The Role of Project Management in Disaster Recovery Projects: Tsunami Lessons from Japan

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Introduction

Japan's 2011 catastrophic disasters have had devastating effects on the economy and the livelihood of the communities affected. Given the complex and multi-layered consequences of such disasters, recovery and reconstruction pose enormous challenges requiring the involvement of multiple stakeholders and the application of various project management approaches in order to "build back better" (Clinton, 2006; Mannakkara and Wilkinson, 2012).

Understanding the differences between conventional projects and disaster recovery projects can lead to a better chance of success in disaster recovery projects for although they have unique features and challenges many of the Project Management key tenets are still relevant for disaster situations. Where conventional Project Management tools do not appear to work, they need to be adapted to the disaster context or new tools need to be developed to account for the challenges (Yi and Yang, 2014). However, the application of project management tools is not sufficient, 'active leadership' is needed throughout all the phases of the project life cycle (LaBrosse, 2007). Active leadership is expressed as a combination of business/ technical skills and softer social skills such as compassion and understanding of the local culture.

The paper highlights aspects of project management that can make a significant contribution to improving the outcomes of disaster recovery projects, focusing in particular on the role of active leadership in stakeholder engagement and management. A qualitative study was carried out over two years (November 2013-November 2015) in Minami-Sanriku, a municipality from North East Japan which was affected by the 2011 tsunami. We focus on the Nagasuka beach recovery project which involved multiple stakeholders and was primarily led by community leaders. We examine the role played by the local community leaders in engaging, liaising and managing multiple stakeholders, an in particular, we analyse their 'active leadership' in the context of the local Japanese culture. Such 'active leadership' is seen to be at the heart of effective stakeholder engagement and management in recovery projects (Baroudi and Rapp, 2014).

Our study sheds light on the processes by which active leadership was enacted by Minamisanriku community leaders who played a key role in communicating, liaising and collaborating with other relevant stakeholders involved in the Nagasuka beach recovery project. Our findings demonstrate the potential to cross pollinate project management approaches with disaster management to aid and enhance the success of disaster recovery projects (Chang et al, 2011).

Disaster Recovery and Reconstruction

An important strand of literature on disaster recovery focuses on the restoration and recovery of businesses. Studies of reinstating order in the retail system (Ilie, 2011; Fujioka, 2012; Khazai et al., 2011) and of managing supply chains in crisis situations (Park, Hong and Roh, 2013; Mackenzie, Santos and Barker, 2012; Matsuo, 2014; Bradley, 2014; Day et al, 2012; Holguin-Veras et al, 2014; Kumar and Havey, 2013) abound. These discussions have to some extent contributed to a better understanding of the recovery process, as business continuity and disaster recovery are often intertwined. However, the discussions are mainly focused on large businesses and global supply chains, rather than exploring how small, community-based businesses rebuild themselves from within. Therefore, grassroots voices and perspectives are ignored by the disaster recovery literature.

Another strand of research has identified the important roles of government, NGOs, volunteer groups and other international agencies (Ismail et al 2014; Von Meding, Oyedele and Cleland, 2009; Avenell, 2012; Sazanami, 1998; Takayose, 1999; Bosner, 2012) in aiding the disaster recovery, especially in terms of handling disaster relief, funding, infrastructure rebuilding and the quick deployment of relevant agencies. Critics are quick to point to the shortfalls of government-led recovery and the inefficiency of the traditional model of top-down governance (Sorensen and Funck, 2007; Hayashi, 2012), in terms of its inability to understand and meet the needs of the local community (Murakami and Wood, 2014) due to inadequate leadership (Matsumura, 2011).

Community involvement is seen by many authors as an important ingredient in the successful management of disaster recovery processes (Shaw, 2014; Murphy, 2007; Yusui, 2007; Aldrich, 2011; Vallance, 2011; Takazawa and Williams, 2011; Ireni-saban, 2012). Early research by Evans (2002) shows that the Japanese practice of Machi-zukuri (community-based planning) worked well in some cases. This bottom up approach is radically different from the traditional top-down model that remains dominant in Japan (Matanle, 2011, Sorensen and Funk, 2007). Recent studies (Okada, Fang and Kilgour, 2013; Ireni-Saban, 2012; Murakami and Wood, 2014) suggest that community-based decision making is an effective approach in terms of understanding and communicating community needs and enhancing resilience in disaster rebuilding. The theory of "building back better" has received much attention from scholars of disaster recovery strategies and policy makers (Clinton, 2006; Mannakkara and Wilkinson, 2012; Fan, 2013; Kennedy et al, 2008; Alexander, 2006; Lloyed-Jones, 2007). At the heart of this concept is an acknowledgement that communities must drive their own recovery working in partnership with other stakeholders (Baroudi and Rapp, 2014; Cole and Buckle, 2004).

Project Management

As the literature above shows, disaster recovery projects need the involvement of a wide range of stakeholders such as government, NGOs, volunteer groups, international agencies as well as the disaster stricken community. The successful engagement and management of multiple stakeholders is argued to be a key process upon which many other aspects of the recovery process will depend. For example, Chang et al's (2010, p247) study on disasters in Australia, China and Indonesia examines the challenges of resourcing and finds that the

success of solving resourcing issues "depends on multi-stakeholder collaboration and the development of policies, plans, and tools to allow market flexibility, donor management and government intervention." Similarly, Meding, Oyedele and Bruen's (2009) study on NGOs as one of the key stakeholders in disaster reconstruction projects finds that NGOs encounter significant barriers in liaising with other stakeholders and implementing their tasks, calling for the development of *a competency-based reconstruction theory* (which combines the fields of disaster management, strategic management and project management) to serve as the basis for the introduction of best practices to be followed by all stakeholders involved in reconstruction projects.

Another study by Ingram et al (2006) highlights the need to balance short and long term needs (that relate to community vulnerability reduction) in the context in which governments are pressurised to make rapid responses that may have a negative impact on the longer term development of the community. This short/long termism dichotomy becomes a dilemma that requires negotiation with multiple stakeholders. A recent study by Baroudi and Rapp (2014) identified a number of stakeholder issues in disaster recovery projects from a contractor perspective. The research suggests that practitioners need to consider the potential conflict between stakeholders' interests and improve stakeholder management to avoid any negative impact on the success of the project. Their findings support research carried out by Mannakkara and Wilkinson (2013, p2) who argue that "the ability to achieve 'build back better' during recovery is dependent on stakeholder operation" which requires better stakeholder management in terms of clear roles and responsibilities, better information exchange and proper training.

Stakeholder issues, then, seem to be one of the key challenges in disaster recovery projects. Collaboration and communication amongst stakeholders becomes even more critical and urgent in crisis situations when compared to conventional projects. Some scholars have identified the important role a project management approach to stakeholder management could play in disaster recovery projects (Ismail et al., 2014; Baroudi and Rapp, 2011; Baroudi and Rapp, 2012; Hidayat and Egbu, 2010). In response to the 2004 Indian tsunami, the Project Management Institute (PMI, 2005) has developed project management methodologies for post disaster reconstruction for those who "provide the kind of leadership and clarity of thought needed to help in the reconstruction effort" (PMI, 2005 page number). While the methodology has been recognized by many as helpful, it has also attracted some criticism from scholars such as Pant and Baroudi (2008) who argue that it places too much emphasis on technical skills and ignores the soft skills needed for managing projects.

Ismail et al's (2014) research on project management methodologies for post-disaster reconstruction highlights the critical success factors that contribute to the performance of international NGOs in post-disaster recovery projects. The research finds that one of the most influential factors in the success of project delivery is stakeholder capacity. Another study by Hidayat and Egbu (2010) which investigates the role of project management in disaster recovery projects stresses the management of project stakeholders, interface issues and effective communication amongst stakeholders as the most important aspects of effective project management. Baroudi and Rapp (2011) provide a comprehensive review of disaster

responses and recovery operations from a project management perspective, highlighting the important role of project stakeholders, project lifecycle and related aspects that can lead to improved outcomes in disaster recovery projects. While such research regards project management methodologies and approaches as central to successful recovery and reconstruction projects, other studies appear to be more sceptical.

For example, Crawford, Langston and Bajracgarya's (2012) research on the Queensland floods (year) examined institutionalised discourses concerning policies, procedures and structures for disaster management with the view to identify the role of project management in disaster recovery projects. Their findings suggest that project management played a minor role in the disaster recovery project studied as conventional project management tools were too bureaucratic and time consuming to suit a situation that required a rapid response. They argued for the need to rethink the role of project management in building capacity for disaster resilience by paying more attention to the special features of disaster recovery (Crawford et al, 2012).

Despite a considerable literature on disaster recovery and the recognition of the role of project management in disaster recovery projects by many scholars (Baroudi and Rapp, 2011; Hidayat and Egbu, 2010; Ismail et al, 2014), there are very few in-depth cases studies that showcase the important role of stakeholder engagement and management in disaster recovery projects (Crawford et al., 2012) and even fewer studies exploring community leadership and its role in stakeholder management within disaster recovery projects. Research by Leadbeater (2013) on Victorian Bushfires (year) demonstrate the critical importance of local community leaders in disaster situations and their capacity to shape and drive disaster recovery. However the study fails to make any connections between community leadership and project management methodologies applicable to disaster recovery projects.

LaBrosse (2007) identifies a number of key tenets of project management relevant to disaster recovery projects, one of which is active leadership. She argues that "hope comes from active leadership. In the disaster recovery effort it is important to give people a safe environment where they can communicate and share their fears and concerns" (2007, p89). 'Active leadership' is seen as key to rebuilding social capital (Dhillon and Randle, 2005) and to bridging service provision and community needs in the planning and the delivery of the reconstruction (Olshansky, Johnson and Topping, 2003; Healey, 2009; Olcott and Oliver, 2014; Nakagawa and Shaw, 2004). Active leadership relies on soft skills as well as technical skills are key to meeting the project objectives. Community leaders who display active leadership are capable of aligning and managing the needs of all relevant stakeholders as well as meeting the objectives of the recovery projects. Our study focuses on the role of active leadership in the success of the Nagasuka beach recovery project in Minami-sanriku, Japan.

Background to the study

On March 11, 2011, the largest ever earthquake and ensuing tsunami hit the Tohoku and

Kanto districts in the Northern and Northeastern area of Japan. The earthquake had a magnitude of 9.0 and the tsunami waves reached heights of up to 40.5 meter. One of the authors was at the time visiting Tohoku University. Although the tsunami did not hit this area directly, he was in a campus dormitory without electricity and water for three days with an outside temperature of 0 degrees. In fact, about 4.4 million households in Northeastern Japan were left without electricity and 1.5 million without water for weeks.^[43] Four years later after the disaster, a report by the National Police Agency of Japan (NPAJ) confirmed 15,893 deaths, 6,152 injured, and 2,572 people missing across twenty prefectures (2015). An earlier NPAJ report (10 February 2014) listed 127,290 buildings as totally collapsed, with a further 272,788 buildings as 'half collapsed', and another 747,989 buildings partially damaged. In addition, the earthquake and tsunami brought about significant damages to roads and railways, the collapse of a dam as well as fires in many areas. According to the Reconstruction Agency, over 470,000 people were evacuated from their homes and in 2015, 70,000 were still in temporary housings.

According to the Mitsubishi-Tokyo UFJ Bank (we need the reference), there have been significant direct and indirect economic impacts. First, the earthquake and tsunami have caused direct damages to the production facilities and activities. Second, there have been indirect consequences such as a slowdown in production, in the supply chain and logistics and inefficiencies in other economic activities. However, this natural disaster has caused also long-term problems in Japanese economy. After four years from the disaster, the Reconstruction Agency (September 11, 2015) indicates that while of most infrastructures have been recovered, a number of serious problems still remained, such as the relocation of residential and commercial areas in particular.

In addition to economic impacts, the 2011 disaster has had a deep effect on the Japanese psyche. Survey data indicate fundamental changes in the values and life styles of the Japanese people. Nippon Hoso Kyokai (NHK), the public broadcasting station, conducted an attitude survey on the Japanese mind set before and after the disaster and found significant changes in family values, which after the disaster emphasised to a higher degree family ties and stronger relationships between parent-children and wife-husband (NHK, 2012). The survey also found that the expression of affection and benevolence intensified post Tsunami along with the importance individuals placed on their local community. A survey conducted by the Cabinet Office on changes in attitudes in the youth (people in their 20s and 30s) found that their definition of happiness changed dramatically after the disaster. Happiness is equated to health, family, household and community relationships and is defined by reflecting on the impact of the disaster. The media discourses also changed. From a neo-liberal language that valued selfishness and winning, discarded loosing and saw life as a game prior the tsunami, the post tsunami media discourses elevated the centrality of social ties, knots, and communal solidarity.

It is against this backcloth that we conducted our research in the Minami-sanriku area, starting with fieldwork in November 2013 and continuing with interviews with key community leaders and other relevant stakeholders over the following 24 months. The

population of Minamisanriku is about seventeen thousands, making it a relatively small town on the Pacific coast of the Miyagi prefecture. It is surrounded by mountains and living areas face the Pacific Ocean. Its main industries are fishing and marine product processing (Seki & Matsunaga, 2014). The tsunami reached Minamisanriku about thirty minutes after the earthquake, killing 778 people (566 accounted deaths and 212 people still missing). 9746 people were immediately evacuated and spread across 33 different facilities such as schools and community halls. In May, 2011, many of them started to move to temporal housing. Accommodation consisted of very small panelized houses which were very cold in the winter and very hot in the summer. Lack of insulation also meant that the level of noise was rather high, making them overall not very comfortable. The tsunami also destroyed other important living facilities, such roads, schools and hospitals. The market and shopping facilities were also damaged. So was the Nagasuka beach which used to be two kilometres long of beautiful golden sand and had thousands of visitors each year. But due to tsunami, the golden sand was washed away and debris was washed up on the beach which greatly affected the beauty and functionality of the seashore.

Research design and data collection

A single qualitative case study focusing on a beach recovery project was selected in order to allow for an in-depth scrutiny of stakeholder engagement and management within a specific disaster recovery project. Qualitative case studies are becoming more accepted in the field of operations and project management (Barratt, Choi and Lee, 2011). Yin (2104) defines the case study as a strategy of research that focuses on a contemporary phenomenon within its wider context and uses multiple methods and sources of data. He argues that single case studies are useful when they are 'revelatory', i.e., when the researcher is in a position to observe and analyse a phenomenon previously inaccessible to inquiry (Yin, 2014, p.52). As a tsunami of this magnitude happens every 1000 years, it is important to document its consequences and learn revelatory lessons for the future.

Marine debris caused by tsunamis is a serious environmental problem worldwide (International Coastal Clean-up Report, 2013). The negative impact of the debris resulting from the Japanese tsunami has been noted by several scholars (Mcllgorm, Campbell and Rule, 2011; Murray et al, 2015; Ghaderi and Henderson, 2013). Official reports also show that more than 5 million tons of debris were swept from the land and coastal systems into the ocean (Ministry of the Environment, Japan, 2014) and this will have harmful social, economic and environmental consequences. Therefore, the beach recovery project discussed in this article is an essential part of the post tsunami recovery effort and its success can have wide ramifications for the communities affected and their environments.

Our case study relies on a variety of methods of data collection and data sources (Flyvbjerg, 2011). Primary data was collected via three storytelling workshops and twenty semi structured and informal interviews conducted between November 2013 and October 2015 with Minami Sanriku city government officials, community leaders and volunteers involved in the Nagasuka beach recovery project. The workshops and interviews were conducted in Japanese. They were recorded, transcribed and translated into English by the first author. We

also made use of documentary evidence such as local newspapers, official reports and websites. The triangulation of the data collection methods and data sources allowed us to build internal validity and construct robust theoretical themes (Eisenhardt, 1989). Ethical clearance for the study was granted by the Japanese university involved in this project.

Three storytelling workshops took place in November 2013 at a newly built hostel in Iryado (Minami-sanriku). Built as a place to support the reconstruction by hosting volunteers from Japan and around the world in the aftermath of the tsunami, the centre now welcomes visiting researchers and tourists by providing a safe space to share stories and learn about the tsunami from its survivors. Many survivors became storytellers in their determination to ensure that their experiences serve to inform, prepare and inspire others who may find themselves in similar circumstances in the future. The hostel in Iryado embodies the local community determination to share its stories and ensure that their experiences of disaster, rescuing and reconstruction are never forgotten by the rest of the world.

Storytelling has a long tradition in Japan. It is a familiar form of expression for laypeople who employ it to share their own experiences with the wider community. As a research method, it originates in narrative interviewing but rather than being research led, it is participant led (Geertz, 1973; Feldman et al, 2004; Gabriel 2000). Storytellers engage in analytical and critical thinking for themselves and in so doing, they invite collective sense making. Such collective sense making is very important for researching communities in crisis who are embarked on a constant process of negotiating their priorities and strategies for reconstruction. Indeed, taking part in storytelling workshops was essential in our understanding of the local culture and the expectations of the local community had from our research project. Despite such advantages, storytelling is generally still seen as unconventional in many forms of academic writing (Grey and Sinclair, 2006) including the areas of project management and disaster studies.

A mixture of different types of interviews was employed to account for the special characteristics of our case study (Fontana and Frey, 1994). Informal conversational interviews provided an opportunity to build trusting relationships with the participants, ensuring that they felt more at ease to share their experiences with us. We also conducted semi-structured interviews which had a clear set of themes: within each of these themes we encouraged the interviewees to elaborate their own points of interests. We asked questions about the rationale beyond the beach cleaning project, the stakeholders involved, reasons for its success and the challenges faced.

We also examined a wealth of documents regarding the beach recovery project and more generally the reconstruction efforts, in particular government official reports, local newspapers (can you name the newspaper I gave you) and websites such as the Miyagi Prefecture official website and Miyagi Recovery Progress website. These documents enhanced our understanding of the economic, social and environmental context of the case study, exposing us to a wide collection of articles, photos and stories about the reconstruction written by community members, government officials, research institutions and volunteers.

Data analysis

The devastation left by the tsunami at Nagasuka bay was such that houses, businesses and local facilities were swept away or severely damaged, infrastructure compromised and both land and sea contaminated by the debris. The beach which was once a beautiful stretch of golden sand was both buried under a huge amount of debris and significantly shrunken by the tsunami (see picture 1). The beach was not only a recreation space for families but also acted as a significant community space for local celebrations and festivals in the past.



Picture 1 Nagasuka Beach after the Tsunami (add the website details)

If "leadership is important through all the phases of the project life cycle" (PMI) in conventional projects, it becomes essential in disaster recovery projects. In a crisis situation, it is crucial that someone initiates the project and takes leadership in planning, executing and closing it. Given that the local government services were interrupted by the tsunami and the support from central government took a while to materialise, communities had to find resources from within in order to start their own recovery projects. Community leaders emerged in an organic way: insiders who were trusted by the local community and who had the drive and determination to make positive changes. Various recovery projects including the one under the study, were initiated by such community leaders in response to the needs and wishes of the community. Four themes are central to understanding their active leadership in the Nagasuka beach recovery project: 1) triggers for initiatiating the recovery project, 2) stakeholder identification and engagement, 3) the management of stakeholders and 4) the socio cultural context of Minami Sanriku and its impact on the recovery project.

Initiating the Nagasuka beach recovery project

In the aftermath of the Tsunami, the Disaster Recovery Support Committee organised various trips for local children to beaches nearby that had not been affected by the tsunami. 23 local elementary and junior high school students from Utatsu visited Onna village for five days in 2012. According to the (which) website: "Children were so happy. They had local Okinawa food, played at the seaside, cheered at the beach, spoke with local people in Onna, Okinawa. They had a wonderful summer holiday. When they came back to Utatsu, children were asked to write a trip reflection diary in which they wrote: '…but I want to swim in our local sea'. No matter how good the seaside in Okinawa is, the sea in Utatsu is still the best because it is the sea of our hometown. That was the voice from the children. That was for the first time we knew the Utatsu's children's wishes".

In the words of one of one member of the Committee: "Onna-son is one of the popular nearby beaches that attract young people. We were told by the local authority that children from disaster affected areas were welcome to visit this beach so we organized for more than 20 children to have a holiday there in 2012. We came back with a lot of nice pictures and the children were asked to write their thoughts and feelings about the trip. They wrote that: "it is beautiful, but it is not as beautiful as ours" (interview transcript). In picture 2, the children wrote: "we want our beach back".





The innocent statements made by these children ignited the determination of a number of community leaders to start a cleaning operation which was eventually named the Nagasuka Beach Recovery Project. One of the leaders said: "we decided to clean up the beach two hours every Saturday afternoon and we kept doing this regardless of the weather, sunny or rainy. About 3000 volunteers participated in our debris clean-up initiatives" (interview transcript). The project started on March 11, 2013 and was completed at the beginning of the summer holiday on July 20th, 2013.

Stakeholder identification and engagement

The local children are the main stakeholders of this recover project. They were joined by high school children from the Kawagoe Nishi High School - Saitama Prefecture, by victims from Fukusima as well as by volunteers from the United States. As well as building a passionate and committed voluntary work force, the beach cleaning project gave local children and young people a sense of pride and ownership of a local amenity that they valued while also facilitating new social bonds and friendships to blossom thus strengthening the human fabric of the local community and its ties with the outside world.

While engaging these stakeholders were relatively unproblematic, engaging local government agencies proved to be more challenging. The community leaders were involved in frequent talks with various government committees to ensure that the needs of the local community and their expectations would be accounted for in the seawall plan. They attended various meetings and seminars organised by the local government with the view to ensure that this important stakeholders becomes a full supporter of the beach recovery project.

"The government has a disaster seawall construction plan in place and this could have a serious impact on our bathing beach. We had many discussions with the relevant authorities and asked whether it was possible to keep our bathing beach open. They acknowledged the great efforts that were made to clean and rebuild the beach and promised they would do their best to keep the beach safe during the seawall construction" (interview transcripts).

Community leaders were concerned that the traffic of the trucks involved in the seawall reconstruction would pollute the beach as well as pose safety issues for the children. Therefore it became essential to communicate these communal concerns to the relevant committees and ensure they would be considered in the revised plans. Many community leaders stressed the centrality and the importance of a two way communication with government stakeholders. In order to engage the local government, it was important to understand their immediate concerns and objectives. Attending government led seminars allowed the project leaders to gain a better understanding of the challenges facing the government and work along their side in order to get the support needed for the beach recovery project.

One leader recounted: "We collected signatures and expressed our collective concern to the relevant government agencies in writing. We also raised our concerns in various seminars held at Oya, Kisennuma City which were held to discuss how to construct the seawall to prevent future disasters. We debated how to construct the seawall but also how to protect the environment and our beach. Without such collective discussion, we would have never realized that there were so many issues to consider. We must always think positively and look for ways to do things better" (interview transcript).

Identifying and engaging stakeholders does not suffice, careful management of the longer term needs and expectations is also required.

Stakeholder Management

The management of stakeholders presupposes building long term relationships with the stakeholders. By comparison to conventional project management projects, recovery projects require that leaders show empathy and compassion given that many of the stakeholders have been and may still be distressed by the human and material losses they had incurred. Community leaders displayed *active leadership* in enthusing local people and volunteers to participate in the cleaning operation, giving them hope for a better future and sharing every small success with them. In addition, they ensured that everyone pulled in the same direction and embraced fully the objectives of the project.

Despite lack of formal training in project management, the community leaders demonstrated the ability to plan a sequence of activities and ensure access to needed machinery in order to speed up the operation. In the words of a community leader: "When cleaning up the debris, we started with debris of very large size and shipped it to higher ground, then dug out the mud to collect smaller debris. A lot of tsunami debris was dug out such as boats parts, construction materials, ropes and fish nets and so on (see picture 3) but we felt that the more we dug, the more the debris still remained to be collected. Later, we used excavators (see picture 4) lent by one of volunteers which greatly accelerated the process. The mud was dug around one metre in depth to see whether there were any nails or broken glasses that could be harmful" (interview transcript).

Picture 3: Rubbish from the seabed



Picture 4: Free Excavators provided by volunteers



The cleaning operation was nevertheless relentless, as tsunami debris continued to wash up from the sea to the beach and therefore people still kept cleaning up the debris to ensure the beach was safe. Setting clear targets by the leaders to ensure that "we all worked together towards one direction" (interview transcript) was an essential part of their approach to stakeholder management.

Community leaders displayed a long term approach to bridging the needs of the community with the demands placed by other stakeholders, in particular the government. In their words: "Basically if we do not articulate our own opinions, then we end up being silent. If you are silent, silence means consent. Therefore we should articulate our expectations for regional development and we should have a long-term plan. Even when the reconstruction is completed, the plan would establish a solid foundation for future development. If we are silent we might lose our beach, we might lose our community' (interview transcript).

The approach they took to express such long term concerns was heavily influenced by the socio cultural environment in which they operated.

The socio cultural context and its impact on the recovery project

The motivation for striving for continuous improvement is deeply seated in the Japanese psyche. Enhanced by a collectivist culture (Hofstede...) and a collaborative way of working (Kiyomiya..), this strive for improvement contributed significantly to the success of the Nagasuka beach recovery project: "The experience from the adjacent town provided stimulation and motivation for us. When we saw the volunteers from outside Minami-sanriku making such a great effort for our town, we did not want to lag behind. In addition, the very close links between our local people are the main driving force in our disaster recovery" (interview transcripts).

The bottom up approach at the heart of this recovery project goes against the grain in a culture that is hierarchical, authoritarian and seniority based (references). Therefore, the social skills are needed for an effective dialogue with government stakeholders who tend to

be senior and have a top down approach to disaster recovery, cannot be under estimated. Indeed, while militant in terms of ensuring that the needs of the communities are heard and accounted for, community leaders did not employ direct confrontation with the authorities. The notion of saving face (references) is apparent even in the interviews we did. When we asked directly if there were any disagreements with government stakeholders regarding the future of the beach, the answers were less direct: "rather than saying agreement or disagreement, it would be better to say that they had some other priorities to consider rather than this one. We are an unofficial organisation, it is hard for us to operate as we would like and always get agreement from government" (interview transcript).

Another community leader said: "There was a high probability in their original plan that the beach would be removed. Young people's voices are not paid much attention and are disregarded by the senior hierarchy. Their mindset is that these things are not for the young people to decide upon and their opinions should be discarded. I find it quite hard to talk about such things in the interview" (interview transcript).

This generational gap is however very important to understanding the social and cultural context in which the Nagasuka Beach recovery project took place and why it was seen as a success by the community. Ignited by the wishes of the local children to rescue their beloved beach, a number of community leaders came together to organise a large recovery operation that relied on local children but also on volunteers from all around Japan and abroad. In doing so, they had to liaise with various government agencies to ensure that the project could be started and the beach would not be closed down as part of the seawall reconstruction plans. Despite lack of formal power, and of being relatively young and lacking prior experience in managing recovery projects, these leaders were successful in engaging and managing all relevant stakeholders and ultimately in completing the project. They argue that key to their success has been the setting of clear and achievable targets so that "we all worked together towards one direction" (interview transcript) along with an effective communication with all the stakeholders. They also argued that the success of the project was helped by an attitude change in the post tsunami period: what people took for granted before the tsunami, namely, their community and their natural environment became overnight very precious, something worth fighting for. Their attitude was not to wait for government handovers and official plans to be put into operation but to do it themselves with the resources available in the community. Because of their determination, they could no longer be ignored so government stakeholders started to engage with them on a more equal footing, recognising their place and contribution to the overall recovery actions.

Conclusions

The Nagasuka beach recovery project has been judged as successful by the local community (the main project stakeholder). The beach was opened to the public as planned on 20th of July with a lot of cheering children around. One of the volunteers recounted his feelings at the reopening of the beach: "when the beach was reopened, the children were so excited rushing towards the sea (see picture 5). We all felt excited as it was our own efforts that rebuilt the beach. We probably would have never thought about rebuilding our bathing beach as it was

too challenging but it was the leading role of our community leaders and the incredible support from our volunteers that made this happen".

Picture 5: The day the beach opened to the public



As this is a seasonal beach, it is always closed to the public at the end of the school summer holiday on August 11th. The ceremony that marked the yearly closure of the beach featured colourful balloons launched in the air and the invitation to come back next year (picture 6).

Picture 6: Beach closure ceremony



While the trigger and the success of this recovery project has a great deal to do with the wishes and the determination of the local community to have their beautiful beach back, it is important to acknowledge also the role played by the project leaders (who were themselves members of this community) in identifying, engaging and managing the project stakeholders.

Compared to conventional projects, this recovery project placed tougher demands on the project leaders. They had to be able to set and meet project objectives and manage the stakeholders according to these objectives in the context in which the main stakeholders (the community members) were still in distress and therefore vulnerable and in a culture where seniority had to be respected in order to save face. Therefore the social skills needed to navigate effectively such complex social and cultural map were crucial and as important as the technical/business skills required in the management of conventional projects. Labelled as 'active leadership' (LaBarosse 2007), this form of project leadership is more complex and more tuned to the socio-cultural context in which the project takes place.

Our theoretical contribution resides in highlighting the important role of active leadership in recovery projects. Active leadership was key in identifying, engaging and managing the project stakeholders and in ensuring the success of the beach recovery project by bridging top down and bottom up demands.

Our methodological contribution resides in putting the voice of community stakeholders centre stage in our qualitative case study rather than simply focusing on government/official accounts.

From a practical/managerial point of view we have demonstrated the usefulness of project management to disaster recovery projects. The main implication of the study is that it is important to train community leaders in project management skills in order to give them the technical/business skills that complement the social skills needed to successfully manage recovery projects.

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