NIMBioS/DySoC Investigative Workshop
Extending the Theory of Sustainability

EVALUATION SUMMARY REPORT
5-7 DECEMBER 2018

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NISER Evaluation Specialist

Dr. Pamela Bishop
NIMBioS Associate Director for STEM Evaluation
**Figure 1. Agreement with the following statements about this workshop:**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would recommend participating in NIMBioS workshops to my colleagues.</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The group discussions were useful.</td>
<td>9</td>
<td>9</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>The presentations were useful.</td>
<td>8</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>The presentations were useful.</td>
<td>8</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>The presenters were very knowledgeable about their topics.</td>
<td>11</td>
<td>9</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This workshop met my expectations.</td>
<td>8</td>
<td>12</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>This workshop was appropriate to my level of expertise.</td>
<td>8</td>
<td>14</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2. Agreement with “As a result of participating in this workshop, I have a better understanding of...”**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>how to adapt existing theoretical frameworks to fully use available data</td>
<td>4</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>new methods and modeling techniques that need to be developed</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>mathematical tools available for modeling the research data</td>
<td>2</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>the research data available on the topic</td>
<td>4</td>
<td>7</td>
<td>10</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
Figure 3. Level of satisfaction with the opportunities provided during workshop presentations and discussions to ask questions and/or make comments:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Satisfied</td>
<td>10</td>
</tr>
<tr>
<td>Satisfied</td>
<td>9</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>1</td>
</tr>
</tbody>
</table>

Please indicate any suggestions you have for facilitating communication among participants during the workshop:

I thank the organizers for highly stimulating conversations that spanned disciplines in tackling sustainability challenges from a mathematical perspective. For me, the seminars and the discussant presentations were very beneficial, and I enjoyed the small(er) group discussions.

A round of introductions might be useful.

Introductions at the beginning, additional opportunities for informal interactions in smaller groups.

More time for ad hoc discussion groups

I like the dashboard and WordPress portal set up. I hope that the intent is for that to be used on an ongoing basis for information sharing. It might also be an idea to link ResearchGate or ORCID profiles into this as it would be interesting to me) to keep up with any new research participants in this conference are doing.

Discussants were carefully chosen from other fields than speakers’. In a similar fashion, questions could have been gathered more from cross-disciplinary participants.

The workshop format would have been more effective if:

More technical and more focused depth

Goals and outcomes were better communicated

More structured questions for the breakout sessions/more structured outputs

More intentional integration of disciplines, more time establishing shared sense of purpose, more effort on introductions, alternating discussions and presentations instead of clustering presentations in the am and discussions in the pm. Discussants and plenary presentations were often poorly linked.

More opportunity for discussions within one’s discipline

It either gave equal time to disciplines or had equal proportional representation from contributing disciplines.
Do you feel participating in the workshop helped you better understand the research going on in disciplines other than your own on the workshop’s topic?

The workshop organizers and participants were very conscious of the diverse background of all the participants thus presenting research and theories in a way that would bridge the expertise involved in the workshop’s topic.

The presentations were very helpful to get an overview.

I especially appreciated the contributions from cultural evolution.

Would never have worked with sociologists and cultural anthropologists, but their work might have the missing links to improving my economic models.

I think it helped developing a fuller picture and understanding details of these disciplines.

This gathering really exceeded my expectations on content value. I felt like some of the economic theory content was a little outside of my area of knowledge. However, all of it was edifying and compelling I came away from the experience feeling very energized to bolster my own research efforts.

We learned a lot about the traditional economic approach.

Do you feel the workshop made adequate progress toward finding a common language across disciplines for research on the workshop’s topic?

It quickly became clear that the dominant paradigm that ended up steering the ship was coming from economics. That was the starting point for the workshop and it seemed at time that there...
were clear efforts to keep it focused on the economic perspective. That's fine if that's how the workshop is billed, but I anticipated that there would be more give and take between the economists and non-economists in the group who had a very different understanding of what "theory" entails as well as a different level of comfort with the assumptions embedded in economic models and with the focus on refining measurement as opposed to understanding processes and dynamics.

The workshop organizers and participants were very conscious of the diverse background of all the participants thus presenting research and theories in a way that would bridge the expertise involved in the workshop's topic.

Yes, with the caveat that adequate progress was still somewhat limited, but there was progress made.

There was an early attempt to identify jargon and define disciplinary terms. However, that did not last past the first session and subsequent presentations and discussions were largely inaccessible to those outside the individual’s discipline.

A good step on the way towards it.

For the most part. Some of the terminologies were still a bit steeped in specific area jargon but not so much that it made things difficult to follow.

Not at all. The workshop was dominated by economists. This made it challenging to have a productive interdisciplinary discussion because the discussions were framed around the standard economic approach, and ecologists and other social scientists did not get a chance to contribute their perspectives adequately.

I had an impression that everyone tried to avoid unnecessary jargons specific in their field.

Participants felt the workshop made adequate progress towards finding a common language across disciplines for research on the workshop’s topic.

Do you feel that the exchange of ideas that took place during the workshop will influence your future research?

In particular, having an understanding of how those outside my field think about these issues.

I am already working on two collaborations with people I met at the workshop. Also, discussions from the workshop were directly relevant to my job interview at Cambridge the following week.

Yes, some of my future research.
Participants felt the exchange of ideas that took place during the workshop will influence their future research.

Did you develop plans for collaborative research with other workshop participants with whom you had not previously collaborated?

I have never [met] any of the researchers before the workshop. Nevertheless, we were able to develop plans for collaborative research.

There are some plans, it remains to have them put into practice.

Not yet clear whether collaborations would develop.

To be fair, this is due to my own current scheduling constraints.

Some breakout sessions were designed directly to write papers. Another collaboration involves a participant whom I have known but not met in the real world!

What would you change about the workshop?

I noticed that the discussion groups were somewhat unbalanced on the second day -- as such, having just two discussions (rather than four), each covering two of the topics, may be better for stimulating conversation on potential products.

More focus on mathematical models and methods from disparate fields.

It needed more explicit and detailed guidance / direction about expectations of participants during discussions and about ultimate goals / products.

Nothing

I would prefer to have a clear agenda for each of the break-out sessions, assigning a discussion leader and indicating which presenter would be attending the session.
Fewer and shorter presentations; less jargon used.

More structure/structured questions for the breakout discussions.

I would have appreciated more time for introductions instead of jumping directly into material. The presentations back to back got a little long, leaving the participants in the afternoon discussion sessions feeling pretty depleted.

The organizers informed the group discussion leaders of the report to be done during the first morning of the workshop instead on the 2nd.

Background material and more specific goals communicated before meeting, however, I’m not sure the latter could be determined until we met!

I can’t think of any improvements.

One instead of two discussion groups about each plenary.

More discussions on empirical methods related to sustainability would be appreciated.

The time of year. End of year is always a little challenging due to other competing conferences finals et al.

Some more time for spontaneous interactions

The organized discussion sessions weren’t very useful.

It might’ve been worthwhile to have a wrap-up at the end of each day. Although this exercise is tedious it is helpful to keep all participants informed of the discussions occurring in other breakout groups.

Either a better balance of disciplines, or a more structured representative discussion in which not individual people but rather individual disciplines were given equal time.

WordPress was not so much used in the end; google docs were more often used to exchange some ideas. I would also appreciate it if a tad more technicalities had been introduced by the participants (in plain English).
Figure 4. Level of satisfaction with the workshop accommodations:

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources of the facility in which the workshop took place</td>
<td>20</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfort of the facility in which the workshop took place</td>
<td>19</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing arranged by NIMBioS</td>
<td>18</td>
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<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel arranged by NIMBioS</td>
<td>18</td>
<td>11</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments about accommodations:

Lunches could have had more options (if don’t like or can’t eat baked potatoes, first lunch was rough).

I think the structure and facility were excellent.

Everything was wonderful!

I did not use travel or housing accommodations. The rest was great!

Perfect

The accommodation was very conveniently located. The workshop facility was also nice.
What do you feel was the most useful aspect of the workshop?

Just having people with different perspectives in proximity for "on the sidelines" conversations.

The combination of short seminars discussing the state of the art in different disciplines regarding sustainability science with the subsequent discussant presentations. The discussants in particular did an excellent job across the board contextualizing the contributions of each presenter’s work (or the work being summarized), often making connections with other disciplinary views, which I greatly appreciated.

Meeting new people, being forced to think about a new topic.

Meeting a new set of people.

Brainstorming about new projects.

I can point out two aspect: (1) the organization: having the plenary sessions with full attendance was important to set up the topics for the day; (2) the structure: the opportunity to have breakfast and lunch at the same place, and availability of rooms for discussions, created a positive climate for group collaboration

Informal discussions

The broad ranging nature of participants.

Interdisciplinary discussions and in-depth discussions with focus on solutions.

I liked the size of the workshop and the obvious attempts of the organizers to balance discipline, career stage, gender, and diversity.

The group discussions and informal interaction with participants during breaks

Plenty of time to talk between sessions and open-minded participants.

Meeting experts in other disciplines who have been working on my topic.

“the high interdisciplinarity”

Group discussions

The break out discussions. The size of the workshop was also a plus. It was small enough to allow meaningful conversations to occur.

Learning from other disciplines; starting a common language and efforts to communicate; good learning environment, and open atmosphere.

Informal discussions with workshop participants

Provided that the workshop includes presentations or activities to ensure that everyone has a similar working knowledge of the subject, I found the breakout groups the most useful aspect to the workshop.

Networking
Being based out of the U.S., I appreciate mostly that it was an opportunity to extend my research to other colleagues in the U.S., especially working in other fields.

Please use this space for any additional comments:

Getting shared drive space set-up before the meeting would have been good.

Great workshop - thank you!

Very well done.

Great and really unique conference! I was very happy to have been invited to participate in this!

It was not clear what happened to the streaming and recording? Otherwise I was really happy to join the workshop. The staffers, including Eric, Jennifer, Mary, and Chandra were very helpful. Thank you.