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How the Covid-19 Outbreak Affects the Quality of International Research Collaborations: A Case Study of EU ERASMUS+ Funded Building Resilience in Tropical Agro-ecosystems (BRITAE) Project

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Abstract

The Covid-19 pandemic has significantly affected the formal procedures for international research collaborations and other interpersonal knowledge sharing practices. Covid-19 restrictions are largely affecting the way of conducting the usual project and research activities. The advice of health authorities is to find an alternative method for these activities. In the present study, a case study approach was applied to investigate the impacts of the Covid-19 pandemic on international research collaborations. The BRITAE (Building Resilience in Tropical Agro-ecosystems) is an EU Erasmus+ program of the European Union Co-funded project which is being carried out in collaboration with five Sri Lankan universities and four foreign universities. The project activities were severely disrupted from initially planned activities due to the pandemic situation all over the world. Apart from the kick-off meeting, all other steering committee meetings were conducted via the Zoom platform. For the first year of the project, an annual self-assessment exercise was carried out in March 2021 which aimed to identify any shortcomings in project performance in order to rectify them. Further, participant evaluation of project steering committee meetings was carried out to ensure that the meetings taking place in the course of the project were conducted appropriately and effectively. The present study attempts to outline the extent of impacts of the Covid-19 pandemic on the project activities and to ascertain whether there is a need for modification of activities due to the conditions generated by the pandemic. According to the results, three areas were highlighted for improvements such as active participation of all participants, more disciplined use of technology by participants, and satisfaction of follow-up tasks and time management. The study concluded that, although the project proceeds well in most areas despite the Covid-19 pandemic, more attention should be given to the effectiveness of project activities as a consequence of the quality reduction of activities held via online platforms.

Keywords: Quality Assurance, International Research Collaborations, Covid-19, Online Events

Introduction

The Covid-19 pandemic affected every sphere of human society with unprecedented impacts. Even at the moment, morbidity and mortality of the pandemic are increasing without a clear sign of a decline. Besides health and economic sectors, the scientific community has been vastly affected by the negative impacts of the pandemic due to the closure of universities and research centres and containment measures such as travel restrictions. Most of the scientific events including international conferences, training programs, and workshops were cancelled or postponed with restricted international travel affecting international research collaborations in particular (Subramanya et al., 2020). The Covid-19 pandemic and subsequent travel restrictions affected field research work followed by travel for meetings and funding mostly (Ramvilas et al., 2021). Such implications have highlighted the dire need for identifying the exact impacts of the Covid-19 on these collaborative research projects and implementing necessary mitigation measures.

The BRITAE (Building Resilience in Tropical Agro-Ecosystems) project funded by the EU Erasmus+ grant scheme connects research communities of 9 universities from 4 countries [Sri Lanka (the University of Ruhuna, University of Colombo, University of Moratuwa, University of Sri Jayewardenepura, Sabaragamuwa University of Sri Lanka), United Kingdom (the University of Huddersfield, University of Central Lancashire), Estonia (Tallinn University of Technology), and Lithuania (Vilnius Gediminas Technical University)] intending to develop curricula modules on building resilience in the tropical Agro-ecosystem in Sri Lankan universities to increase their capacity to continually modernize, enhance the quality and relevance of education of students to the global market needs and to ensure international cooperation in line with needs for solutions relevant to food security and climate change (BRITAE, 2020). This 3-year project with seven work packages was kicked off in February 2020 and progressed amidst the Covid-19 pandemic. Like various other collaborative research projects worldwide, BRITAE also has been experiencing challenges induced by the pandemic such as travel restrictions, bans on gatherings, etc. The annual progress monitoring process was carried out in March 2021 with the aim of systematic and monitoring quality assurance of the overall project. Based on findings from the progress monitoring, this paper aims at outlining the level of impacts of the Covid-19 pandemic on the overall project progress and what areas need improvements in order to incorporate conditions created by the pandemic.

Methodology

The work plan of the BRITAE project consists of seven Work Packages; 1. Preparation for BRITAE activities, 2. Development of Innovative and adaptive Curricular on Agro-ecosystem resilience-related food security and climate change, 3. Development of Smart Agro-ecosystem based Resilience Center for teaching, learning, research and development (SARC), 4. Development and implementation of Master's degree Programme on Building Resilience in Tropical Agro-ecosystems, 5. Systematic and Monitoring Quality Assurance, 6. Dissemination and Exploitation of Results, 7. Project management and Work Package 5. designated as Systematic and Monitoring Quality Assurance aims at ensuring systematic monitoring and evaluation of the project's activities to maximize the likelihood that the project will deliver its planned outputs and achieve its intended outcomes. In order to achieve this target, several methods of monitoring the progress were planned in the proposal of the work plan. Within the first year of the project, two evaluation methods were used for the purpose of monitoring the project quality.

Annual Self-Evaluation Exercise

An evaluation questionnaire was used to conduct the self-evaluation, which addressed general project success indicators based on previous experience of similar projects. The project coordinator and the lead partners for the quality work package agreed on the criteria and questionnaire format. This questionnaire consisted of four main areas named; 1). Overall Project Objectives, 2). Planning, Coordination, and Management of the Project, 3). Implementation of the Project, 4). Project Results and Outputs. Under each area mentioned above, there were several sub-indicators and project members were asked to rate each of them on a scale with five levels (poor, needs improvement, meets expectations, above average, excellent). In addition, as part of project progress reporting, lead partners for each work package were asked to report their progress against the project work plan and the qualitative and quantitative performance indicators which appear in the Project Quality Plan. The quality plan was developed by the quality management team and all the other partners have agreed on the indicators relevant to their work packages. Under each of these two methods, comments of project members were obtained at the end.

Evaluation by Consortium Meeting Participants

The BRITAE Consortium meeting participant evaluation form was created to capture both quantitative and qualitative indications of meeting quality. This evaluation is aimed at ensuring that meetings taking place in the course of the project are conducted appropriately and effectively. Evaluation forms were distributed to all participants at the end of each consortium meeting. For the kick-off meeting in

February 2020, this was done using a sheet of paper physically and, for later meetings it was an online questionnaire since 2nd and 3rd consortium meetings were held online due to international and domestic travel restrictions. Table 1 shows the form used in evaluating the quality of consortium meetings.

Table 1: Evaluation form used in consortium meetings

No.	Evaluation Indicator	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
01	I was notified of the meeting sufficiently in advance.					
02	The meeting purpose and objectives were clear.					
03	The meeting agenda was appropriate and clear.					
04	The meeting time and place were convenient.					
05	The meeting format (face-to-face / online) was suitable.					
06	The meeting started and ended on time.					
07	I was satisfied with the way decisions were made.					
08	The meeting was well-attended.					
09	All meeting participants were actively involved.					
10	We used our meeting time effectively.					
11	I was satisfied with the assignment of follow-up tasks.					
12	The meeting atmosphere was friendly and constructive.					
What aspects of this meeting were particularly good?						
What aspects of this meeting could have been better?						
Do you have any suggestions or additional comments about this meeting?						

Results, Discussion, and Conclusions

According to the responses received for the self-evaluation, the median assessment for all the criteria is either “meets expectations” or “above average”. Further, only two project objectives have received

more than three responses under the criteria “needs improvement”. Moreover, the balance between project monitoring and control activities and the administrative burden on partners is rated under “needs improvement” according to results. However, this criterion did not receive a particularly low score in the average performance assessment, suggesting that the view that it needs improvement is not widely held. Furthermore, there was a response that assesses the project performance is poor with regard to the effectiveness of project events and activities. From further comments, it was understood that this assessment relates to the quality reduction in events as a consequence of all events being online due to the Covid-19 pandemic. Annual project reporting from each partner shows that all work packages have commenced, substantial progress has been achieved, have been completed, or are proceeding accordingly. Therefore, amidst the impacts of the Covid-19 pandemic, the project can be considered to be proceeding well in most of the areas. The absence of studies in laboratories and fieldwork can be a possible reason for low impact of the Covid-19 pandemic on project activities.

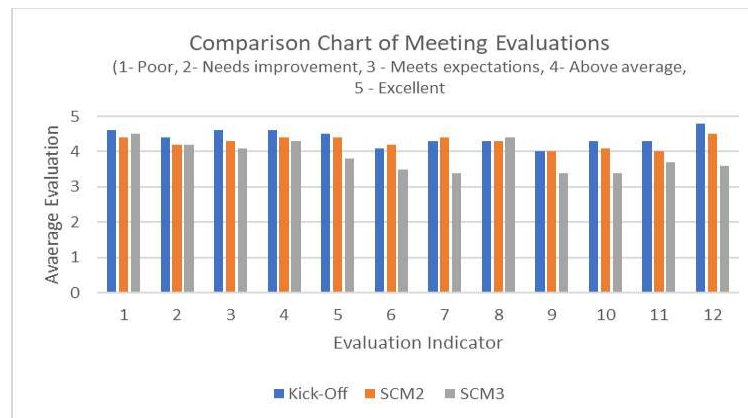


Figure 1: Comparison chart of meeting evaluations

Except for the kick-off meeting, the 2nd and 3rd steering committee meetings of the project were held using online platforms. Figure 1 shows a comparison of the average evaluations from each of the 3 meetings held during the first year. Further, it depicts that evaluation levels for most of the criteria have decreased with time. Furthermore, results from the participants’ evaluations show that quality indicators of 2nd and 3rd steering committee meetings were not highly evaluated as much as the kick-off meeting. The decline in participants’ satisfaction from the 2nd to 3rd meeting as shown in Figure 1 was reflected by comments from participants as well. For instance, participants pointed out that having to do increasingly complex and interconnected project operations solely online is a major reason for the growing dissatisfaction. Furthermore, reduction in participants’ tolerance for technical glitches and sub-optimal use of online communication platforms have been highlighted as a severe problem since several issues arose during online meetings such as unclear sounds, repetition of contents, and disturbances caused by unmuted microphones. According to the results, three areas were highlighted

that need to be improved; active participation of all participants, more disciplined use of the technology by participants, satisfaction of follow-up tasks (though this has improved in the 3rd meeting), and time management.

Results of the quality monitoring processes suggest that though the project proceeds well, there are several areas that need improvements. There should be more focus on the effectiveness of project events and activities which are held through online platforms. It is necessary to identify both advantages and disadvantages of these virtual events and adapt their structure to incorporate the limitations of virtual events. Through more structured approaches in online events, time management can be improved. Furthermore, the disciplined use of technology by participants should be improved since disturbances can reduce the quality of these events and cause frustration among other participants. Based on the comments obtained from participants' evaluations, some suggestions can be made such as sharing materials in advance and displaying the agenda between presentations to improve the active participation in discussions. Since the project does not consist of work in laboratories and the field it is fair to conclude that the impacts of the pandemic have affected mostly workshops and meetings which do not have a great impact on the progress of the project.

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