

## Comment Form 【FR5】

February 13, 2019

<b>Title of the Project</b>	<b>Societal Adaptation to Climate Change: Integrating Palaeoclimatological Data with Historical and Archaeological Evidences</b>		
<b>Research Term</b>	<b>FR5</b>	<b>Project Leader</b>	<b>Nakatsuka Takeshi</b>
<b>General advice and comments of the EREC:</b>			
<b>(Workshop Comments)</b>			
<p>The paleoclimate research forms a distinct contribution of RIHN and we can expect a strong impact and results. The project started before the Program was formulated, which explains to some degree the lack of transdisciplinary engagement. Since the project is now regarded as completed, there is no budget for next year. The Program should consider how to disseminate the findings and make them accessible beyond East Asia.</p>			
<b>(Final Evaluation)</b>			
<p>The Committee was very pleased with the results of this excellent project. Based on stable isotope analysis of trees and wooden objects, it has produced a unique year-by-year time series of the climate in Japan going back 2600 years and combined this with data from historical records. The findings are original in linking decadal climate variability (and in particular the amplification of this variability that occurs once every several centuries) to societal change and regime shifts. They enable researchers to better understand societies as complex systems and can be expected to be used extensively by archeologists and historians.</p>			
<p>The project is also a prime example of an interdisciplinary approach where natural scientists, social scientists and humanities scholars worked side-by-side, contributing their different strengths to the common research agenda. The project experience shows that this is an often difficult process, but in the end the collaboration yielded good results.</p>			
<p>The Committee also realized that, while the project at RIHN is about to be completed, the work will need to continue in a number of ways. Most directly, there is a need to publish the results internationally. In addition to the 6-volume English book series that is already in the making, the results are such that they can be expected to be published in top journals.</p>			
<p>Furthermore, now that the basic data have been developed and connections between climate variability and societal adaptation (including many major historical changes) have been suggested, there is a need</p>			

to theorize the relationship between climatic variability and human society. Is it possible to develop conceptual models that can be tested statistically and used to identify cause-and-effect relationships? This is not at all straightforward, but if successful, it would be a major contribution.

Finally, the Committee would like to see the project articulate ideas about what insights can be developed from the findings that could be relevant to current debates about climate change and more broadly on the quest for sustainable societies?