

SPC Concept for Disaster Risk Reduction

The challenge of participation at the Disaster Risks Reduction (DRR) initiatives is directly aligned with our more than five years of experience working on the goals that DDR has. This paper is inspired by conclusions of the Third World Conference on Disaster Risk Reduction, held in March, 2015, in Sendai, Japan. We have got this contact via the 5PforRES interest in participation on the Global Resilience Partnership (GRP) program (Rockefeller Foundation, USAID and SIDA, 2015). More information about us you find on www.5pforres.eu and www.academia.edu (Zdenek Chalus).

The SPC (Self-Powered Communities) Concept integrates plans (vision) and solutions (missions) of socio-economic and resilience development projects and identifies and prioritizes SPC Drivers reflecting community needs. Feasibility of the SPC Concept is defined by SPC Drivers and SPC Utility is an instrument for implementation of project's objectives. In the SPC Concept, households and small entrepreneurs are target end-user group.

SPC Drivers reflect the needs and/or demands of a target group in socio-economic development in a given province (respecting DRR impacts at global, regional, national, and local levels). SPC Utility is an organizational unit of the SPC Concept that is controlled by lenders and owned by representatives of the public and private sectors (at a province level). The role of SPC Utility is monetizing local human and natural source to satisfaction of creditors and for reinvestment of profit into the given province's needs through a portfolio project approved and controlled by stakeholders.

Communities need integrated multi-functional projects and should be committed to identifying and using experts in preparation of project-portfolio. They must also have the self-confidence to withstand any opposition or even legal disputes at local levels. Frequently we find that the problem might lie in such business environment that many capital investment projects (mainly at local levels) do not give a true and fair view of financial calculations and a transparent assurance of feasibility and quality of proposed solution. There seems to be certain reluctance in some communities to accept the required responsibilities.

The cause is simple - undervaluation of itemized budgets in project specification used for tendering, monitoring and financial closing of projects. This results in insufficiently transparent environment for public-private cooperation. Therefore investors (donors) need new techniques and templates for risk evaluation of their financial strategies and plans and deeper know-how for management and control of DRR. Such multifunctional tasks must be properly prioritized and only then implemented step by step.

Pragmatic solution exists: Via international cooperation following the process of DRR analysis in preparation, implementation and evaluation of pilot projects in different regions (while respecting both the local specifics and business approach to benchmarking of results).

SPC Drivers

Prioritization and definition of DRR tasks for each territory (region, state, province, town or municipality) needs independent attention and care. SPC Utility needs flexible inputs for strategic decisions as well as measurable indicators for managing day-by-day operation. Below is an example of SPC Drivers proposed for a pilot project for the Philippines. Three key drivers were identified (in the given case reflecting outputs of the Country Operations Business Plan, COBBs):

- Access to electricity: Residential PV + batteries, micro grids with advanced power control and high efficiency and - where possible - net-metered access to central power grid. SPC Concept works with a mix of renewable energy sources (solar, biomass, wind, hydro energy, geothermal etc.), supports Self-Powered Building (SPB) solutions for urban areas, and it is also an initiator of SPB solutions for peri-urban and rural areas. SPC Utilities will cooperate with national and local power distributors (see e.g. power cooperatives on the Philippines islands).
- Water management: Impacts of rainwater on a landscape; target group access to water (drinking and service); projects impacted by floods, landslides and other disasters (e.g. strengthening of river banks, seashore, reclamation, irrigation, cleaning infested waters, prevention of flooding).
- Renewable natural sources and their usage for business (e.g. forests and plantations) and for a capacity building of public-private partnership for industrial production and services (e.g. plantations of bamboo and coconuts, their harvesting and sale of products with added value)
- Local micro, small and medium enterprises (MSME) created and operated through acquisitions by the SPC Utility (e.g. development and delivery of workshops about manufacturing of products demanded by local markets). More detailed proposals were discussed for MSMEs opportunities coming from operation of bamboo or coconuts plantations (e.g. bamboo for housing construction, coconuts for cosmetic industry and carbon production, food industry).

SPC Utility

SPC Utility is responsible for implementation and evaluation of SPC Drivers and should also monitor other drivers for a complex infrastructure development (in synergy with objectives set forth by central and local public administration) and assists monitoring of a local environment in a framework of own activities (e.g. climate changes and local impacts of CO2 emissions, wild and dangerous landfills etc.).

SPC Utility:

- Generates benefits for target groups (new jobs, financial literacy, richer social life, etc.)
- Creates opportunities for input by members of a community into post-industrial economy by improving self-confidence and competitiveness.
- Customizes break-down costs according of contents of multi-functional projects (for organizational structures of a project portfolio) through inputs of SPC Drives (mainly due to synergy among drivers).
- Scans DRR (within a province, etc.) by applying internal financial controls and by internal audit mechanism (e.g. through a healthy cash flow management of DRR process for short and long term spending, and through internal audit of key functions of a DRR project).
- Assists eradication of extreme poverty and hunger in communities by involvement of target groups in project portfolio process (e.g. with a goal to strengthen legal and financial literacy in a cooperation with a local education system - elementary and high schools and universities of a province).

SPC Utility will make available standards of a banking from international investment banks above all the WB, EIB, ADB, AIIB; e.g. best practices in management, internal financial control and audit of public and private spending. This opens new opportunities to build a stronger resilience against fraud and corruption both in humanitarian and development projects.

SPC Utility is a new instrument for solving of key priorities of developing countries at a

province level by pilot project methodology and later on in SPC Utility network (at regional, national and global levels) using all advantages adopted from global networks services.

SPC Concept creates a room for “intellectual ventures” in DRR-related services and for synergy effects in addressing socio-economic objectives and building resiliency for emergency needs as well.

The SPC approach is finding positive response and support from the United Nations agencies, international financial institutions and from other institutions and funding sources in private and public sectors and it helps to create new opportunities in socio-economic development as well as business endeavours.

Innovation

Innovation brings up new requirements on PPP projects, financial control and audit mechanisms and consulting services. SPC Utility responses to these requirements (for example by operating Revolving Loan Fund (RLF) and using Special Purpose Vehicle (SPV)).

SPC Concept represents a new view on traditional functions of a utility and supplements its roles (central power plants, transmission systems, local distributors, power cooperatives, etc.) with a new chain of services that are defined and maintained through SPC Drivers. These drivers must reflect regional, national, provincial (local) strategies and planning objectives.

Benchmarking and feedback control in a hierarchy of inputs for implementation of required plans and business solutions should be on adequate levels and locally available through ICT technologies.

From this point of view, three innovations are described in more details below:

Innovation of public-private partnership (PPP) means:

- Involvement of PPP in processes of Participatory Budgeting (PB) through synergy effects of outputs for public administration, private capital owners, and core lenders (supervised by international and local banks), and public institutions and intellectual centres (e.g. local and national universities).
- The SPC Concept produces a package solution to socio-economic and resilience objectives and can be part of a speedy and transparent humanitarian.
- Development of PPP methodology for planning of investment strategy and transfer of know-how using instruments such as Citizen's Charter, Master Plans, Business Rules, etc. International network of SPC Utilities is the future part of public-private sectors' cooperation.
- Training in PPP skills and best practices (gained via SPC pilot projects) at universities and postgraduate seminars are new opportunity afforded by virtual educational channels (Internet, Skype, mobile phones etc.).

Innovation in financial tools and ownership relations depends on:

- Development, implementation, testing and evaluation of DRR functions through preparation and implementation of pilot projects in different countries. Two core functions for testing are proposed: SPC Utility's RLF & SPV services.
- Internal financial control and internal audit practices developed by SPC Utility professionals and tested by supervision of lenders) and their positive impacts on public planning and budgeting (including introduction of participatory budgeting and follow-up development and fine-tuning of methodologies and templates).
- Raising of awareness and interest from bonds issuers, lenders and SPC Utility investors (initial capital grant, capital from stakeholders, etc.) and other financial market participants for the purpose of creating more financial tools, offering long-term financing and minimizing legal disputes concerning project's spending (using services of international financing institutions and other tools e.g. from the WB Green

Bonds, International Climate Bonds Initiatives etc.) in a due diligence environment.

- Solving of practical and/or critical problems of ownership of land and market value of MSME (e.g. for products from bamboo and/or coconut trees). The task of the SPC Utility is to motivate both landholders and tenant farmers to being interested in an efficient, effective and economic cooperation.

Innovation in consulting services depends on:

- Introduction of new consulting financial and legal services for multifunctional projects and for a personal growth in responsibility of legal/natural persons with responsibility for result of a part or a complex of the SPC Utility outputs (at first for pilot projects and later for a global network of SPC Utilities).
- Inputs data dissemination (services) for financial agencies and institutions (local and international) in the matter of long-term loans risks evaluations (up to 30 years) for clients of self-powered programs included in a project portfolio by the SPC Utility.
- Gained results in innovation of financial tools and ownership relations should be disseminated via internationally accepted bilingual templates (in English and Local languages) both for education needs and practical operations in project management.
- Gathering and processing of DRR results for needs of public administration, industrial parks and agrarian farms focused on post-industrial national goals (initiatives of central and local governments) and self-confidence of the target group (creation of useful and sustainable jobs for themselves).

Conclusion

Summary of the Third World Conference on Disaster Risk Reduction (DRR) was published in a document “Sendai Framework for DRR 2015-2030” (A/CONF.224/GRP.1), 18 March 2015. Conclusion of this paper reflects a content of the document (key four priorities) and title of each priority (by italic letters) is supplemented by a brief comment:

- ***Priority 1 - Understanding disaster risk:*** DRR framework should distinguish internal and external influencers; internal includes the Earth and external comes from the Universe (e.g. radiation, meteorite impacts). The Earth has two players and two owners – the Nature and Humans. The Earth is a responsible originator e.g. of earthquakes and Nature and Humans are originators, for example of floods. But only Humans are originators of local and/or world wars and they are fully responsible for destroying the Nature. The conference has called all DRR stakeholders to cooperate on new, relevant solutions.
- ***Priority 2 - Strengthening disaster risk governance to manage disaster risk:*** Governance covers all processes of governing, whether undertaken by a government, market or a network, by a family or an entrepreneur. Pilot projects are the best opportunity to apply and learn that.
- ***Priority 3 - Investing in disaster risk reduction for resilience:*** Investing in DRR for resilience, economic development, and social cohesion is a multidisciplinary task and any simplification and half-solutions are likely to eventually backfire. This is the reason why the SPC Concept recommends to organize management of tendering process at project portfolio level. Success in DRR needs a flexible assigning of priorities to specific tasks, itemized budget plans and true and fair view of planned expenditures; it also requires transparent accounting of all projects in the life cycle of a project portfolio (until financial closing of the last project).
- ***Priority 4 - Enhancing disaster preparedness for effective response and “Build Back Better” in recovery, rehabilitation and reconstruction:*** The Conference recommends 16 items as what is important to do at national and local levels and 8 items concerning global and regional levels. This list of strategic tasks is a clear challenge what must be done.

Allow me to add a brief comment on methodology of present practices and what should be improved. Generally, we distinguish territorial regional tasks (divided by territories) and sectorial tasks (divided by branches). Most institutions work with a system of territorial and sectorial structures, but say for DRR solutions we also need "task oriented" approach suitable for multifunctional task solutions. This is a reason for dissemination of project portfolio skills and why DRR projects must be properly managed and controlled through the itemized budget principle at all levels of a project life cycle. In this context, the practice using a "Task force" is a proven way how to start.

I would like to emphasize two assumptions:

- Feasibility of the SCP Concept was outlined, functions of SCP Drivers were explained, and core functions of the SPC Utility were introduced.
- The third World Conference on DRR (March 2015, Sendai, Japan) recommends - through the UN - to invite experts and to establish intergovernmental working group for DRR and to apply a "task oriented" approach (Task force) for solving of multifunctional project of economic disparities (in quality of life), disparities in technological innovations (in technique of life), and disparities in capacity building for planned investment spending (differences in skills and educations within a community).

So we are interested in participation in such attractive and a lot of good offering challenge and in adding value to DRR solutions using the SPC Concept. 5PforRES is ready to assist preparation and implementation of a methodology of pilot projects for various developing countries.

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