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Sustainable Consumption and Production as a Lever for Social Innovation

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Abstract

In order to understand and drive social innovation towards sustainability, developing strategic alliances based on the principles of systems thinking has proved to be an effective approach. This study presents such an approach by linking consumer behavior and lifestyles on the one side with business models and production processes on the other side. Thus, analyzing which lifestyles can be considered sustainable and how consumer behavior can be driven to paths towards leading such lifestyles, provide a base for educating entrepreneurs and developing business models, which in return, support the creation of more options towards sustainable lifestyles. On the other hand, the choice of sustainable products and services developed by practitioners of Sustainable Consumption and Production, can drive consumer behavior and can influence lifestyles towards more sustainable livelihoods (Kuhndt 2010). The paper presents three case studies, which highlight how an analysis of consumer behavior and lifestyles as well as educational concepts for entrepreneurs and sustainable business models can serve as basis for social innovation towards sustainability. Therefore the first case study (SPREAD) relates to sustainable lifestyles, the second one (SMART) to an educational concept for sustainable entrepreneurs and the third one (SWITCH) analyses change processes from unsustainable to sustainable business models.

The first case presents the SPREAD Sustainable Lifestyles 2050 project, launched in 2011 by an European consortium that looks forward to mobilize current knowledge to mainstream lifestyle changes, build scenarios to discover how to enable sustainable lifestyles through backcasting, honing social innovations and engaging society in a multi-stakeholder platform. Because of its recent launch, showcasing this program aims to present its basis and open the door for collaboration and participation to take its outcomes to other regions in the world and bolster activities for developing social innovations.

The second case, SMART Start-up training program, emphasizes on innovative educational approaches for generating sustainability-driven business models. First implemented in Mauritius in 2009, the program has been evolving in terms of capacity and reach, involving students, professors and young professionals from seven African countries, and expanding to China and Brazil in 2012.

The third case portrays sustainable consumption and production patterns through the facilitation of production networks in Asia; the case of the European funded SWITCH Asia Network Facility highlights the practices and innovations that allow replication and implementation of locally-generated knowledge and support the development of sustainable livelihoods in 15 Asian countries.

The insights provided by these three programs show how focus on sustainable lifestyles address the issue of why social innovations are needed; production processes and their feasibility for replication then represent the mechanisms to boost these innovations. They also allow distinguishing the actors and leverage points to create, drive and evolve social innovations.

1. Consumption and Production – a soil for innovation

In 1992, the Agenda 21 pointed out that unsustainable consumption and production patterns were the main cause of deterioration of global environment, and subsequently causes of economic and social distress. Ten years later, the concept of Sustainable Consumption and Production (SCP) was coined to identify the practices to be developed and implemented towards shifting patterns of unsustainable lifestyles into sustainable ones. The "Marrakech Process", launched in 2003, became the 10-year framework of programs that comprise informal expert task forces and other activities that serve as platform for developing breakthrough policies, projects enhancing SCP (UN/DESA 2007) In 2006 the European Commission included SCP in its Sustainable Development Strategy as one of the seven key challenges to be addressed through the union's policies and programs. By 2008 it was defined as policies and action plans that "maximize business' potential to transform environmental challenges into economic opportunities [...] The challenge is to improve the overall environmental performance of products throughout their life-cycle, to boost the demand for better products and production technologies and to help consumers in making informed choices" (European Commission 2008)

As the concept of SCP evolved and gained relevance on the international agenda, the UNEP/Wuppertal Institute Collaborating Center on Sustainable Consumption and Production (CSCP) was created in 2005 with the purpose of providing scientific support to the activities undertaken by UNEP and other organizations. The scope of its activities comprises development, testing, implementation and monitoring of projects and programs in the less developed nations of the world, enabling leapfrogging sustainable consumption and production patterns and practices. The programs developed and carried out by the organization and its partners are built on three milestones: capacity building, establishment of infrastructures to support sustainable innovations and encouraging bottom-up participative models for sustainable innovation (CSCP 2010)

The structural societal changes needed entail a combination of exploring the causes of the problems, identifying mechanisms and actors to provide solutions and also alternatives for improving existing opportunities – societies must then reinvent themselves without falling into the social trap of progress that depends on the self-reinforcing cycle of novelty and anxiety (Jackson 2009: 147) – environmental, technological innovations are not necessarily supporting the development of societies, what then is a sustainable innovation?

The term "social innovation" often refers to entrepreneurial. Since social innovation changes the performance capacity of society (Drucker 1993: 21), narrowing it to the realm of business creation or improvement of products, processes and methodologies from the mere economic perspective or even for its impact on the emission of CO_2 does not necessarily imply that the innovation is a sustainable one. There is also a clear boundary between technical and social innovations, the later being defined as "a new combination and/or new configuration of social practices […] to the extent that it, conveyed by the market or 'non/without profit', is socially accepted and diffused widely throughout society or in certain societal sub-areas, transformed depending on circumstances and ultimately institutionalized as new social practice or made routine" (Howaldt / Schwarz 2010: 21) Therefore, social innovations should be addressed as a system with the ultimate objective of triggering behavioral change and enabling sustainable lifestyles through an interconnected worldview (Evitts/Seale/Skybrook 2010: 22), this means seeing cause-effect of situations and capitalizing on individuals' creativity for problem solving through enabling spaces of inclusion for collaboration schemes.

To better understand the systematic approaches to social innovation that SCP programs present, this study showcases three experiences covering the areas of: innovative schemes of social participation for improvement of lifestyles, education for developing sustainable businesses and the development of networks to spread information and knowledge regarding production and consumption practices in developing economies around the world. The structure of each approach outlines the background of the program and its scope, methodological aspects that foster innovation, current status, lessons learned, areas for further improvement and envisioned ripple effect (Willard 2009: 67) for a paradigm shift.

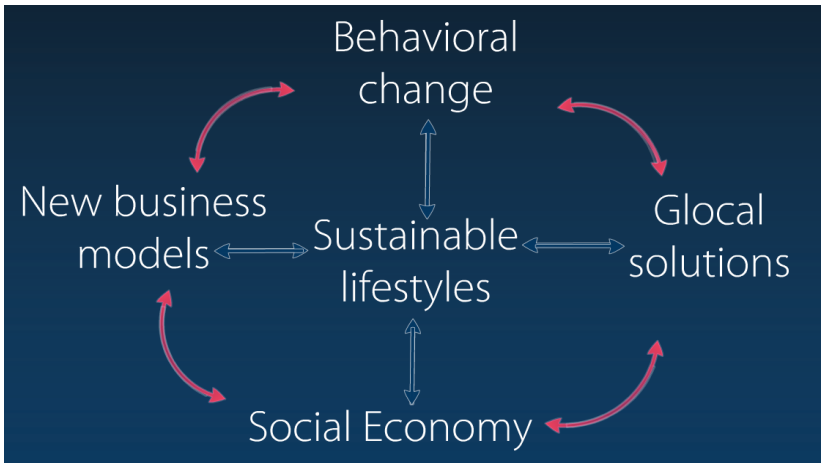

Fig. 1.1: Cause-impact of sustainable innovations

Figure 1.1 depicts the causes and impacts of social innovations with the ultimate objective of leading the way towards sustainable lifestyles. Finding means to make this happen, drives innovators to discover or create new models and solutions through activities, products and services that contribute to an overall societal change and behavioral shifts.

Analytical Framework

After clustering various elements that characterize social innovations (Howaldt et al. 2010; Willard 2009; Murray et al 2010; NEPAD 2011) it was possible to evaluate if the three analyzed SCP programs meet the criteria of promoting sustainable consumption and production whilst presenting sound social, sustainable innovations.

This criterion comprises five fields:

- Methodology: Is the program fostering innovative, inclusive methodologies that enable engagement from the community and individual action?
- Elements of systemic change: is the program pervasive, replicable and transparent enough to identify leverage points, patterns in application and elements of causality/impact?
- Ripple effect: is the program measurable, interactive and flexible enough to be replicated and extended to other communities and adaptable to other environments?
- Actors involved: is the program offering a multi-stakeholder platform for involvement from the planning stages to the impact and follow up?
- Action scope: what are the identified lifestyle areas the program is having a direct impact on?

After analyzing the components of each of the programs, the matrix offers a clear overview of what the elements of social innovation that the three SCP projects contain and also facilitates the process of identifying low-hanging fruits for maximizing the potential of these projects.

	Methodology					Elements of systemic change						Ripple Effect					Actors Involved								Action Scope												
	inclusive	inspiring	creative	access to communities	open information	pervasive	customizable	causal	allow pattern identification	identifies leverage points	replicable	measurable	teachable	scaleable	multi stakeholder dialogue	interactive	policy makers	CSO	foundations	social entrepreneurs	academia	businesses	investors	individuals	cities	social cohesion	lifestyles	PPP	capacity building	social entrepreneurship	health	education	knowledge creation	knowledge dissemination	networking	funding	environmental preservation
SPREAD	X	X	X	X	X			X	X	X		X			X	X		X		X	X	X	X	X	X	X	X	X		X		X	X	X		
SMART	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X		X	X	X	X	X	
SWITCH Asia NF	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X		X	X	X	X	X		X	X	X	X	X	X

Fig. 1.2: Assessment chart of elements of social innovation

2. SCP Cases Leveraging Social Innovation

2.1 Leverage 1. Innovating towards shifting lifestyles

2.1.1 Background and scope

The SPREAD Sustainable Lifestyles 2050 program has as an objective to support the formulation of a research agenda for the European Union. SPREAD is a European Commission project aiming to address particular social problems of Europe on the areas of health, energy and transport use and support the creation of an agenda that will emphasize on ways to solve these challenges. This agenda will also address policy makers, practitioners and researchers with insights for life quality improvement and behavioral change towards sustainable lifestyles. SPREAD's unique methodology and features make this program worth exploring as a case for activating communities in the regions of the world where traditional policy-making and economical mechanisms have failed to satisfy the needs of the society.

2.1.2 Methodology

An important aspect of SPREAD lies on engaging stakeholders through a social platform and encourage their participation on a number of thematic and cross-cutting workgroups. The features highlighting the development and diffusion of innovations through this approach are:

Crowdsourced scenarios and Backcasting

The information on different lifestyles and visions for 2050 is being gathered through an online social platform and open consultations. All the input is generated through an open, social collaborative process, which itself is perceived as a new paradigm in the way of developing businesses, designing products and delivering services: crowdsourcing (Howe 2006: 4) – an innovation that combines networking, expertise and skills sharing with creativity and accessibility. It is a model that has produced millions in revenues for companies, improved product quality and serves as inspiration for many other innovations and their diffusion.

The scenarios drawn from the information acquired through these sources will serve as the lodestar for the future towards which European societies will strive to. These are the "scenarios for sustainable living 2050" from which the actions will be backcasted.

Backcasting is a strategic planning approach that uses an envisioned future as objective, all the action plans are developed towards achieving the desired vision of success (Robèrt 2010: 21). This planning technique addresses issues in the future that may be the results of today's, thus enabling the planning and design of ways for changing these actions or developing activities towards reaching the desired future.

2.1.3 Lessons Learned

Because understanding the drivers of behavioral intention is important for message development and appeal choice (Rice 2001), SPREAD already identified various streams for capturing the information and moving on:

a) Implementation of visualization techniques: Because of the "time-traveling" component of SPREAD, crafting visions and identifying pathways are backbone activities for the proper implementation of the project. As the figure 1.1 illustrates, visualization is an efficient tool to make abstract ideas more tangible; to stimulate visions of the realm of possibility; and to orient mindsets towards more sustainable ways of living.

Fig. 2.1: Pathways to sustainable lifestyles –keywords. Output of the Vision 2050 workshops organized by the CSCP

b) Involvement of sustainable entre/intrapreneurs. They provide 'creative destruction' that propels new combinations of people and resources – therefore the creation of public value for a social innovation to spread, includes those that are mission-driven and also seek to prove that sustainable business models can be profitable (Botsman 2011: 18)

c) Tapping on the insights from the youth and implications for future infrastructure needs. Sustainable living models that are being built today require of the participation of those who will make these models happen. It is relevant to make the connectedness to nature more obvious in terms of the impacts and find a common language for crafting future visions together. Current trends in activating networks and actions towards community development are showing how the evolution of social networks and the reinvigorated role of communities concerning consumption patterns, are influencing behavioral change.

2.1.4 Further Improvement and Ripple Impact

SPREAD offers an open platform of engaging with all its stakeholders. It is often argued that a cross cutting innovation amongst the different stakeholders and even sectors has a higher chance of being sustainable and successful than just an industry-driven approach. The flexibility of the measures to be presented as an outcome will help to steer and determine what innovations are needed along the road.

SPREAD was designed to serve as a driver for engaging societies in different regions of the world. Its innovative methodologies, practices and lessons are setting the basis of breakthrough developments towards behavioral shifts in societies, starting by challenging the existing infrastructures in the regions of the world where innovations are most needed. The networks and linkages created through this program are being built through innovative processes and foster new ideas and leads towards solutions that can be implemented today.

2.2 Leverage 2. Sustainable Entrepreneurship through experiential learning

2.2.1 Background and scope

The SMART Start-up program was first developed and implemented as the "Introducing Sustainable Lifestyles and Sustainable Entrepreneurship into African Universities and Colleges" in 2009 as a component of the African 10 Year Framework of Programs (10YFP) and it was developed as a platform for educators, students and policy makers to interact and build upon notions of Sustainable Entrepreneurship.

The training wanted not only to raise awareness about the opportunities created by developing new, inclusive and socially-oriented business models, but also aimed to enable dialogue between policy makers,

researchers, students and businesses in order to connect traditional mechanisms for enterprise development with chances for shifting processes of consumption and production.

The pilot program took place in Mauritius in August of 2009, lasted four days and counted with the presence of thirty-two participants. Within the context of this training, the Government of Mauritius expressed a political commitment to sustainability with a view to securing present and future livelihoods through its *Mauritius Sustainable Island* vision. Education and communication for sustainable lifestyles is one of the seven priorities within the Mauritius National Action Plan.

The training materials and methodologies developed for Mauritius, were further tested in an "Educate-the-Educators" workshop held in Germany in April of 2010. The objective of this training was to develop means for replicating the training, finding opportunities to tailor it to the realities of the different countries where the methodology was introduced. This training brought together students and educators from Egypt, Ethiopia, Germany, Ghana, Kenya, Senegal and Tanzania. The interaction of nine students and eight professors resulted in various initiatives for customizing the methodology and the content of the training and introduce it to the syllabus of the participating universities, but also empowered some of the participants to start their own businesses. Some of the most notorious examples include:

A 20-year old law student in Ghana teamed up with an international student organization and provides trainings to inspire sustainable entrepreneurship within universities in her country. She leads a project team of specialists from the Kwame Nkrumah University of Science and Technology (KNUST) and the New York based Fordham Faculty of Law to tackle e-waste issues in Ghana.

A renown professor from Egypt, integrated the tools and strategies of the training into the courses she teaches at the Management of Technology Department at the German University in Cairo whilst an Associate Professor, member of the Chemical and Mining Engineering Department at the University of Dar es Salaam in Tanzania, adapted various elements and concepts of the training into the curricula of the entrepreneurship course.

A stakeholder meeting on sustainable entrepreneurship was also held following the event. Both trainings were steppingstones towards the development of later initiatives, translated into sector-oriented opportunities and expansion to countries outside Africa.

2.2.2 Methodology

Through its interactive, hands-on approach, the SMART Start-up training program supports the participants' process from discovery of opportunities in their communities to the definition of a business model and identification of partners for turning their ideas into functioning enterprises.

The program's methodology combines traditional educational structures such as research through benchmarking, assessments, and business planning guidelines, with innovative, techniques that comprise the process of experiential learning.

Personal journey

For better understanding of the concepts of Sustainable Entrepreneurship and its importance for social innovations, learners need to be motivated on a personal level and hone their entrepreneurial skills. To show the progress each individual will undergo throughout the workshop, SMART Start-up has adapted the Creativity-Based Model of Opportunity Recognition (Lumpkin/Hills/Schrader 2004) into a navigation chart presenting the focal steps of the program guiding the participants through their sustainable entrepreneurship journey.

The process within each module of the framework is a progression of concepts of analysis-activity-reflection that is intended to provide a higher and deeper level of understanding as the program develops. The framework also serves as compass for idea generation and brainstorming of opportunities to be tested in the later stages of the program.

Experiential Learning

Adapted from Kolb's Experiential Learning Cycle (1984) each section of the training program follows a 6-step structure:

- Provision of background information to generate common understandings.
- Oral or written explanation of the activity. Provided by the facilitator.
- Activity. Through simulation and interaction participants are given an opportunity to live a practical experience.
- Group discussion.
- Personal reflection.
- Decision on actions. The main outcome of each activity is to present learning through a tangible action or personal commitment that can be taken throughout the training and crystallized in the draft of a realistic, sustainable business plan.

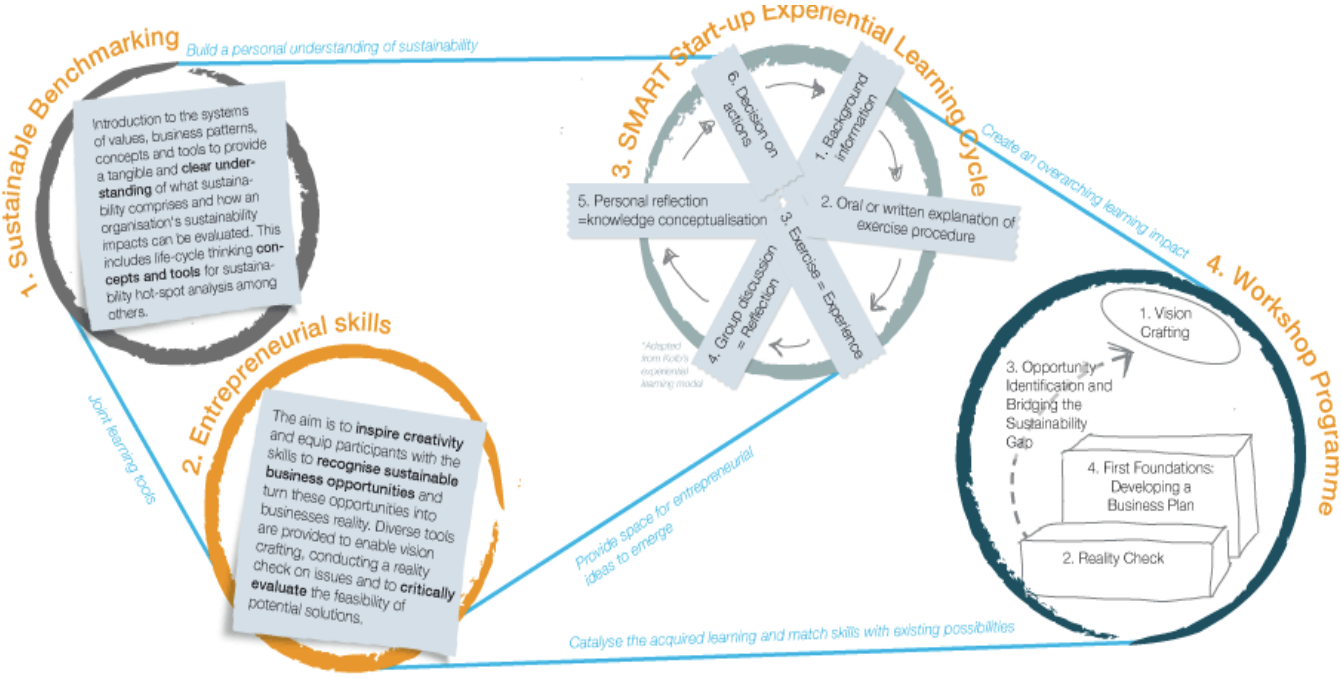

Fig. 2.2: "Connecting the Dots" The methodology of SMART Start-up training program (CSCP) 2010)

A similar learning scheme happens when developing and spreading a social innovation. To reach a critical mass, innovations must make sense in the individual level in order to be scaled up to the group and trigger common action.

Tools for honing skills and business development process

Participants identify opportunities in their environment and create a personal understanding of sustainability by being introduced to the systems, values, business patterns, concepts and tools that provide a comprehensive landscape of how sustainability concepts can be integrated into a business model.

Networking and active stakeholder involvement

As an expression of innovation, instead of presenting an interaction of "aid providers / awardees", the relationship between entrepreneurs and enabling agencies happens through 1-1 meetings in the context of the workshop. Stakeholders are invited to participate throughout the training or during 1-day (the last one) for getting to know the business models and their creators. The program harnesses an informal networking setting from which new partnerships may emerge (Saveri et al. 2004: 21)

2.2.3 Lessons Learned

The pilot in Mauritius was milestone for the success of the program since it provided a "safe proof of concept lab" (Willard 2009: 66) and showed the need for having a "safe space" for challenging perceptions about one's environment and cross-pollinate ideas. The training needs to remain sensitive to certain social traits, such as the relation professor-students, and other practical constraints, implying that great part of the adaptation efforts must be focused on ensuring an optimal participant composition, delivery times and location for really maximizing the innovative features of the program and granting a positive impact for the development of partnerships.

Launched in October of 2010, SMART Start- up ICT focuses on stimulating sustainable entrepreneurship and developing skills and capacity among young people in China, South Africa and Brazil.

The training in South Africa took place in April 2011 with the participation of students, professors and young professionals, which provided a newest insight of the possibilities for promoting intrapreneurship through the SMART approach and shift production and consumption practices within existing companies regardless their size. The South African training included young professionals (recent graduates and people who had a working experience of up to 2 years) Three of the participants had already reported changes in their activities induced by their participation of the training, either in the application of the material for supporting their activities in the community or for the creation of a new social venture.

2.2.4 Further Improvement and Ripple Impact

SMART Start-up inspires and motivates individuals by supporting the value that each sustainable idea conveys. The training is an initial steppingstone upon which outcomes and connections that are created can be later strengthened. Developing indicators for measuring the success of the training in terms not only of enterprises started or replication activities but in impact for personal decision-making is also a feature that must be explored.

SMART start-up methodology serves as a trigger for individuals to identify opportunities upon which they can develop a sustainable innovation. In countries with rapidly growing economies, the emergence of sustainable entrepreneurs can be accelerated through this training program, just as demonstrated by the cases hereby presented. The impact of the innovations created after the training require further observation, especially because the challenges that sustainable entrepreneurs met during their journey, will pave the road of other entrepreneurs that will be involved in the program in the years to come. SMART

start-up itself is a program of continuous learning, building on the knowledge accrued through each delivery is crucial for making it a social innovation itself.

This program evolved from a pilot to a well-established training program, replicable and adaptable to different audiences and regions. Participants to the stakeholder meetings and members of business chambers have expressed their interest of having SMART Start-up tailored to their countries and/or their industries. Replicating the "Educate-the-educators" experience is also another path that SMART Start-up program aims to elaborate further.

The rapid changes that today's growing economies present, amidst the large population of these countries and the profile of the emerging global consumer class, support the quick spreading of the outcomes of educational programs such as SMART start-up, thus enhancing the development and increase of more sustainable innovations in the parts of the world where they are more needed.

2.3 Leverage 3. Switching practices and networking

2.3.1 Background and scope

The Asian Development Bank estimates that by 2030 Asia will represent the world's largest consumers group, such statement offers a positive scenario for sowing innovations through the promotion of sustainable products, processes, services and consumption patterns.

The aim of SWITCH Asia is to promote Sustainable Consumption and Production (SCP) in Asia. To achieve this objective, the program works simultaneously on the ground, with producers and consumers, and at the level of policy-making through supporting for formulation and implementation of SCP-related policies. It started in 2007 with a budget of €90 million for the period 2007-2010.[2]

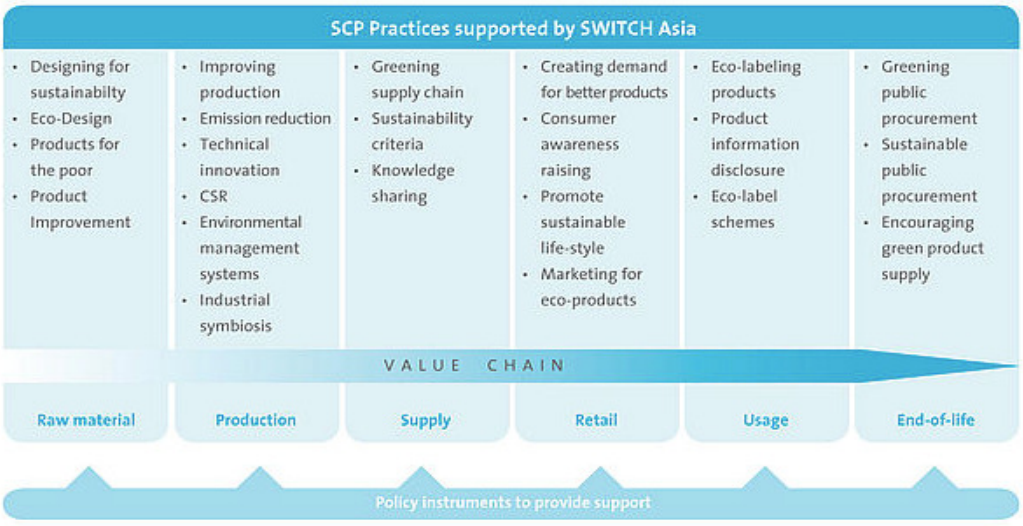

Fig. 2.3: SWITCH-Asia practices on SCP along the value chain

As the figure 2.3 shows, the program currently supports a wide spectrum of SCP practices along the value chain, maximizing the use of existing tools and technologies that influence the product life-cycle and also offer opportunities for governing frameworks to develop instruments and endorse sustainable innovations, starting by the network facility created to support the successful development of the program.

2.3.2 Methodology

The SWITCH-Asia Program has three core components that make it a unique incubator for sustainable innovations: support to policy makers, the network facility and the provision of funds to grant projects on

[2] http://ec.europa.eu/europeaid/where/asia/regional-cooperation/environment/SWITCH_en.htm

SCP. The SWITCH-Asia Network Facility (NF) connects the grant projects of the program and allows the transfer of information and knowledge to take place.

Policy Support

The regional component implemented by the UNEP addresses all the 19 eligible countries for the program. The country component is implemented by the national governments and subcontracted consortia that include delegations of the European Union with the intention that policy-supported activities will lead to the creation of national action plans.

Information management and promotion

Through the online portal, the facility allows the diffusion of best-case practices, news, guidelines and advisory packages for policy forums are some of the most relevant features of the facility.

Knowledge creation

The NF initiates research on replication mechanisms and provides insights on the projects' scaling-up practices. The facility also provides strategies and tools used for implementation and replication that belong to the Asian context and the reality of each participating nation.

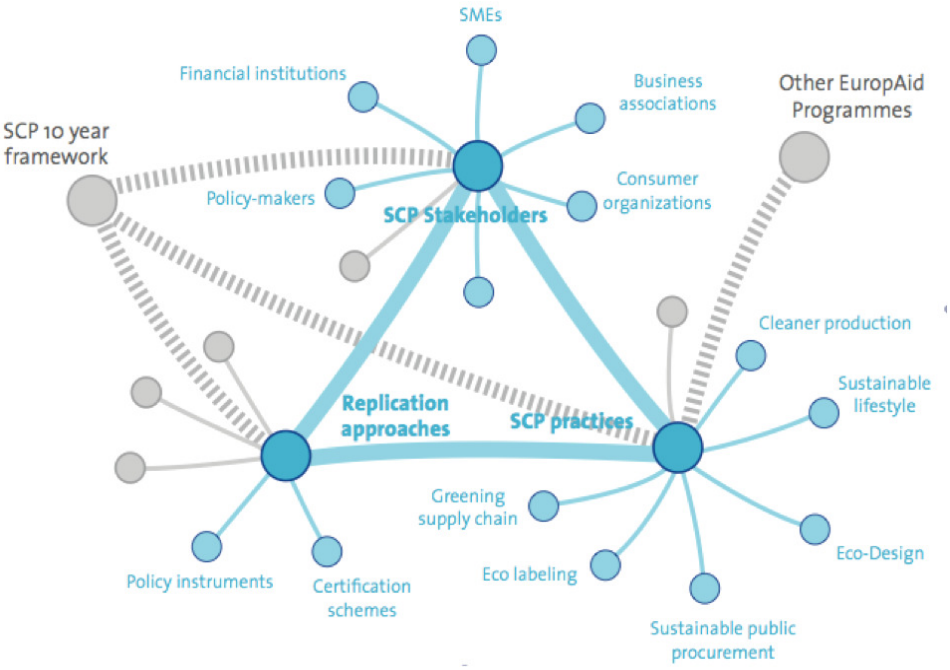

Fig. 2.4: The SWITCH Asia Network Facility. CSCP 2010

Dialogue and events

The figure 2.4 shows the nodes and connections that make of the SWITCH Asia Network Facility a sustainable innovation with many opportunities for other innovations to grow.

2.3.3 Lessons Learned

During the period of 2008–2009, thirty projects were awarded and implemented in fifteen nations across Asia. Through the Network Facility's website it is possible to access all the detailed information of each project, participating organizations, budget, reach and current achievements. Figure 2.5 presents these projects

Country based:

Bangladesh. 1 project – Leather Production
China. 7 projects - Eco-friendly Bamboo Production for Reconstruction, Efficient Electric Motor Systems, Greening Public Procurement (SuPP-Urb), Higher Efficiency of Transformers, Industrial Symbiosis, Strengthening Electrical and Electronics Sector (ESEEC), Sustainable Interior Decoration Initiative (SUS BIRD) and Train the Trainers in the Construction Sector.
India. 2 projects - Eco-friendly Electronic Waste Recycling (WEEE-Recycle) and Fair Trade and Sustainable Consumption (PRO SUSTAIN)
Malaysia. 1 project- Sustainable Production in Biomass Industries
Mongolia. 1 project - Green Products Development and Labeling
Nepal. 1 project - Sustainable Production of Lokta Handmade Paper
Pakistan. 1 project - Cleaner Production in Manufacturing Industries (SCI-PAK)
Philippines. 3 projects - Cleaner Production in Three Sectors (SMART CEBU), Sustainable Industrial Development in the Philippines and Zero Carbon Resorts (ZCR)
Sri Lanka. 3 projects - Greening Sri Lankan Hotels, Reducing Pollution in Export Sectors (EEPEx) and Sustainable Production in the Food & Beverages Industry
Vietnam. 2 projects - Adapting Corporate Social Responsibility and Mainstreaming Energy Efficiency (MEET-BIS)

Projects involving various countries:

Bangladesh and India. 1 project - Jute: an Eco-friendly Alternative for a Sustainable Future
Cambodia, Laos and Vietnam. 2 projects - Sustainable Product Innovation (SPIN-VCL) and Sustainable Rattan Industry
Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand and Vietnam. 1 project - ASEAN Energy Manager Accreditation Scheme (AEMAS)
China, India and Vietnam. 1 project -Sustainable Wood Processing and Trade
Indonesia and Malaysia. 1 project - Clean Batik Initiative

Fig. 2.5: SWITCH Asia projects. New projects will be selected on the last trimester of 2011.

The Network Facility activities prove the importance of having policy support to create sufficient demand for market "pull" and prevent counteractive practices, it is of paramount importance to ensure adequate organization along the supply chains and moreover, enable transparency mechanisms for communication within supply chains and consumers.

As the program moves on, the response of market demand also shows that government can serve as role models through sustainable public procurement, this results in econ innovation and an alternative competitive development of local industries and practices. SMEs thus tend to use more environmentally-friendly technologies and practices, encourage behavioral change so consumers also demand more environmentally friendly and socially fair ways of designing, producing and disposing of products and services.

Safety for information transfer and building relationships of trust is also a feature endorsed by the network, since it enables means of accountability and mechanism for effective up-scaling through generation of synergies and linkages between regional SCP activities and other networks. A dynamic learning program is always much more effective than a static program that only provides grants for project development.

2.3.4 Further Improvement and Ripple Impact

The Network Facility is an innovation that has been improved as the projects evolve. Though the very essence of the NF is to enhance the ripple impact of the program's projects, the success of the innovation lies on the core function of comparing results, ensuing information and disseminating results to be transformed into policies and mechanisms for scaling up and replication.

As the website of the Network Facility states, each of the project's assessments focuses on:

- Replication mechanism to scale up SCP practices
- Processes establishing voluntary initiatives
- Influencing policy-makers adapting better procurement standards
- Establishing sustainable supply-chain management
- Successful business models of technical services and networks
- Multi-stakeholder partnerships and involvement of intermediaries
- Linking to policy-makers
- Creation of ownership

The scale of the impact of each project can be measured in terms of their impact chain, which consists of seven links (inputs, activities, output, use of output, direct impact –objective-, indirect impact and the highly aggregated impact) that reinforce each other and allow distinguishing the elements for replication.

3. SCP as lever for social innovation: The way forward

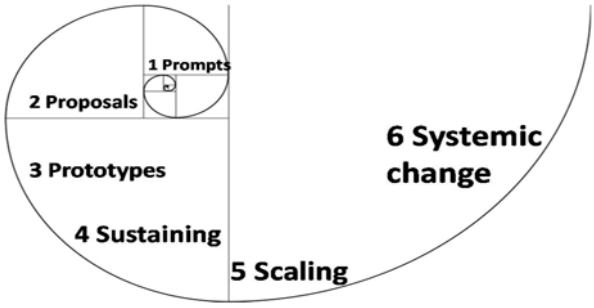

Fig. 3.1: The process of social innovation. The Social Innovator 2011

Using as a reference levels that characterize the process of social innovation described by (figure 3.1, it is possible to track the evolution of the SCP programs when sustainable innovations emerged and how these are being taken forward. The process comprises 6 levels, from the prompting of the idea (1) to the systemic change (6), proposals, prototypes and pilots, sustaining practices, and actions for scaling and diffusion are the steps innovations undergo. Each step represents various sets of challenges, finding means to overcome them prompts the creation of solutions to improve the conditions for the innovations to evolve.

The first three levels: prompt, proposals and prototypes relate to the factors needed for creating an innovation, both SPREAD and SMART were created as sustainable innovations though SPREAD is still on its very initial stage, therefore the opportunities for leveraging social innovations in economies with different levels of development, lies on the methodologies the program is experimenting with.

SMART Start-up relies on the entrepreneurial aspects that are still quite traditional for making it clear to distinguish the "sustaining" elements. Hitherto, the innovation components of SMART Start-up that can qualify as every day practices are not solid enough in terms of measurable indicators such as income generated from the enterprises modeled during the training or the impact that these initiatives are having in the communities where the trainings took place. Despite of this shortcoming –an important lesson learned that is being addressed by the program designers – the innovative components of the training program made it possible to move to the next level: scaling up and diffusion.

As the most mature program, SWITCH Asia presents the Network Facility as an innovation within the program, a leverage that happened through the acceleration phase, and by enabling the diffusion of knowledge, models, laws, mechanisms and other elements for improvement, scaling and replication, is contributing to a systemic change.

The figure 3.2 illustrates the identified levers for sustainable innovations within the presented SCP programs on their different development stages.

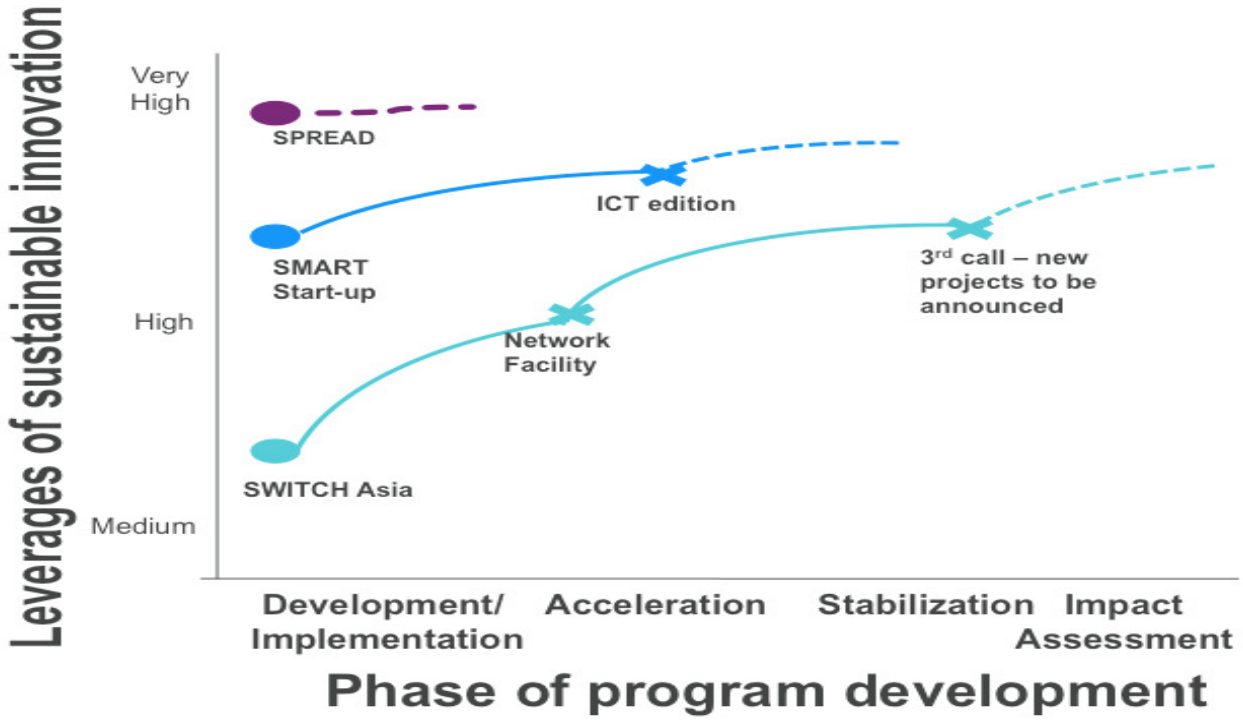

Fig. 3.2: Innovation components over development time of SCP programs

Each of the programs presents a picture of the causal relationship between SCP practices and sustainable innovations: while SCP propels the development of sustainable innovations, these in return shape the behavior of individuals and communities, directing them towards more sustainable practices of consumption and production. As part of the knowledge creation process, keeping a close track of the different stages of innovation development within each of the components of these programs, is also another task that will be translated into specific activities such as:

- elements of systemic thinking for the agenda of policy-makers
- material for creation of marketing campaigns for sustainable goods and products leading to behavioral change
- creation of comprehensive training programs to inspire and enable more innovations towards shifting existing economic structures that hamper social growth and nature preservation

Figure 3.3 shows the stage of development in which the three SCP projects are as social innovations. There is still a considerable road to go before the systemic changes become tangible, and this also means that the countries where these programs are taking place are also one step closer towards leading more sustainable lifestyles.

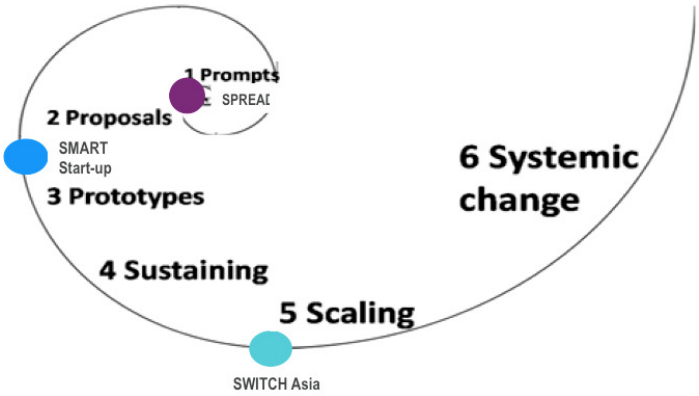

Fig. 3.3: Stage of development as social innovation of each SCP program

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