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How can social innovation challenge the degree of empowerment? The case of the first social enterprise empowering artisanal fishermen in Peru

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Peru





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How can social innovation challenge the degree of empowerment? The case of the first social enterprise empowering artisanal fishermen in Perú

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Abstract

Social innovation and its process has been studied from different perspectives in recent years. One approach is to understand the entire process of social innovation and its outcomes. Since social innovation deals with complex systems for social change, the impact and outcomes cannot be captured by conventional evaluation reports, profitability or growth in market share. As an alternative, the analysis of the empowerment as a result and process of social innovation gives an integrated way to understand this phenomenon because it shows the interaction of two concepts: agency and opportunity structure. This paper seeks to answer how social innovation can challenge the degree of empowerment of individuals? By doing so, it uses the empowerment framework by Alsop-Bertelsen-Holland (2006) and analyses the level of assets and the formal and informal institutions in the context of social entrepreneurship. The research suggest that social innovation increases the level of assets of individuals such as social, human, financial and environmental assets. It also emphasize the importance to start the process of social innovation with the identification of the team capabilities along with the recognition of networks in more than one phase.

Key words: social innovation, empowerment, social innovation process, social enterprise, artisanal fishermen, social business.

Introduction

Social innovation have been broadly discussed by the academia and professionals seeking for its dynamics and its contribution to social challenges. Although, social innovation is considered a practice-led field because it has developed with ill-defined boundaries, meanings and definitions (Evers, Ewert, and Taco, 2014), there are some agreement in the definitions by the academia referring to, new ideas that meet unmet needs (Mulgan *et al.* 2007) and how it enhances society's capacity to act (BEPA, 2010). To achieve social change, social innovation can take different paths because of the complexity of social change. Some authors agree that the starting point of a social innovation is an idea of a need that is not being met (Mulgan *et al.* 2007; Pol & Ville, 2009) and from there, it could fail attempts, make improvements and or achieve of results. The literature has focused to determine the phases or stages of the process of social innovation, however, there have been few analysis in the barriers and enablers of the process during designing, diffusing and supporting.

The path of ideas meet with several actors and an environment with formal and informal institutions that can shape the solution and have an influence in the results. The main actor are the social enterprises, hybrid organizations that combat a shared problem in the society. Social enterprises aim to benefit the community where profit distribution to external investors is limited (Defourny & Nyssens, 2013). This actor have learned to operate across the ecosystem and social innovation is one of its tool to generate, develop and scale ideas that become into solutions.

Since social sector organizations operate in a complex system and 'are characterized by a diversity of resource inputs, and multiple, distinctive, non-comparable outputs' (Nicholls, 2010) there is a need to contribute in understanding how social enterprises achieve its results and what kind of outcomes they obtain in each phase of the social innovation process. This research look to find out the outcomes of social innovation process through the lenses of empowerment and the barriers and enablers that social enterprises have to sort out. To do so, it discusses existing definitions of social innovation process and the empowerment framework. After that, it studies a case study of a social enterprise who works with artisanal fishermen in Peru and discusses the strategies for the accumulation of assets, the interaction with the opportunity structure and their social innovation process. The final section offers some concluding remarks and future research.

Theoretical framework

Social innovation and its process

Social innovation has been increasingly studied by the academia scholarship with the intention to understand this complex phenomenon and provide a dynamic framework to the private and public sector. Since the concept acquired its own space in the academia discussion, different authors have contributed in definitions, characteristics, the processes, and different ways to evaluate. However, there are still no widely shared concepts, no consensus regarding its relevance or clear boundaries about social innovation (Caulier-grice et al. 2009) neither to the monitoring and evaluating.

While some authors refers to innovative activities, products and services (Mulgan *et al.* 2007), other approaches identifies social innovation as change at the institutional level (Hämäläinen and Heiskala, 2007). Other group of definitions centered on how social innovation can be social practices, processes or product change organizational change, but also deal with relationships (Defourny & Nyssens, 2013; Kaletka, Rehfeld, & Terstriep, 2016; OCDE, 2000). Although there are several perspectives in the literature, it can be seen two shared characteristics. Social innovation refers to a 'new idea', that can be a product, service, process, business model and is motivated to find solutions to a social need, problems or challenges at the individual, community or national level. For instance, the Young Foundation (2007) defines social innovation as "new ideas that work in meeting social goals", which shows what the academia claim: an 'ubiquitous' concept. Nevertheless, at the same time, it offers a large understanding of social goals or needs where social, economic, political and environmental challenges of the 21st century can fit in.

Individuals, social movements and private or public organizations use different resources to design and implement the new ideas to develop social innovations. These resources may vary from financial, human and physical that most of the innovations use. But social innovations supports itself from political recognition, voluntary labor, and philanthropic commitment (Mulgan, 2006). For this reason, the social innovation environment plays an important role. Pol and Ville (2009) emphasizes that not only there must be an environment conducive to the creation of new ideas but also a context in which a new idea is socially innovative.

In the environment, there are actors such as the government, consumers, social organizations, markets and enterprises, with different set of interests, values and perceptions that interacts in different ways, most of them in an unpredictable manner. For instance, BEPA (2010) claim that collaboration and alliances between stakeholders are key

for the achievement of social value. These actors are embedded in specific institutional contexts that can be formal and informal. Rehfeld *et al.* (2015) at the SIMPACT Project Report places institutions as part of the economic components of the social innovation framework and based on North (1981), explains that the formal constraints are the rules of the game while the informal constraints are norms, codes of conduct, behavior conventions. What social innovation does is to challenge the configuration of these institutions and break up or transform the environment creating a new alignment where the power relations change. Some authors called this environment the 'social innovation ecosystem', in which the government has the role to create a suitable framework, the civil society to participate actively and universities to transfer know-how (Kaletka *et al.* 2016).

Since social innovation intention is to implant a new idea into individuals and society and transform their relations, it is key to analyze the process that follows in this system where several actors come together. Westley and Antadze (2010) explains that the process of social innovation emerge within complex system where the dynamics of the challenges and the innovation are nonlinear, uncertain, and unpredictable which means that there is a cycle with not start or end at the same point. Although these complexities, social innovation can be broken into different phases inside its lifecycle (Unceta *et al.* 2019). Some authors have make contributions regarding the social innovation process that helps us to analyze the dynamic from the conception of the idea until the implementation. On one hand, The European Commission (BEPA, 2010) propose four successive steps: i) identification of new, unmet and/or inadequately met social needs, ii) development of new solutions in response to these social needs, iii) evaluation of the effectiveness of new solutions in meeting social needs and, iv) Scaling up effective social innovations. On the other hand, The Young Foundation (2012) defines the six steps that social innovation pass through: prompts, proposals, prototyping, sustaining, scaling and systematic change.

Both approaches recognize that, in practice, these steps appear simultaneously and that the ongoing feedback make that process goes back to previous steps, therefore, the graphic process is represented in a spiral form. Finally, Picciotti (2017) introduce a process based on social entrepreneurships in Italy. While Caulier-Grice *et al.* at the Young Foundation claim that the social purpose of the social innovation is through a systematic change, Picciotti affirms that, in addition to the social objective, it has to be sustainable. In his process it can be seen the relations with the stakeholders in each phase that defines the paths of innovations directed at sustainability. In this model, there are five phases: i) identification of new needs of individuals and communities, ii) identification of the barriers to demand (barriers for beneficiaries, iii) identification of partners and creation of networks, iv) activation of the network and transformation of needs into effective demand, and, v) achievement of results and redistribution of benefit. According to Picciotti, the social enterprises need to develop new competences to satisfy the actual and future needs of the public objective. Technical skills related to the sector and the 'ability to access resources in the context of sustainable development' are the main competences of social enterprises.

The organizational resources and the collaboration of stakeholders in the environment will have different effects in the groups where the social problems exits. The next section shows an alternative way to measure the outcomes and outputs of the social innovation.

In the definitions of social innovation, the empowerment of the poor or vulnerable groups show up constantly as an effect or as a mean to solve the social problems. For instance, Bhatt and Altinay (2013) mention that social innovation can provide a solution by empowering the poor. Meanwhile, Rehfeld *et al.*, (2015) emphasizes that the effect of social innovation is the 'empowerment and (re) engaging of vulnerable groups' during the process or as an output. Additionally, the European Commision Bureau of European Policy Advisors recognize how the interactions between individuals can solve social problems and at the same time empower the beneficiaries which it is also an outcome because produce social capital. By doing so, the groups becomes part of the solution and has a more active role in the process of social innovation.

Empowerment is defined as "the processes by which those who have been denied the ability to make choices acquire such ability" (Kabeer, 1999: 437). Moreover, Narayan, (2005) defines empowerment as the expansion of freedom of choice of an action. In this way, empowered people can transform their desires into reality through the activities they choose and achieve a better life quality. Social innovation brings to the persons, the opportunity to choose from the options they actually value. However, the market, state or other institutions that impedes the accumulation of assets can affect the expansion of freedom.

Alsop, Bertelsen, and Holland (2006) offers a framework that allows analyzing empowerment in practice. They explain that the degree of empowerment and its outcomes, will depend on the interaction of two concepts: agency and opportunity structure. Agency is the ability of individuals or group to make purposeful choices. The person is "the agent who acts and brings about change" (Sen, 1999). In this case, the public objective of social innovation is the agent who set the goals and interests. In order to use the ability to transform choices into actions, people use their assets. The assets can be physical, financial, human, psychological, social and natural (Moser 2009). One asset can contribute to the accumulation to other asset and, at the same time, the lack of assets impedes the expansion of freedom.

The structure is the institutional environment that can give the possibility, or not, to people to transform their agency into action (Alsop *et al.* 2006). The interaction of agency and opportunity structure can define the degree of empowerment that gives to the person the option to i) have the opportunity to make a choice, ii) to use the opportunity to choose or iii) to have the desired results once the choice was used. The empowerment framework can help to understand the effects of social innovation because it measures how vulnerable people can obtain assets and agency as part of the interaction with the social, economic and environmental context.

It was said how difficult is to define a model for social innovation evaluation because 'the innovation is constantly changing and adapting in order to understand the social needs', however, the empowerment framework see the outcomes and outputs as a process. Some authors suggest that social innovation should shift from measuring as a product or service to evaluating as a process (Patton, Guijt, & Visser, 2012), therefore, using the empowerment framework can offer an important approach.

Methodology

This research seek to answer how social innovation can improve the level of empowerment of artisanal fishermen who are part of the social innovation of the social enterprise Sustainable Fishery Trade (SFT)? To reach these goal, first, it will analyze the process of social innovation and the barriers and enablers that SFT encountered. Second, it will examine the effects in the accumulation of assets and the interactions with formal and informal institutions. Finally, it will examine the strategies in each phase of the process and the level of empowerment. The scope of the study will be descriptive and exploratory because it will specify the characteristics, properties, people profile, processes and any phenomenon that can contribute to accomplish the objectives, nevertheless, it won't propose connections between them. It looks to acquire a clear image of the phenomenon from the information collected.

To describe this social process, the research will use a qualitative method because it provides richer definition of social processes, and it can give "a more insight to causality and more accuracy depth of information on certain questions" (Kanbur, 2005: 24). The level of empowerment and social innovation are complex problems that requires some level of openness and flexibility from the researcher. The research applied semi structured interviews to twenty artisanal fishermen who participates of the social innovation at the North of Perú: El Ñuro – Piura. They represent all the artisanal fishermen who worked with the social enterprise SFT in the area. Although SFT works with artisanal fishermen in all the Coast of Peru, the reason why it was selected "El Ñuro – Piura" is because the relation is the longest (more than 2 years) and it is more convenient for the analysis of outcomes. It also carried out three interviews to founders of the social enterprise.

To analyze the social innovation process, the study will use the phases of the author Picciotti described above because it emphasizes in the importance of the interaction of institutions and networks in many phases. The empowerment framework will serve to analyze the outcomes of the social innovation process. In Table 1 is presented the variables that will be examined.

Table 1: List of variables

	Assets/institutions	Variables	
	Human	Education level, new knowledge	
Assets	Material	Ownership of the boat, access	
		to new boat accessories	
	Financial	Access to credit, savings	
	Psychological	Capacity to envisage a better	
	, ,	future	
	Social	Relations at the household level	
		and community level	
	Organizational	Member of organizations	
	Natural	Conservation of natural	
		environment	
Institutions	Formal institutions	Access to financial services,	
		support to artisanal fishermen	
		from Government	
	Informal Institutions	Social norms	

Source: Elaborated by author

The qualitative data analysis from the interviews will help to establish the linkages between the variables and provide a comprehensive description of the phenomenon of social innovation and empowerment. The process of qualitative data analysis will discover regularities by identifying, categorising the variables and identifying patterns (Tesch, 1990) in each step of the social innovation process related to the outcomes (accumulation of assets and interactions with institutions).

Results

The case study of the social enterprise "Sustainable Fishery Trade" (SFT) allows to analyze the process of social innovation and its implications to the empowerment of one of their public objectives: artisanal fishermen of the coast of Perú. The main problems fishermen faced were the high prices that traditional middlemen impose to them, the low value of their products, the financial dependency with middlemen the weak infrastructure and the low awareness to protect the ocean resources. They were not able to make direct selling to the restaurants in the capital of Perú, Lima. Before any fish or seafood can be served on a plate, it passed through at least 5 to 6 intermediaries and fishermen receive the smallest piece of the pie. SFT solution was to connect fishermen directly with the best restaurants of Lima, breaking the traditional supply chain, and recognizing the fisherman's effort while promoting sustainability of marine resources.

The social innovation of SFT, founded in 2016, relies on the creation of a fair trade business model where fishermen receives between 30%-50% higher income than if they would sell to the current market system. SFT delivers a service to fishermen and restaurant but to achieve this. They develop and track the entire process such as the training of artisanal fishermen, logistics, develop equipment for boats, communication and contacting with restaurants. To do this, SFT takes a fee on every transaction with restaurants. The social enterprise believes in the power of the relationships between artisanal fishermen, chef and final consumers in order to share a sustainable vision in the consumption patterns of seafood. To create new relationships, or challenge the actual ones, they follow a strategy that will be analyzed applying the five phases of social innovation process by Picciotti.

1. The process of social innovation

The process of social innovation that SFT went through, follows paths of innovation that has many similarities with Picciotti model, however, some of the empirical evidence show certain variations that stablish new ways to conceive the social innovation process.

i) Identification of new needs of individuals and communities

The founders of SFT recognized the new needs of artisanal fishermen before the social enterprise was founded. The reason of this responds that each partner have worked before with fishermen in past projects. Therefore, they have information of the precarious context and the lack of resources of fishermen as a result of years working in organizations that creates social value around fishing sector (NGOs and social responsibility programs). In these past experiences, the opportunity to interact in the institutional context allow them to identify the actors, their interests, resources, influence capacity, among other characteristics.

For years, the founders testified how different social interventions tried to break down the barriers that impedes that fishermen can improve their incomes and have a better life quality, but no one achieve a sustainable result. As long as fishermen are dependents to many middlemen there will be a vicious circle. SFT created a business model that seek to increase fishermen incomes and empower them in their local context.

ii) Identification of the barriers of beneficiaries

In the second phase, SFT analyzes not only the barriers but its causes and effects. It was also important to mention that for each barrier, it was identified the actors that might affect positively or negatively. The lack of financial and physical resources, technical knowledge, low environmental awareness and low quality of products were preventing fishermen from integrating to a better commercial channels. Regarding the low environmental awareness, fishermen are forced to catch larger amounts of fishes because the prices they receive do not cover its expenses. This practice endanger the sustainability of marine resources.

As a consequence of the low incomes, it was difficult for them to keep savings or access to loans to buy its boats and accessories. Most of fishermen used to rent the boats or borrow from family and friends. Moreover, their boats did not count with the equipment to conserve the fishes in good conditions. Concerning the lack of technical knowledge, most of fisherman only have primary education. They left the school when they were teenagers or kids to follow their fathers in the fishing activity. Most of these barriers are transmitted generation after generation between fishermen, for this reason, they prefer that their kids to study a career, nevertheless, they have economic limitations to pay the studies and the only option is the fishing activity.

iii) Identification of partners and creation of networks

To design the social innovation, SFT members incorporated the preexistent relations with fishermen to its model. Artisanal fishermen were the first partners of the social enterprise because of the trusting relationship with some leaders. Fishermen leaders convened to other fishermen, who they use to work with, to incorporate to the business model. This strategy assured that in each port SFT has a network of fishermen commanded by a leader who can be at the same time the connection to SFT.

The second partners to identify were the buyers, in this case the chefs or owners of the restaurants. The idea was to work with restaurants were seafood represents more than 40% of the menu, willing to buy products with fair price and committed to sustainability. In Lima, there are 12,000 "Cevicherias", restaurants that sell seafood as the main dish, however, just a limited number have environmental awareness and this market size represent about US\$ 3 million in sales.

After this, it was important to contact public institutions to stablish collaborative relationships, nevertheless, in Perú, this sector is one of the most forgotten by the State. For this reason, SFT had to lead the process and look for resources in other spaces. As Piccioti (2017) claims, processes of innovation require an adequate investment of capital and SFT was entering into a new area of intervention where many organizations entered in the past. For this reason, the second group of partners more important were the one with financial resources. As Kistruck and Beamish (2010) point out, social enterprises can establish new entities for financially challenging projects which makes the partners more involved in the process. SFT competed to access to funds for technological

startups and/or innovative enterprises. They won several prices from incubators, universities, social investors and public funds. From this relations they also had access to training, contacts, acceleration services, innovators forum and access to other networks.

In this phase, the team abilities and know-how were crucial. SFT team already had negotiation abilities, technical skills in the sector and connections with different stakeholders. The new ability they required to develop was fundraising but the circumstances contributed that the team acquire this skill since they only started the social business with 200 hundred dollars and rapidly obtain funds.

iv) Activation of the network and transformation of needs into effective demand The solution of SFT was to connect fishermen directly to the top restaurants in Lima. SFT was in charge of negotiating the best price from restaurants based on the specific demand, weather conditions and the state of the marine species. SFT's products are of high quality, delivered on time and in a tailored presentation for each client, respecting their high standards. All SFT'S clients are top class restaurants, most of them are among the best fifty restaurants in the world.

To ensure a good quality product, SFT encourages fishermen positive conservation practices and minimizes over-fishing of aquatic species by offering training in sustainable harvesting to fishing communities and ensuring traceability. The network of fishermen increased when they started to see the results of the social innovation, specifically, the increases in revenue, which allowed the consolidation of relationships with fishermen. The face-to-face contact with them was essential along with a friendly treatment. The foundation of trust was to fulfill the word.

In the case of fishermen, there was an ex ante sense of trust, however with restaurants they have to build a new relationship. Thus, SFT settled with restaurants specific requirements on the product and delivery services. It created a professional trust that was reinforced with training to chefs. In these trainings, SFT brought together the fishing reality to their kitchen so they can know the hard labour of fishermen. As a consequence of this, it was expected that chef being sensitized and generate a change in the fishing sector from gastronomy.

V) Achievement of results and redistribution of benefit
One of the main outcome that the social enterprise pursuits was to improve fishermen incomes. After three years of work, 25 fishermen are beneficiaries of the social innovation only in "El Ñuro" (in all the Coast of Peru, 135). The new fair trade business model accomplished that fishermen receive between 30% and 50% higher than in the past market system. Moreover, 40 restaurants are clients of the social enterprise. About the results related to empowerment, the next chapter will show the analysis.

The social enterprise followed the five steps of the process of social innovation that Piccioti describes. The identification of needs, barriers, partners and networks were fundamental before the design of the social innovation. Likewise, the activation of the network was the main strategy that SFT needed for the implementation of the business model. However, in this social innovation there are some features that are

not distinguished in Piccioti model. For instance, once the networks were integrated to the social innovation process, it was a source of information to upgrade the innovation. The interrelation with different networks improved the innovation and made that the process were non-linear (Figure 1). Each network opens the access to new resources such as technological and enables the refining and testing of new ideas to improve the social innovation.

Another key aspect is the team creation and its capabilities as the first step of the social innovation process. The identification of new needs, the inspiration and diagnoses comes from people who experienced and understood the social problem. These people accumulate significant capabilities that are the basis to start a social innovation. For this reason, it is considered relevant to start with the identification of the set of competences that the team founders have. As a result of this, the team can clearly identify its limitations and strengths whenever they have to deal with the causes of the social problems.

The process is non-linear because the activation of networks demands the development of new competences from the team and the social enterprise more than once. Therefore, the innovation can be sustained to ensure new resources and create more sharpening ideas to attend new demands. Finally, in this research, scaling, diffusion, and systemic change is not shown because the social innovation studied has three years in the market and it is just starting the phase of scaling.

Figure 1: Comparisons between models of social innovation process

Piccioti Model Achievement Activation of the Identification Identification Identificatio of results network and of new of partners n of barriers transformation of and needs of and creation needs into to demand redistribution individuals effective demand of networks of benefit Model with new paths Team Identification creation and Upgrade of of new recognition the solution needs of of team and scaling individuals capabilities Identification of partners and creation of networks Identification of new Activation of the opportunities Achievement network and from networks of first results transformation and of needs into redistribution effective of benefit demand

2. Effects of the process of social innovation in the empowerment

This section will analyze the effects of social innovation by using the empowerment framework. The first part of the analysis will concentrate in the dimension of assets and the structure opportunities. As it was explained, the level of assets can enhance or constrain the agency, as well as the institutional context. In this way, the social innovation can play a key role in fishermen who can have the opportunity to make effective choices and transform it into desired action. The second part of this section will analyze the barriers and enablers of the social innovation that limit or enhance the agency of fishermen and the outcomes of the social enterprise.

2.1. Assets of the partners of the social enterprise: Artisanal fishermen

The first asset to be analyzed is the human asset. Fishermen received technical training such as responsible fishing, better handling of products, and survival in the sea, among others. SFT invest resources in these training because, first, the current clients demand quality of products, and second, with the new knowledge, fishermen would have more opportunities to reach directly more markets. Before SFT, fishermen had less power to negotiate with other market agents and they used to think that middlemen, for instance, were a 'necessary evil'. After the training, fishermen know that, i) they can do their activity better and earn more, ii) work by their own without intervention of middlemen, iii) acknowledge who receives their products which gives them more confidence, iv) be aware they can contribute protecting the sea. The fishermen shared: "I use the training for security and first aid, I have never seen a training like that. At the moment, we know better what to do in case of emergency in high seas" (F6). "I received training about hygiene in the boats, also regarding our moods, they (SFT) always lift up our spirits..." (F10). "When working with quality of the products, once a girl (FST) came and taught us how to treat better the tuna fishing so we can have better quality to sell to the restaurants" (F12).

Regarding the material asset, before the social innovation, fishermen used to rent their boats from family and friends and, in some cases from middlemen. This dependency with the main resource they use in their fishing activity did not give them the capacity to act. Moreover, it was difficult for them to buy fishing accessories since they did not have savings. For this reason, they have to borrow money from other people and feel conditioned. After the social innovation, they have more incomes to buy their own boats and fishing accessories. This is associated to the expansion of the financial assets. Since they have more incomes, they were able to have more savings and apply for credits without any restrictions from the banks. In a sense, the power relations between fishermen and the bank system balanced in favor of fishermen. Some of the fishermen testimonials affirm this analysis: "With this project (social innovation) I can save money because I can get a fair price, I have also apply for a credit" (F3). "From the project I was able to repair my boat and have some savings for my house" (F12)

Likewise, fishermen increased their psychological and social asset. Along the social innovation, they have to coordinate and socialize with other fishermen which amplified the trust among them. Because they were together into the same innovation, they shared their anxieties and concerns about the new projects of the social enterprise and once they saw the results they feel more secure with their activity and the people involved. In

the same way, their capacity to aspire have increased. Since they proved themselves that it is possible to have better incomes, fishermen want to improve their activity even more: "I would like to own a bigger boat and to have my house finished" (F2). "I want to keep working with other fishermen and continue participating in the improvement of fishing, doing projects, training that benefits all of us" (F5).

With regard to the organizational asset, there were no changes registered. Although there are greater confidence among fishermen, the establishment of new organizations, federations or associations was not presented after the social innovation. Most of them already belong to the Guild of fishermen, an organization that protects their interests before the government and private sector. Apart from that, the social enterprise coordinate with one fishermen leader in the artisanal landing and after that, each agreement is at an individual level. It is likely to say that for these reasons, fishermen saw no need to create a new organization.

Finally, at the natural asset, fishermen show more self-awareness about the importance to conserve natural resources. A shift occurred in the discourse of fishermen who are more alert to the sustainability of fishery resources. Now, they take into account the effects of their activity and share with their partners the importance to fish with better techniques to protect the sea resources.

2.2. Enablers and barriers: the structural opportunity

This section analyzes the enablers and barriers in the institutional context that the social innovation faced. This corresponds 'to the rules of the game' that can shape or constraint the fishermen interaction with his business activity and the social innovation. First, it corresponds to examine the enablers. They are considered the factors that operate to make a positive influence in the accumulation of assets and, more importantly, in the level of empowerment. Three factor were found as enablers: the support of the banking system, the funds for social innovation and the social entrepreneurship ecosystem.

Perú is well known for offering a favorable environment for the development of the microfinance sector. Public and private sector has been working together to improve financial inclusion and place it in the national agenda. As a result, there are policies and regulations that allow microfinance institutions to develop products and services that fits into fishermen needs. For instance, Municipal Savings and Loans Banks offer to fishermen credits without to many restrictions. This is an advantage for the social innovation to growth because fishermen can access to financial resources to improve their activity together with the social entrepreneurship.

The second factor is the presence of funds from the central government and the private sector. In the last five years, the Ministry of Production have implemented National Awards and challenges for innovative startups. SFT could access to one of these prizes and implement technological solutions for fishermen. Conversely, the private sector have also available funding for social entrepreneurship. NeSsT, an international incubator, offers tailored financing and one-on-one business development support to SFT that help their social innovation move from startup to fully scaling business.

Finally, in Perú, the social entrepreneurship ecosystem has been more dynamic. First, the establishment of the first platform that brings together the social and environmental entrepreneurship (Kunan) has promoted commercial channels, shares knowledge.

networking, and gives an annual prize for the social enterprise with more impact. Second, there are more incubators specialized in social business who offers services and connects them to financing. Third, the academia is more engaged to social entrepreneurship and has adapted its programs with new content, created spaces where social entrepreneurs can share their experiences to students and developed research to analyze the social business models in Perú.

Regarding the constraints, most of the barriers come from the formal institutions, specifically, in the government. At the National level, some of the problems are that most of the public policies favour the interest of industrial fishing. The new regulations allow big boats to fish in the areas that belongs to artisanal fishermen which takes significant resources away. Equally, there are social programs in the fishing sector for artisanal fishermen that creates dependency. The government buys the fish from fishermen but pays above market prices. As a consequence, some fishermen prefer to belong to the social program rather than commercialize with the social enterprise SFT.

At the local level, on one side, the corruption in the administration of the port creates difficulties to fisherman to obtain fishing licenses. It delays the projects that SFT wants to start with them and takes lots of resources, such as time, from the SFT team. On the other side, the local government keep distances of fishermen problems and concerns. They are not involved in the projects and have a lack of proactivity. In many opportunities, SFT has convened local authorities to the project but they only received negative answers. In addressing these barriers and exploiting opportunities, SFT developed specific strategies that will be analyzed in the next section.

3. Strategies for the accumulation of assets during the social innovation process

The importance to analyze the barriers and constraints that the social innovation faced, helps to understand the context embedded by actors with specific rules and informal agreements. Through the process of social innovation, SFT had to challenge the institutional context and create strategies to have a positive influence in the accumulation of assets. This section organizes which strategies were used in each phase of the social innovation process and it also arranges the accumulation of assets and the structural opportunities.

Table 2: Strategies used in the process of social innovation

Social innovation Process	Strategies	Accumulation of Assets and/or influence in the Structural opportunities
. ~	Co-founders with past experiences in the sector, bonds, bridges and linkages with fishermen.	No changes

Identification of new needs of individuals and communities	Creation of a business model to connect fishermen with restaurants directly. Before fishermen has to pay middlemen to sell their fish and obtain low incomes.	No changes
Identification of the barriers to demand	Develop technology and training to fishermen	No changes
Identification of partners and creation of networks	Negotiation with restaurants owners and chefs, mobilize resources from public and private organizations.	Active social enterprise ecosystem.
Activation of the network and transformation of needs into effective demand	Encourages positive conservation practices and minimizes over-fishing of aquatic species through training and supplying products from different coves and ensuring traceability.	Improvement of human capital, psychological and social capital. Change the power relations between fishermen and chefs.
		Funds from central government for social innovation initiatives.
Achievement of results and redistribution of benefit	Give information to fishermen about the results. Fishermen receive directly the economic benefits in each transaction.	Fishermen accumulate more material, natural and financial assets.
Upgrade of the solution and scaling	Look for new markets outside Perú to increase buying power Design of new technology	Funds from national government and international organizations for social innovation

The strategies are carried out through agreements with fishermen and chefs of the restaurants, both, the main actors of the social innovation. Once SFT had the mutual conformity from these actors, the next approach was to raise funds. The formal institutions such as the National government and social incubators, allocate resources for social enterprises with innovations strategies. There were three factors that enabled SFT to earn the funding: i) the high potential to create social value, ii) the use of technology in the enterprise and, iii) the close understanding of the team with the social problem. The structural opportunity – formal institutions - provided possibilities to SFT to transform the ideas into action.

The accumulation of assets started in the phase: 'activation of the network and transformation of needs into effective demand'. The improvement of human, psychological and social capital were identified in fishermen after the training and commercialization. According to Alsop-Bertelsen-Holland (2006), one asset contributes to gain other assets and

enhance agency. This affirmation was probed because after consolidating their human and psychological capital, fishermen could accumulate material, natural and financial assets.

Finally, for the last phase: 'upgrade the solution and scaling', the intervention of the institutional context was necessary through the funding from international organizations, mainly. Moreover, the accumulation of social capital give fishermen the confidence to incorporate new technology in their boats and have more benefits from it. For SFT, building-up social capital was its priority from the beginning and one of the main reasons for the social innovation to success.

Conclusions

Social innovation has received broad and complex definitions, however, there is an agreement that has to be new ideas that resolve social problems. People with past experiences in social organizations propose these new ideas because recent projects or interventions have no offered the best approach. By using their knowledge of the social problem and networks, they can identify the new needs. For this reason, in the process of social innovation, the recognition of team capabilities and networks should be more visible. It is suggested to add as first step of the process of social innovation, the team creation and recognition of team capabilities. Ideas come from people and teams, therefore, the process should start with the analysis of the assets that innovative people have.

Regarding the effects in the accumulation of assets of the social innovation, the research suggest that the social innovation increases the level of assets of individuals such as social, human, financial, psychological and natural assets. During the process of social innovation, fishermen had the capacity to make effective choices and run their activity to obtain the desired outcomes. In the structural opportunities, the participation of an active social ecosystem, the support from the national government and social organizations enabled SFT to put ideas into action.

Nonetheless, their ability of fishermen to make purposeful choices was influenced by some barriers in the formal and informal institutions. Corruption, lack of local government involvement and dependency of social programs had two consequences in the process and outcomes of social innovation: it delayed the implementation of the ideas and the possibility to reach more fishermen. As a result, in the local area were the social innovation took place, SFT acted not only as a social enterprise, but as a type of local government. The strategies of SFT focused on creating and maintaining the trust of fishermen so they can act as entrepreneurs and citizens. As a result of the intervention, some fishermen raise their voice to demand a major involvement of the government in the fishing artisanal activity. Moreover, they act as responsible entrepreneur who preserve the natural resources.

The analysis of this social innovation has enabled to recognize that social enterprises during the process of social innovation activate their networks from the beginning to the scaling up of the solution. In this process, it is key to recognize the assets that the public objective is accumulating, so they can rely on these assets to acquire more. Moreover, the interrelations of the assets with the structural opportunity will help to re-direct the strategies and efforts. Barriers from formal institutions takes more time to sort out but at the same time can be the most strategic to attend in the social innovation process.

The implications of the research are, from the theoretical perspective, it increases the debate on the convergence of networks in more than one phase of the social innovation process,

besides bringing the importance of the recognition of team capabilities as the first phase. From a practical point of view, it suggests that managers of social enterprises could monitor and evaluate their outputs and outcomes as the accumulation of assets of their public objective. The limitations of this study is the research extent because it only includes one case study. Future research should expand the unit analysis and enlarge the scope of the study to reach aspects of scaling and upgrading solutions.

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