry of artificial intelligence (AI) find the same utilization in any project, anywhere. The motivation is obvious, in the end all people want (will need) to include new technologies and organizational skills in their programs and projects.

3. PPP

Public and Private Sector Partnership (PPP) as a phenomenon can be – according to Wikipedia – demonstrated at five different levels: as a specific project or activity; as the way a project is implemented, as a declaration of governmental policy, as an instrument of a government, or as a broader cultural phenomenon. Different sectors routinely emphasize different aspects of PPP.

When the PPP is relies on projects, it is always focused on generating a Value or the Money (VfM). If it is not so, then it is not a PPP for SED programs and DRR projects, but they are various, soft, data unsupported ideas based on political proclamations and not anchored in political (strategic) programs.

PPP is an agreement about cooperation between two or more public and private subjects. Usually of a long-term nature. Governments have been using this mix of public and private efforts throughout the 20th and beginning of the 21st century and – with arrival of new ICT - bring new opportunities.

It is the best to consider PPP to be a special kind of contract which relates to investments, from the perspective of this article specifically into large and small infrastructure. To the SPC Concept, the PPP approach represents the fundamental concept as how to work with WEMAF drivers and how to position SPC Utility so that it can operate in the province.

Common themes of public and private sector partnerships are shared risks, development of innovative approaches, and seeking of forms of financing in a long-term horizon, which is important especially to the public sector. Use of private finance is another dimension of many partnerships of public and private sector. The PPP phenomenon is

controversial. No one is questioning the utility of deployment of PPP in investments into infrastructure. Problem arises in efficiency of PPP due to insufficient preparedness of project portfolio and individual projects.

In the end, a large project, for example, a sea harbor or a nuclear power plant, if it proved to be successful, it always was portfolio of many projects (according to spectrum of suppliers) and when they were insufficiently prepared, led to failure of the entire project.

This experience also applies to these days. Bad projects deform business environment and pushing politics on a route of promises which can't be fulfilled. They are either making politicians into demagogues or are unable to unmask politicians' bad characteristics. Evidence of VfM concerning investments into infrastructure is the best argument also about economic and societal benefits of PPP projects. Think over this chart: Fig. 3

PPP Block Includes the Following Elements:

- 1. Public sector it is a part of total economy composed of public services as well as public enterprises. Public enterprises or state enterprises are self-financed commercial enterprises in public ownership, and they provide various private goods and services for sale and usually they operate on commercial basis.
- 2. Private sector is part of the economy, sometimes labeled as civic sector, which is managed by private individuals or groups, usually as enterprising vehicle aimed at profit. It is not controlled by government.
- 3. **Opportunities** are in time and conditions limited favorable moments for implementation of some goal. They represent certain external potential which must be recognized and be taken advantage of. Opportunity is a new chance but at the same time also an impulse and stimuli. Opportunity might be also product of pure chance or favorable coincidence of circumstances.
- **4.** Business is an activity in which a man provides livelihood or makes money by producing or buying and selling products and services. It is any activity aimed at obtaining profit. Businesses are enterprises ranging from street hot dog vendor to supra-national corporation.
- 5. Politics a term with many meanings, usually referring to a process or method of decision making of certain group of people with plural interests and views. Politics is a sphere where a smaller or larger tension is always present between the "ruling" and emancipating" politics are present at all times (political action from above versus from bottom).
- 6. **Consensus** means an agreement in opinions in certain community, in particular a live, spontaneous, and broad agreement, generally any agreement presented by group of people (by the weight of group of people in their grouping around activities related to SED programs and DRR projects).

Lesson Learned 03:

We can find experience with PPP projects at many places around the world. In countries of the African Union, in the European Union, India, ASEAN countries, Australia, China, Canada, Japan, Russia, and United States. The World Bank in the past stated that governments have the tendency to create centralized PPP units as a reaction to shortcomings of central governments to manage PPP projects efficiently.

This situation survives to these days. Central governments suffer due to various institutional failures in process of awarding public contracts to PPP and local governments for that reason do not even try to participate in PPP projects.

Reasons for that are various. Internal regulations in a country are either insufficient or not present at all. Consultancy is weak as so is an overall awareness, starting with education and ending with medial support. It is not widely known that PPP projects can be – and in many places around the world already are – the best solution to investments in infrastructure.

According to the Economics and Private Sector Professional Evidence and Applied Knowledge Services (EPS-PEAKS) 2013 survey, which focused on research based on value of centralized units, PPP centers, it was found that:

- Building of PPP centers in individual countries around the world failed,
- In their countries, PPP centers do not play significant role in approving PPP projects.
- PPP centers differ from each other based on a country and sector and their organizational procedures and methodology are not uniform.
- On other hand, the survey didn't prove that PPP centers do not contribute to expansion of PPP in individual countries.

Entry into the business of PPP projects can be beneficial and at the same time also destructive when it is not prepared with due care and without the necessary education. Partnerships need a balance between both parties as well as ongoing

maintenance. When they are approached in slightly light-minded way it is assured that the partnership falls apart. This represents a very important lesson for planning and preparation of SPC Concept, especially of steps setting forth (the range) of future project based on WEMAF drivers as well as for performance of SPC Utility (due to indispensability of its services and the need to keep it operational for at least 30 years).

4. Jobs

A friend of my, a physician, told me: "When you assure me that I have access to water and electricity, the – anywhere in the world – I can very quickly start performing the most demanding surgical procedures. The same, for sure, applies to schools and other public and private sector services. It is also sufficiently general precondition for development of global trade network. For sure at the beginning of the 21st century."

At a given location, in provinces, are people, biomass, and other materials (including mineral wealth of any kind). A place that that physician envisioned might be seen, for example by a governor of that province in similar way, while, obviously, in broader perspective.

For example, as a call for activation of micro, small, and medium enterprises (MSME), with intellectual support and financial participation of SPC Utility (in a form of a loan, guarantees ad technical assistance), all that as an opportunity to create jobs in a province, a process that is accompanied by creation of capital among the households and entrepreneurs.

It also represents opening of a door for a forceful entry of a province into domestic market and for broader cooperation on global markets. SPC Utility can help with building of the infrastructure in a province by defining – along with local institutions, organizations, and entrepreneurs – the extent, structure, and financial strategy of project portfolio with WEMAF drivers.

If SPC Utility projects, its portfolio into infrastructure of a province within the framework of SED programs and DRR projects it thus gains a better chance in defending its future before donors. Such projection shows not only the weight and importance of its portfolio, but it also uncovers the necessary financial sources. SPC Utility therefore functions in a province in accordance with regional plans of economic development, stimulates work on documents such as Citizen's Charter.

SPC Utility builds its own image of blended role in finance and as "Center of Excellence". In that sense, SPC Utility has an opportunity to become agile element in the realm of socio-economic development and save lives of people in a province with a potential to introduce new ideas and the necessary competitiveness. More detailed view at this block will allow you taking look at Fig. 4.

Block Jobs includes the following elements:

- 1. SPC Utility is an executive unit of SPC Concept, aimed at support of SED programs and DRR projects in a province with a population of about one million.
- 2. WEMAF is a set of drivers which outline area of operation of SPC Utility. Drivers support synergic cooperation in securing access to water, electricity, clean air, materials needed for work, and to money in socio-economic environment of a province.
- 3. **Know-how** are technical, organizational, and business preconditions for operation of distributed services of (small) infrastructure outlined by extent of WEMAF drivers.
- 4. Project portfolio is a set of SPC Utility projects where SPC Utility oversees the purposefulness, efficiency, and economy of every project throughout its life cycle (from the conception all the way to evaluation of preconditions for using the project in a province for the time period determined by the project).
- 5. Infrastructure is a set of investments into (large) infrastructure in an extent of a province and the country (waterworks projects, national electric grid, data transfer and storage, telecommunications, roads, logistics, airports, etc.)
- **6. Distributed Market** SPC Utility supports local job market and formation of local capital through distribution of applications for WEMAF elements including coordination of their synergic cooperation and necessary regulatory instruments.

Lesson Learned 04:

Electrification, entry of renewable sources of electricity brings new view at the ways allowing people, anywhere in the world, access to electricity. The era of large power plants and monopoly on electric power transfer comes to end. Opportunities to third parties including small electric power producers are opening as do opportunities to those who sell it. All this opens new was for enterprising through DER (Distributed Energy Resources). At the same time task for

applications of blockchain and Smart Contract are being formulated. Mobile phones are entering trading environment. New obligations are taking place, based on trust and other instruments rather than on classical written contracts. Those, of course, still exist but they are hidden (or included) in procedures set forth for Smart Contract applications and they are supported (covered) by databases of the blockchain type.

These applications allow for going – in energy sector – the DER way, but other applications of the same kind can be found and expected in other elements of WEMAF infrastructure. For example, how to motivate people so that their access to water can be available as self-financed over a long period of time.

How to support creation of MSME - which are using locally available materials – and their chaining throughout the province. How to get engaged into worldwide effort to protect Earth atmosphere we all have to use and how to approach financial flows within the province so that they are connecting, not dividing people.

A large goal is to build SPC Utility network operating on all continents as "Centers of Excellence" supporting digitalization of SED programs and DRR projects and their development and using application "Personal Digital Assistant (PDS)". These are partial applications of AI in SED and DRR processes having the priority to build, present and teach people around SPC Utility (stakeholders) to work in a uniform workflow regime (in a realm outlined by WEMAF drivers).

5. Projects

A project is – according to definition in the code ISO 10006 – a unique process consisting of a series of coordinated and directed activities with date of initiation and date of completion, performed for achieving a goal which fits specific requirements, including restrictions given by time, cost and resources. Despite the fact that projects are unique works, and they differ from each other in many details, every project has throughout its life cycle common signs. They are the same in being divided into three layers and in them in elements which characterize those stages:

- I. Layer: Project preparation
 - 1. stage: Project proposal
 - 2. state: Tendering
 - 3. stage: Contract
- II. Layer: Project implementation
 - 4. stage: Monitoring
 - 5. Reporting
 - 6. Project closure
- III. Operational function of a project

Operational functions of each project include or may include the following stages: Start of an operation, its maintenance, modernization, and in the end, liquidation, i.e., physical, or moral end of operation (delivery of products or services) or its bankruptcy loss of profitability, growth of debt, all of which can happen at any time and at any layer. Fig. 5 shows links among elements (stages) at the first and the second layer. The third layer is not detailed here due to the desire to maintain continuity of the text with emphasis on preparation and implementation of projects. The chart at Fig. 5 helps to sort the listed elements out and strengthen their positions.

Block Projects Includes the Following Elements:

- 1. Project proposal is a declaration by a person (physical or legal entity), who writes with a single purpose, to secure investors and other stakeholders for preparation and implementation of a project, and secure financing. Project proposal goes through the 'funnel' along with other suggestions which might be a text message sent from a mobile phone or a prospectus or, eventually, a feasibility study.
- 2. Tendering is a formalized procedure by which a supplier of the announced project is being selected. Besides supplier a specific person to fill important position in a project might be also coming out from tendering. Public contracts follow rules set forth by internationally formalized process (procurement) for identifying and approval of conditions for obtaining goods, services, or work by external source.
- 3. Contract is a legal document which recognizes and governs the rights and obligations of parties to the contract. It is legally enforceable because it complies with requirements of the law. Contract usually includes exchange of goods, services, money, or promises of any of them. In case of contract violation is awards injured party access to corrective measures, such as compensation for damages or voiding of contract.
- 4. Monitoring is following of the project, a process of looking at all metrics related to the project, including performance of the team, time required for fulfilling the tasks, identifying potential problems and adopting corrective measures necessary for ensuring that project meets its scope, budget, and deadlines.

- 5. Reporting is a set of recordings about project's progress, documenting its history. Reports must be based of credible data, true picture of financial flows across project's stages (accounting). Different types of reporting exist: On project status, on its risks, resources, its management (Board/executive Reporting) or reporting used for internal financial controlling and auditing.
- 6. Closing of a project (or its stage) is a process of completion of all activities of a project, a stage, or the contract. The key advantages of this process are archiving of information about the project, completion of scheduled work, and release of resources of the organizational team so that it would be possible to use them on new project or effort/

Lesson Learned 05:

Preparation and implementation of projects are structured activities supported by computers and large number of methodologies, guidelines, templates, and toolkits.

From the standpoint of readiness and accessibility of documentation and tools for transfer and dissemination of best practices it is one of the best-prepared blocks. The methodology advanced from finding the critical path to unified sets (Six Sigma, Price 2); all the way to the current links to AI project management technologies.

Use of computer and mobile applications is growing in project preparation (project funnel), through tendering (limiting frauds and corruption), contracting (seeking smart contracts), monitoring, and reporting (use of international standards), all the way to project closing (a wide range of data storage facilities, clouds).

Summary

We can look at SED programs and DRR projects from different perspectives. It is possible to describe a view from top, from bottom, from right and from left and observe them over time if they are getting better or worse. Let's remind ourselves of importance of two views, from the top and from the bottom.

The view from the top presents' programs in a framework; it generates big data (for example, an overview of GDP in countries around the world). View from the bottom (from where people live and work0 can give us current information and measurable data (in real time).

The view from below uncovers opportunities to realized that majority of programs and all projects is built, implemented, and controlled by the same principles of organizational arrangements, financial operations, technical solutions, and legal procedures.

Every enterprise and development of market economy anywhere is built on visions, plans, and in the end on projects. Only project can convert potential stakeholders into shareholders in a completed, financially settled work, prepared for enterprising with value of its products and services.

Therefore, it is purposeful, efficient, and economical to perceive projects investing into SED and DRR as a sector which has the potential to address problems generated by climate change and their impacts on nature and people. Good will and coordination of work initiated by individuals and organizations will not suffice for that task, if we don't accept investments into SED and DRR as a specialty, a sector, similarly as we perceive industry.

Now we are referring to industry 4 (of fourth generation) but we should start talking about sector of investments into SED & DRR (for example, about requirements for an integrator (accelerator of processes) in sectors such as industry, agriculture, health care, education etc.)

Text of the article mentions the need to see investments into SED programs and DRR projects as a comprehensive approach representing specialty or the reasons such as the fact that SED and R_+DRR have common characteristics and they both open the door for new ICT possibilities and AI applications.

Nonetheless, such complex task isn't the goal of this article. It focuses on a call on provinces and their governors, on universities (including those which are local), and it is a call on financial institutions (including local banks), philanthropists, and all fans of ICT. The reason is clear: start with pilot projects and with practical applications respond to quantity of orders for investments into SED and DDR and improve their quality.

How can the SPC Concept help in this living process of changes in human behavior and his knowledge, opportunity to understand the public private sector partnership in expansion of jobs through transformation of project into uniform, standardized process which opens entry of AI? SPC Concept can do that by facilitating human efforts for a better, safer life along with sustainable natural life on the Earth we all share.

The following table converts the above, road thought into reality of tasks divided into five blocks, six layers, all together with thirty elements (separate tasks).

	1. Behavior	2. Knowledge	3. PPP	4. Jobs	5. Projects
1.	Foresight	Science	Public sector	SPC Utility	Project proposal
2.	Craftiness	Technologies	Private sector	WEMAF	Tendering
3.	Action	Education	Opportunities	Know-how	Contracts
4.	Tool A	Ecology	Enterprising	Project portfolio	Monitoring
5.	Tool B	Inclusion	Politics	Infrastructure	Reporting
6.	Reactions	Skills	Consensus	Distributed market	Project closure

Optimism is justified and answer to the question is yes, I would like to get involved, but who would pay for that, is on the table. For example, the IFC estimates that - by 2030 - investment opportunities into climate will strengthen developing markets by 23 billion dollars. That is a challenge for everyone.

In Prague, on March 29, 2019

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You find more information on the SPC Concept at www.5pforres.eu.