

Chapter 11

Experiences of University Student Volunteer Activities to Revitalize the Area Affected by the Kumamoto Earthquake



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Abstract The purpose of this paper is to clarify the situation and issues of volunteer activities through the example of the students' voluntary activities after the Kumamoto earthquake. In the case study, we described the volunteer activities of Tokai University students starting from the time immediately after the Kumamoto Earthquake, and the revitalization activities they conducted in the disaster area. We focused on how the motivations and actions of university students are changing over time. The students of the Faculty of Agriculture of Tokai University established a student volunteer group called Aso Fukkoheno Michi which means "Path for Revitalization of Aso". The group is currently working on the revitalization of Minami-aso Village, with a particular focus on developing the sustainability of the Kurokawa area. With this intention, members of Aso Fukkoheno Michi started to tell the story of Minami-aso Village to visitors. Through this storytelling activity, the students are able to convey their own experiences of the disaster to visitors. From the survey conducted among student volunteers, we learned about the effective ways in which the students undertook such activities. However, we identified problems faced by the volunteers regarding the continuation of their efforts in the future, and regarding maintaining their involvement with the local community.

Keywords Kumamoto earthquake · Local community · Storytelling activity · Revitalization · University students

1 Introduction

Until today (August 2019) since the Kumamoto earthquake occurred in April 2016 (Kato et al. 2016), various people, including residents, administrators, students, and volunteers, have been participating in revitalization efforts in the areas affected by

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the disaster. Compared to the situation immediately after the earthquake, however, there have since been various changes in the way that revitalization efforts have been undertaken by these various actors. To make revitalization efforts more sustainable, we need to understand how the motivations and actions of these people are changing over time. This chapter focuses on the changes in the revitalization efforts made by students of Tokai University, as an example of the students' voluntary activities after the earthquake.

This chapter begins by describing the significance of the students' revitalization activities and their purpose. Immediately after the Kumamoto earthquake struck, university students independently began to operate shelters in some disaster areas. For example, Kumamoto Gakuen University established its own shelter after the foreshock of the earthquake (Takagi 2017). Some professors and students in the Faculty of Social Welfare participated in voluntary activities, taking care of elderly and handicapped people in the local community. As another example, the Prefectural University of Kumamoto temporarily opened its campus to local disaster victims. At that time, through their own initiative, university students formed groups to operate several missions at shelters—even though they were also themselves victims. The students appealed to members of university clubs and faculty members to participate in voluntary activities. They also used social media to recruit participants.

From this response, it is evident that the relationships and networks that had been established prior to the earthquake were practically utilized to operate the shelters. In this way, at an early stage after the earthquake, the students were able to act independently and respond quickly. Some universities in Kumamoto City temporarily opened their campuses as a shelter for victims (Takagi 2017). After these shelters closed, many of the students continued to work as volunteers in the disaster area. Thus, these students made significant efforts towards helping to rebuild areas affected by the earthquake. This chapter focuses on the actions of university students in helping to sustain the local community and examines what might be learned from those efforts. It also introduces the involvement of the Decision Science Center at Kyushu University, which can act as a case example of the role that a university might play in disaster recovery.

2 Students' Volunteer Activities After the Earthquake

2.1 Students' Actions in the Early Stage After the Earthquake

We conducted field surveys from March 1–2, 2017 in Kumamoto City and Minami-aso Village, to record the students' actions in the early stage after the earthquake. As noted above, these students undertook their actions independently and responded quickly; they were also able to organize voluntary groups.

The Prefectural University of Kumamoto opened its campus and facilities to the public on April 14, 2016, when the foreshock occurred. The students' volunteer activities started on the same day. The main earthquake occurred on April 16 (Kato

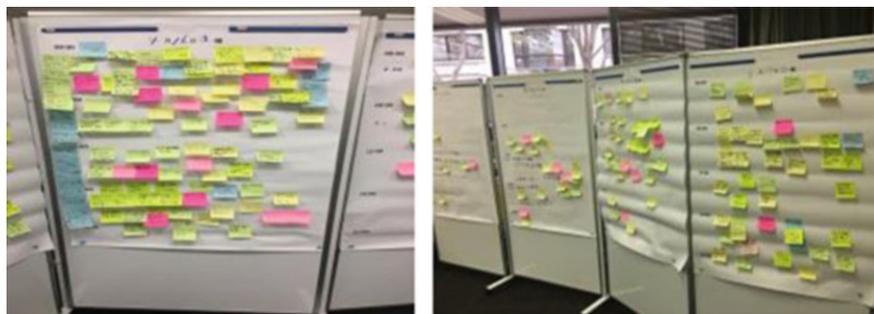


Fig. 11.1 Whiteboards showing the thoughts, feelings, and memories posted by volunteer students at Prefectural University of Kumamoto at the time of the disaster (photos taken by the author)

et al. 2016). Subsequently, the student groups, which had until this point been acting separately, became integrated into the Student Volunteer LINE Group; in total, about 200 students joined (Iwasaki 2017). The integrated student group organized a meeting of group leaders. Various groups shared the workload of managing the shelters, and they operated systematically.¹ The Prefectural University of Kumamoto closed its shelter on April 18, 2016, because the shelter had only been intended to be a temporary evacuation area. When the shelter was closed, the students and staff members of the volunteer center made efforts to remembering and recording the efforts that student volunteers had made. The students who had worked as volunteers were requested to post their thoughts and feelings at the time of the disaster on whiteboards (Fig. 11.1).

One staff member at the Volunteer Center of Kumamoto Gakuen University described the students' actions and the situation in operating the university shelter as follows:

Volunteering has an educational meaning. However, the actions undertaken by the university students after the Kumamoto Earthquake seemed to have a sense of mission more than of volunteering. Students had close relationships with members of university clubs and members of faculty, and those relationships naturally led to taking part in volunteer activities. Students could respond quickly to disaster victims who were in urgent need of help by mobilizing people and spreading information using social media. I think it was important that the victims could make use of such advantages.²

As noted above, it would be beneficial to examine the efforts made by the various people who played different roles at the time of the disaster. For example, the Social Welfare Council generally maintains a strong network among the residents of the

¹Students at the Prefectural University of Kumamoto immediately took action by organizing volunteer groups to run shelters. Club leaders became the leaders of the voluntary groups; there was no compulsion to join. This information was based on the survey conducted on March 1, 2017 at the Prefectural University of Kumamoto. Prefectural University of Kumamoto (2017) “大学COC事業/創造的復興支援プロジェクト報告書.”

²Based on the survey of March 2, 2017, Volunteer Center, Kumamoto Gakuen University.

local community. Thus, the Social Welfare Council can identify the needs of local residents accurately if time is allowed. However, its decision-making process is often slow, particularly during a time of crisis. Accordingly, the Social Welfare Council is better suited to helping with the reconstruction and revitalization process, rather than reacting during a crisis. For example, following the earthquake, the Social Welfare Council was responsible for supporting people who were living in temporary accommodation. On the other hand, the student volunteers were able to respond quickly to the more urgent needs of the disaster victims.

Even after the universities stopped operating the shelters, most students continued to engage in volunteer activities. At present, students are still involved in various volunteer activities. While some students continue to visit disaster areas through the volunteer center of their university (or an organization related to volunteer activities), others have instead begun to organize such activities by themselves. Due to this development, this chapter focuses on the activities of these university students. Supporting these student activities helps to promote the sustainability of the local area.

2.2 Tokai University Students in Minami-Aso Village

This chapter introduces a case study focused on a student group that has continued to undertake volunteer activities to revitalize Minami-Aso Village. The Aso Campus of Tokai University is located in the Kurokawa area of Minami-Aso Village. Students of the Faculty of Agriculture had formerly lodged in Kurokawa. After the earthquake struck on April 16, the Aso Campus suffered considerable damage: some lecture halls were destroyed completely, and cracks appeared in the campus grounds (Matsuura 2017). The Faculty of Agriculture recommenced lectures in the Kumamoto Campus of Tokai University on July 1, having concluded that reopening the Aso Campus would be difficult owing to security problems. At the time of writing, the Aso Campus is still closed, and around 800 students who had been living in Kurokawa have been forced to relocate to Kumamoto city. The students of the Faculty of Agriculture attend lectures in the city: they can use only certain facilities at Aso Campus, for the purpose of on-site training for agricultural practice. Special permission was granted for them to continue using these facilities.

Before the earthquake, around 800 students and around 200 local residents had lived together as a community in Kurokawa. Most of these local residents were making a living by providing student lodgings. The Aso Campus of Tokai University was established in 1973, and Kurokawa subsequently became a kind of student village; the students and residents there developed a very close relationship. Thus, in Kurokawa, students and local residents had already developed strong networks before the earthquake struck. The Kumamoto Earthquake forced these two groups of people to live far apart and lead different lives. Most of the residents had to move to temporary accommodation or other places, whereas the students moved to Kumamoto City. The intimate relationship that had developed between the students

Fig. 11.2 A photograph of Kurokawa's landscape after the Kumamoto Earthquake: large cracks in the ground are evident



and residents remained, however. Under the new situation, the students of the Faculty of Agriculture of Tokai University established a student volunteer group called Aso Fukkoheno Michi: the group's name means "Path for Revitalization of Aso." The group is currently working on the revitalization of Minami-aso Village, with particular focus on developing the sustainability of the Kurokawa area. Kurokawa was badly affected by the earthquake, as demonstrated by the collapse of Aso Bridge, which had connected the main road and Minami-aso Village. The bridge was an irreplaceable piece of infrastructure that supported the daily lives of Kurokawa's residents, and was also an attractive site for local tourists. The collapse of the bridge therefore seriously damaged Kurokawa.

Aso Fukkoheno Michi is involved in various volunteer activities in Kurokawa. After the earthquake, some students engaged in volunteer activities, such as the management of shelters and the transportation of supplies to elderly residents. Those students had lived in Kurokawa, and were therefore affected by the earthquake themselves. Students who shared the same lodgings contacted each other to confirm their safety after the disaster struck, for example (Fig. 11.2).

One student who was active as a group leader at the beginning of the volunteer activities explained the significance of the activities:

We wanted to make an effort to maintain our relationship with the local residents in Kurokawa. So we organized groups devoted to sustainability and revitalization of this community. It was unfortunate that most students left the community after graduation. But some students who experienced the disaster of the Kumamoto Earthquake are still living there, although their numbers are decreasing. On the other hand, some new students joined the community. We senior students may be able to communicate something valuable to Minami-aso Village based on our experience and promote good relationships with local residents and new students. We are conveying our experiences of the Kumamoto Earthquake to the new students. We are working on activities to share our memories with the next generation.³

³From an interview with the former leader of Aso Fukkoeno Michi, who was a student of Tokai University, on March 1, 2017.

With this intention, members of Aso Fukkoheno Michi started to tell the story of Minami-aso Village to visitors. Through this storytelling activity, the students are able to convey their own experiences of the disaster to visitors. The students are enthusiastic about preserving their memories of the disaster, and in doing so they are assisting new students in creating close relationships with the local community.

3 Aso Fukkoheno Michi: Experiences and Problems in Activities

Throughout the years that have elapsed since the Kumamoto Earthquake, Aso Fukkoheno Michi (Path for Revitalization of Aso) has continued its efforts to improve its activities. This section describes the experiences learned from these efforts and identifies the challenges that the group is now facing. We conducted a research survey to clarify the problems of managing voluntary activities in the disaster area. We regularly visited the area and observed the group's storytelling activities to visitors of Minami-aso Village. We also interviewed students individually to record their awareness of the disaster.

As noted above, storytelling is one of Aso Fukkoheno Michi's main activities. Another main activity of the group is holding exchange meetings with local residents and students in Minami-aso Village. In 2016, most of the group's members were living in Kurokawa and therefore became victims of the earthquake. In 2017, however, 15 new students joined the group, with a further five new students joining in 2018. Most of these new students did not experience the disaster, and none of them had lived in Kurokawa, and therefore they had not developed a relationship with the residents. These new students were keen to work towards local revitalization, however: they wished to know more about Aso, and play any role in the development of Minami-aso Village. These wishes were their motivation for taking part in Aso Fukkoheno Michi's activities.

According to interviews with the students, it seems that there are differences in their awareness of the disaster, and furthermore their motivations for wanting to revitalize the area differed between the senior and new students. The senior students helped the new students to achieve the group's tasks by managing the group: in this way, they could help to reduce the differences in awareness of the disaster, and could also maintain the group's intimate relationship with the local community. The storytelling activities are mainly undertaken by the senior students who lived in Kurokawa, and who therefore experienced the earthquake. If Aso Fukkoheno Michi receives requests for storytelling from visitors, some group members travel to Minami-aso Village from Kumamoto. At present (August 2019), it is impossible to reach Kurokawa using any public transport, so students have to go there by car. The students consider this transport problem something of a burden: only a limited number of students have their own cars, so most group members have no way of getting to Kurokawa on their own.

Fig. 11.3 Storytelling activity (May 7, 2017) in front of Aso Bridge, which collapsed due to the earthquake



The narrator does of course play a key role in storytelling. With the passage of time, the number of Aso Fukkoheno Michi members who are able to narrate about their own experiences has decreased. New students are also involved in the storytelling, but they feel that they are unable to describe the disaster situation as vividly as the students with firsthand experience. Accordingly, Aso Fukkoheno Michi is making efforts to pass on the storytelling techniques to new students. Maintaining a sustainable relationship between students and local residents is important in revitalizing the disaster area (Figs. 11.3 and 11.4).

The senior students of Aso Fukkoheno Michi agreed that it would be necessary for new students to become well acquainted with both Minami-aso Village and Kurokawa. They believed that if the new students could better understand Minami-aso Village, and therefore feel more familiar with the community, their motivation towards the revitalization efforts would increase. Furthermore, through this process, the difference in awareness of the disaster between senior students and new students could be reduced even a little. However, the new students had their own ideas about revitalization, and about the types of activities that should be undertaken in the disaster area. It is therefore difficult to generalize the attitudes of the new students with respect to revitalization. The senior students thought it would be beneficial to let the new students experience for themselves Minami-aso Village and the surrounding area, and therefore organized a revitalization tour for the new students (Fig. 11.5).



Fig. 11.4 Using pictures in storytelling: the scenery of Minami-aso Village

As noted above, the group's number of storytelling narrators with personal experience of the disaster had declined, and the new students had become aware of this problem. The new students became particularly aware of this situation when they participated in various group events. They organized activities on their own, and these activities had a big social effect. The new students believed it would be better to broaden the activities of Aso Fukkoeno Michi and to elicit support for those activities. They believed it was important to effectively utilize their capabilities as students.

4 Involvement of the Decision Science Center of Kyushu University Project Team and Its Activities

There are ongoing recovery operations and revitalization activities in the areas badly affected by the Kumamoto Earthquake. Various actors, such as local government officials, university students, tourist organizations, and non-profit organizations, are making concerted efforts to revitalize these disaster areas. The Decision Science Center of Kyushu University formed the Kumamoto Project team to help in revitalizing the disaster areas. In this section, we describe the role of this project team, which was composed of university researchers. Initially, the Kumamoto Project team attempted to find a way to provide support to the disaster areas. In the initial process of surveying disaster areas, project team members came to learn about student volunteer activities, which at the time were focused on building trust and forming a cooperative relationship within the student group. The Kumamoto Project team has since started observing the student volunteers' activities by regularly visiting them and interviewing members of Aso Fukkoheno Michi. In this observation, we set our



Fig. 11.5 In the tour for revitalization organized by Aso Fukkoeno Michi, new students experience the natural environment of Minami-aso Village

project goal to identify the challenges faced by the student volunteers' revitalization activities in the disaster area. After observing the students' storytelling activities, the Kumamoto Project team concluded that there was a big difference between the narrators with personal experience of the disaster and those without it. Visitors to the area badly affected by the earthquake could change their ideas about the disaster and the revitalization efforts by listening to the stories related by the narrator. The storytelling activities therefore had the potential to greatly influence people. On the other hand, the new student members of Aso Fukkoheno Michi lacked the personal

experience of the disaster, and so they had to develop their own way of continuing the positive efforts towards the local community.

Accordingly, the Kumamoto Project team attempted to widen the circle of involvement for those making revitalization efforts in the disaster area. The team thought it would be beneficial to include individuals interested in wishing to make a contribution to revitalization, as well as those people already engaged in such actions. The project team recognized that it would be worthwhile for Kyushu University to inform its society about the activities of Tokai University students. The Kumamoto Project team of Kyushu University could play a role in encouraging the activities of Tokai University students. To carry out this idea, the project team organized an event on a campus of Kyushu University in Fukuoka City (March 11, 2018), in which the project team could bring the activities of Tokai University students to the attention of citizens. This meeting also allowed the participants to exchange ideas regarding activities for revitalization, and regarding their ideas for a desirable future of the disaster area. Participants at the event included dentists and dental hygienists who had conducted volunteer activities on the dental health of victims after the disaster and also attracted Kyushu University students. The purpose of the event was as follows:

- Exchange information about individual and group volunteer activities.
- Provide information about volunteer activities by such individuals as university students, dentists, dental hygienists, and volunteer participants; it was for this reason that the event took place in the city of Fukuoka, not in the disaster area.
- Create a new role model for universities, linking all volunteers working in the disaster area.

Most of the participants recognized the need for further revitalization from the disaster, and following the meeting could better understand the activities of the various players, including Aso Fukkoheno Michi (Fig. 11.6). At the event, the participants gave presentations about their activities. The Tokai University students of Aso Fukkoheno Michi talked about their various efforts; they shared their experiences in storytelling, and addressed the ways in which their experiences could be handed on to new members of the group. The dentists and dental hygienists introduced their experience of the disaster area. Their volunteer activities consisted of providing dental care to elderly people who were affected by the disaster. The project team of Kyushu University (including the authors) gave a presentation on how to support the volunteer activities of the Tokai University students. After these presentations, all participants were given the opportunities to share their ideas and thoughts. Most participants recognized that the volunteers had acted independently, but that everyone had the same goal: the revitalization of the disaster areas. A student at Kyushu University stated as follows:

I have never had any experience of a disaster, and I had never thought about disasters and revitalization. But those presentations made me recognize the need for revitalization. I will think more about what I can do personally to help with revitalization even though I don't live in Kumamoto.



Future Earth 熊本プロジェクト報告会

被災地における様々な主体による 復興活動のあり方と連携の可能性

—熊本地震の現場での復興活動の声から—

2018年 3月11日(日) 13:00 - 17:00

九州大学箱崎キャンパス 21世紀プラザI (多目的ホール)

被災地域で復興活動を行なっている大学生、医療福祉関係者による取り組みやそこから見えた課題を共有しつつ、意見交換を行い、連携の可能性を模索し、今後の持続的な活動について話し合います。被災地域の復興について考えたい方、復興活動に参加したいと考えている方など、復興に関心のある皆さまのご参加をお待ちしています。

**九州大学持続可能な社会のための決断科学センターによる
フューチャー・アース研究の取り組み**

鄭有景 九州大学持続可能な社会のための決断科学センター 助教
比良松道一 九州大学持続可能な社会のための決断科学センター 准教授
銭現 九州大学持続可能な社会のための決断科学センター 助教

被災地域の復興活動の経験と課題 —「阿蘇復興への道」の取り組み

井手良輔 東海大学熊本キャンパス 2年生
下川俊祐 東海大学熊本キャンパス 1年生

熊本市榑ヶ丘復興支援ハウスの地域に寄り添った復興支援活動

森田海 九州大学大学院工学府都市環境システム工学専攻 修士2年生

災害時の保健医療対策 — 命の入口を守る

太田秀人 おおた歯科クリニック 院長
村本奈穂 医療法人グラン会東町グラン歯科 歯科衛生士




Fig. 11.6 Talking about volunteer activities following the disaster

Participants also understood the possibilities for cooperative actions, as part of a unified mission working towards revitalizing the disaster areas. In particular, the members of Aso Fukkoheno Michi learned about the different approaches that they

could apply to their activities. They also learned that it was necessary to organize their group so that the new generation of members could continue their work in the future. These new ideas were propelled by exchanges with leading figures. The event provided a good opportunity for people dealing with the same issues to exchange opinions and information. The Kumamoto Project team organized the event, and also played a meditating role.

5 Conclusions

In this case study, we described the volunteer activities of Tokai University students starting from the time immediately after the Kumamoto Earthquake, and the revitalization activities they conducted in the disaster area. From the survey conducted among student volunteers, the Kumamoto Project team learned about the effective ways in which the students undertook such activities. However, the team identified problems faced by the volunteers regarding the continuation of their efforts in the future, and regarding maintaining their involvement with the local community. The group's new students seemed to be aware that they cannot be as effective as storytellers as the senior students, so they are instead trying to develop new ways to operate "Aso Fukkohen Michi" in the future. The Kumamoto Project team of the Decision Science Center of Kyushu University played a role of observing the group and gave them opinions and comments from a third party. In this project, we could not contribute to problem solving, but we could observe and analyze students' activities from an objective standpoint. This must be a cornerstone for the next step.

6 Data Sources

This case study was based on fieldwork and interviews conducted with the following people and groups (from March 1–2, 2017):

- Prefectural University of Kumamoto
- Kumamoto Gakuen University
- Council of Social Welfare in Kumamoto City
- Council of Social Welfare in Kumamoto Prefecture
- Former student of Tokai University (Aso Campus)
- Student members of Aso Fukkohen Michi

Interviews with members of Aso Fukkohen Michi included the following:

- Former student leader of the group Tokai University, Kumamoto Campus (April 27, 2017)
- Storytelling by group members in Minami-aso Village (May 7, 2017)
- Storytelling by group in Minami-aso Village (May 26, 2017)

- Three new students at Tokai University, Kumamoto Campus (June 22, 2017)
- Revitalization tour for new students, organized by Aso Fukkoheno Michi, in Minami-aso Village (July 15, 2017)
- Student leader of Aso Fukkoheno Michi (March 7, 2018)
- Two second grade students and one third grade student members (May 9, 2019)
- Two first grade students and two fourth grade student members (July 23, 2019)

Acknowledgments This work was supported by a grant JPMJRX16F1 from the Research Institute of Science and Technology for the Society (RISTEX) of Japan Science and Technology Agency (JST) as part of the Future Earth programs.

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