

Event Impact Assessment Instructor's Manual

2 Theory

This is the instructor's manual produced to accompany the book *Event Impact Assessment: Theory and Methods for Events and Tourism*, by Donald Getz, 2018, published by Goodfellow Publishers.

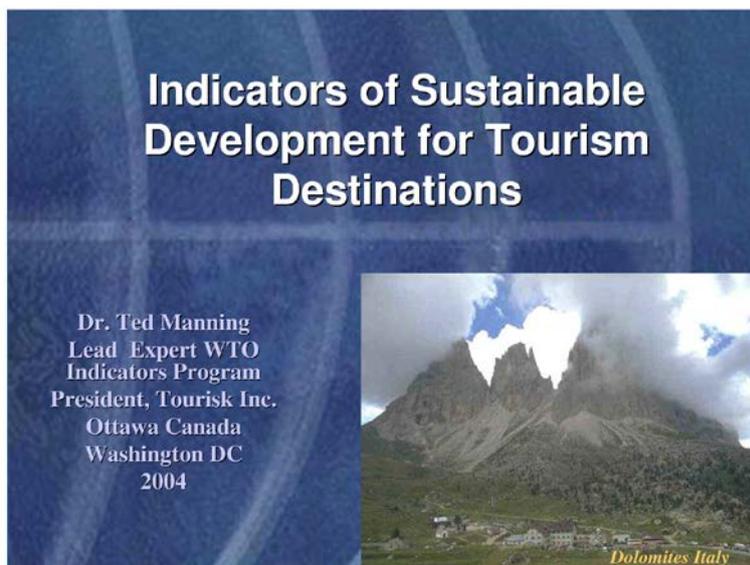
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Lecture 3

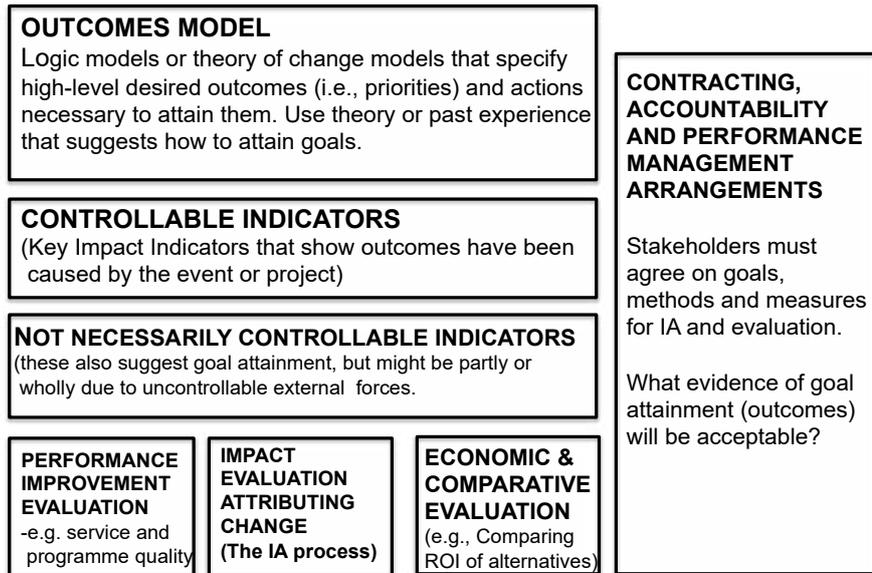
The Duignan Outcomes System Model is a great introduction to several themes. First, the specification of desired outcomes/impacts and the setting of goals is fundamental to planning and therefore sets up goal-attainment IA and evaluation. Of course we always have to mention goal-free evaluation and the need for IA assessors and evaluators to avoid tunnel vision. Second is the importance of logic and theory-of-change models to specify the causal pathways that link actions to outcomes.

Third is the need for indicators, with Duignan distinguishing between 'controllable' indicators, the kind that an organisation or event has control over, and the others that relate to external forces. It is useful here to point out, as indicated in the illustrated logic model, that individual events usually do not, and cannot hope to cause long-term changes to a system (economic, social or ecological) on their own. Most evaluation therefore pertains to outputs, not outcomes. Event portfolios through synergistic and cumulative impacts can realistically aim for major outcomes.

There are plenty of sets of indicators available for sustainable tourism, and that is a decent place to start; see what's new from the World Tourism Organisation.



Economic and Comparative Evaluation in this model is equivalent to strategic IA, where different alternative strategies are compared on ROI or other possible outcomes. Finally, the model (as I have added comments in the boxes) suggests that stakeholders have to agree on event goals and impact measures.



Adapted from: Duignan, P. "Using outcomes theory to solve important conceptual and practical problems in evaluation, monitoring and performance management systems." *American Evaluation Association Conference*, Orlando, Florida, 11–14 November 2009.

Figure 2.1: Outcomes System Model Adapted From Duignan

Logic models are seldom used in practice, but the Edinburgh example can be cited - find their documents online.

Exercise: Have students work in small groups to prepare a logic model for a simple evaluation task like raising money for charity or boosting attendance at an event. That problem actually belongs in an Event Evaluation course, but it sets up a discussion about how portfolios of events can aim for longer-term impacts, and leads to the theory of change model.

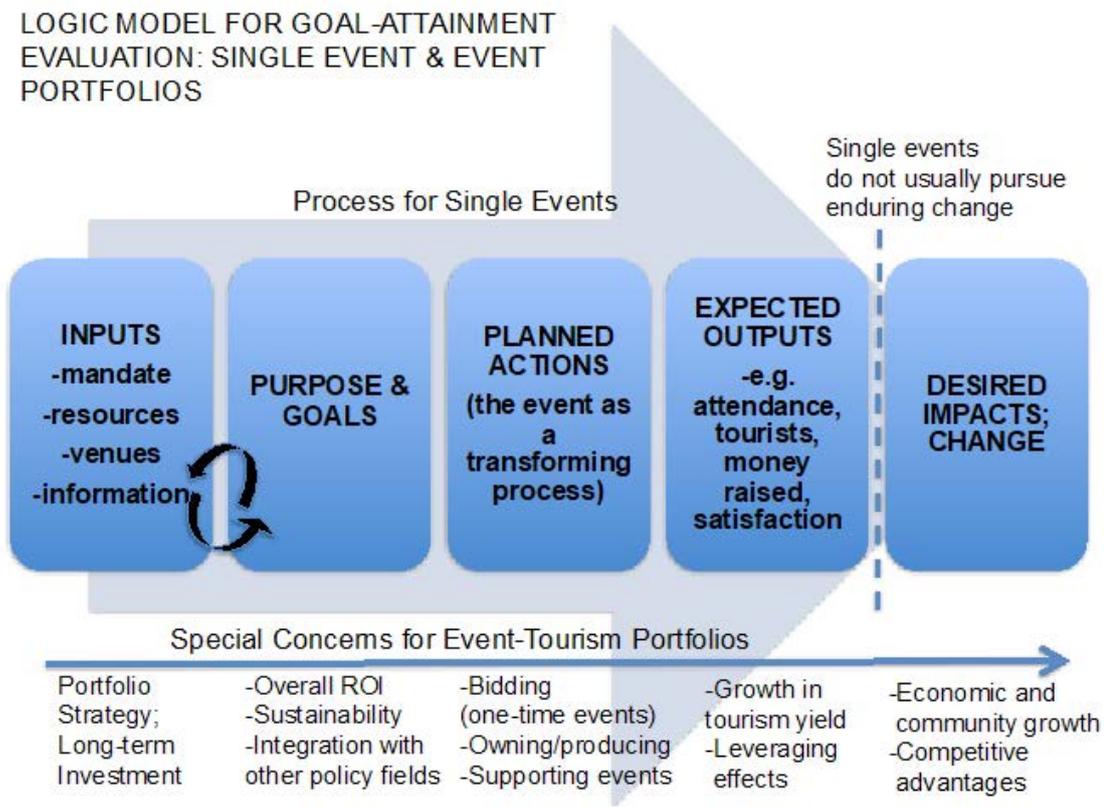


Figure 2.2: Logic Model for Event and Tourism Evaluation and Impact Assessment

For Theory of Change I used the goal of social inclusion to illustrate the process, and later in the book I discuss social capital. These are abstract concepts that require very careful thought about what they mean, how to measure them, and the roles events can play in achieving them. Normally the TOC would involve many stakeholders, as distinct from simpler, internal evaluation projects. Indeed, stakeholder commitment, based on perceived need, is one precondition, and having sufficient resources to do the planning and the integrated IA is another.

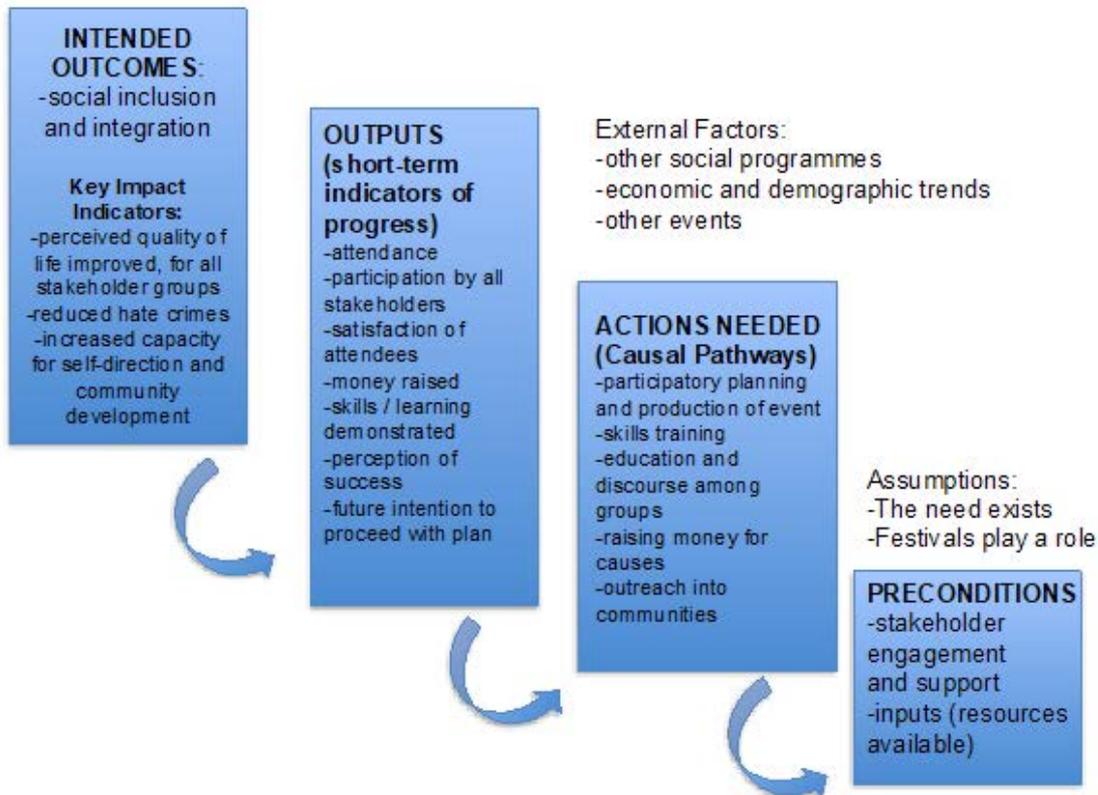


Figure 2.3: Theory of Change Model

Exercise: Having completed a logic model for a simpler evaluation task, now ask students to tackle a really difficult theory of change model for something like social inclusion, social capital or perhaps community development. It can be applied to any system, in fact, including economic development or achieving sustainable cities.

If time is short, discuss the following question: is it possible for a single event acting alone to contribute to social inclusion or social capital? How could that be measured? That should also lead to a discussion of *social marketing*.

Lecture 4

2.4 The Meaning and Nature of Evidence

This is a critical part of evaluation and impact assessment theory. We use a range of direct measures (such as quantifying carbon emissions) and indicators (such as reduced hate crimes as a measure of progress towards social inclusion) as evidence of goal attainment. What is appropriate and sufficient evidence can be a social contract among stakeholders, or fixed by law and regulators.

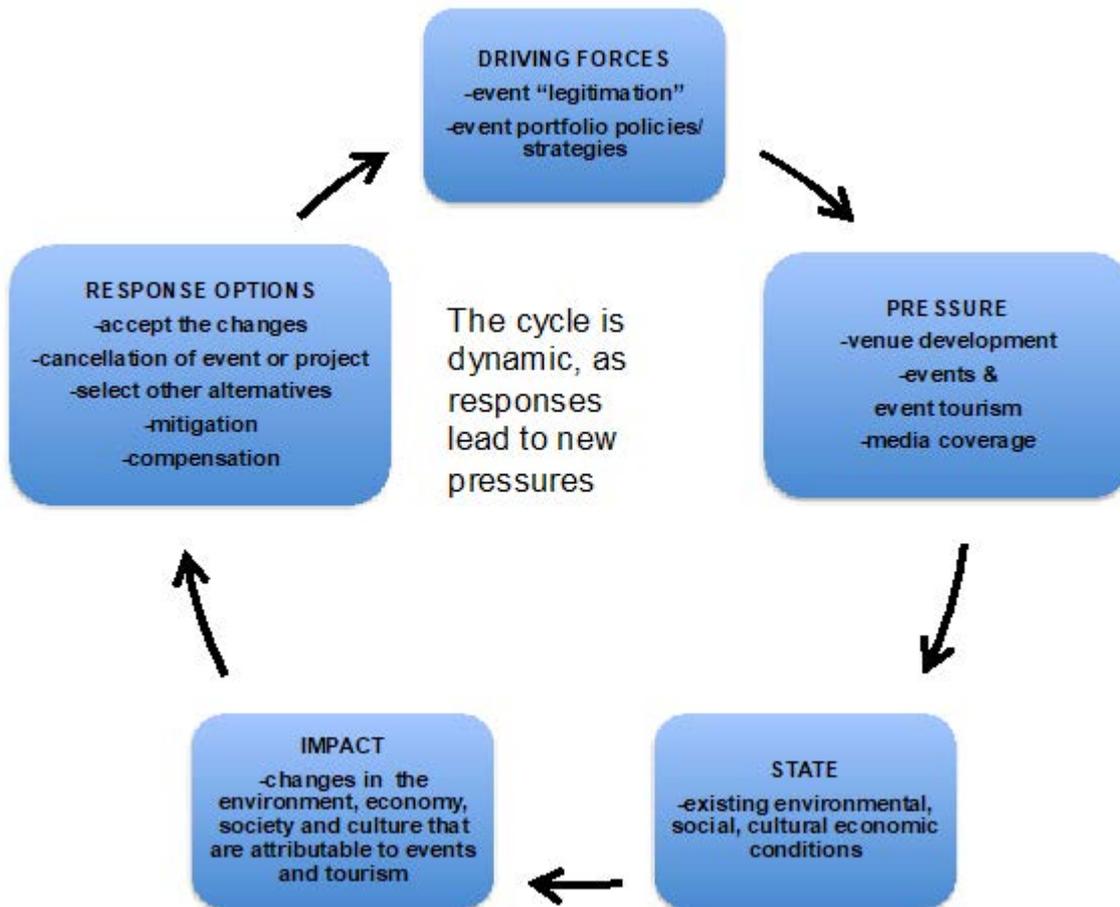
Figure 2.4 lists Types of Evidence and Related Data and Possible Applications and should form the basis of one or more discussions. A foundation in research methods and epistemology would help with understanding this list.

Exercise: Start with *Voices* and discuss examples of how each of these types of opinion or evidence are actually used, and the related advantages and disadvantages. For example, would event-management graduates like to be called as expert witnesses in an inquiry into the costs and benefits of hosting a mega event? How much do people trust public input versus experts? A guest lecture might help with this discussion. You can go through the list of types of evidence and do similar discussions. I think the question of subjectivity will inevitably arise, versus 'proof' of cause and effect (as is the intent of experimentation).

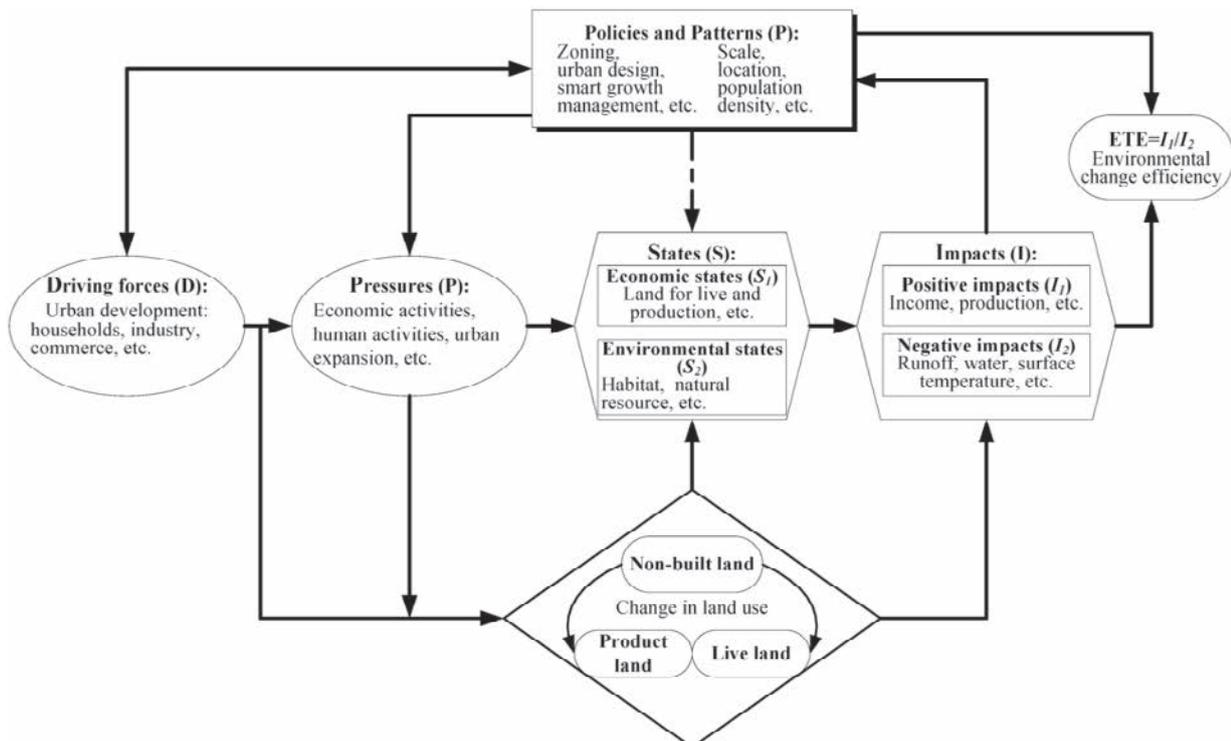
The nature of knowledge, and reliability/validity enter the picture here, but hopefully students already have some knowledge of these concepts. Point out that logic and TOC models require internal validity provided by either a theory that enables prediction, or sound logic about causal pathways. It can also be demonstrated how these models can act as experiments contributing to theory. The worst thing that can happen is that goals are set by 'wishful thinking'.

2.5 The Forces-Pressure-State-Impact-Response Model (FPSIR)

Figure 2.5 illustrates the Forces-Pressure-State-Impact-Response Model. This comes from environmental studies and EIA, but is adaptable. For our purposes a key point is that whatever action we take has consequences, and these have to be forecast and often mitigated. All systems we deal with are dynamic. Another key point is that IA has to correctly identify the pressures (or causes) that lead to impacts, and this requires knowledge of the 'state' of the system. So if we are talking about economic impacts, we need to know the current state of the local economy and trends such as unemployment rates. We need to understand the social system to deal with social impacts, etc. 'Response options' means 'mitigation', which leads to further changes in the system!



You can find many images and sources online, as in the following model that is particularly relevant to our 'built environment' IA object. (Source: Hsing-Fu Kuo 1 and Ko-Wan Tsou (2015). Application of Environmental Change Efficiency to the Sustainability of Urban Development at the Neighborhood Level. *Sustainability*, 7(8), 10479-10498.)



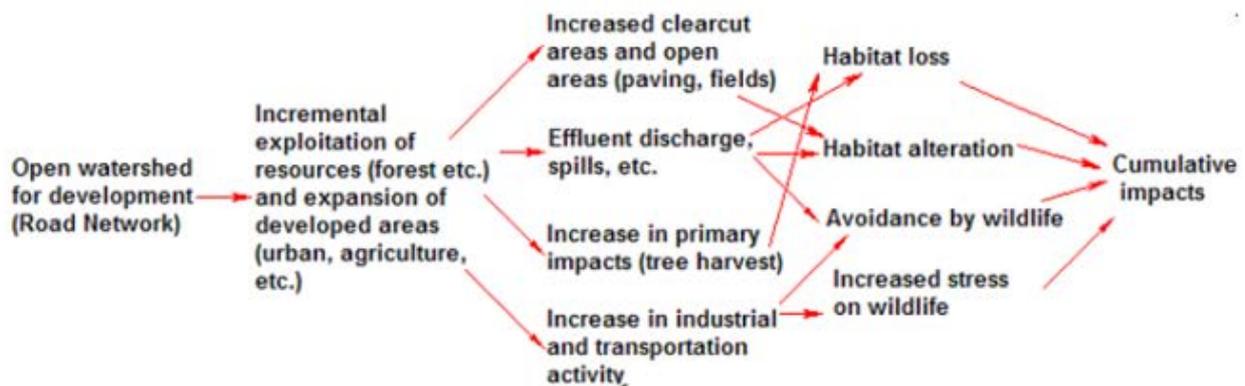
2.6 Cumulative Impacts

This discussion takes impact assessment and evaluation to the highest levels of complexity. How can we look far into the future and determine the impacts of all our actions, all events and event tourism? The theory of change provides a planning model into which evaluation and IA fit, but we really do not know enough to make firm predictions. In such cases, we set up monitoring systems, document trends, and strive for continuous improvements.

Below is a downloaded illustration pertaining to wildlife. The process of developing an area results in interacting pressures which, over time cause cumulative impacts on wildlife. Consider this quote from CBC news in Nov. 2018:

Well over half the world's population of vertebrates, from fish to birds to mammals, have been wiped out in the past four decades, says a new report from the World Wildlife Fund.

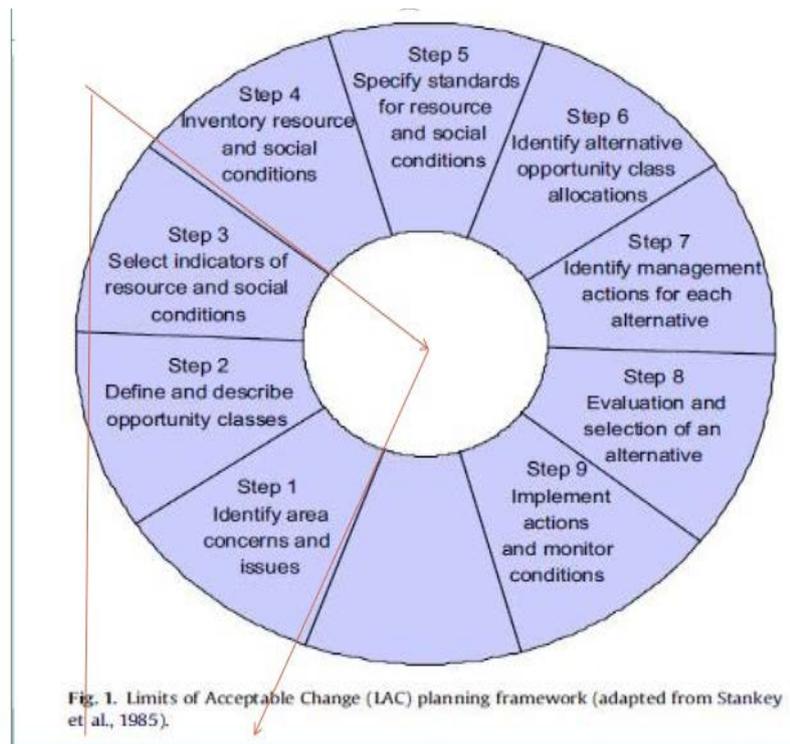
Between 1970 and 2014, there was 60 per cent decline, on average, among 16,700 wildlife populations around the world according to the 2018 edition of the Living Planet Report released Monday.



And there is worse to consider - what happens to human populations, especially indigenous people, when wildlife declines precipitously? Ask students to adapt this model to the cumulative impacts of events, venue development and tourism. Make the clear link to the FPSIR model.

2.7 Limits Of Acceptable Change (LAC) and Related Concepts

Although created for parks and protected areas, and used mainly in the fields of environment and outdoor recreation, the idea of imposing limits on developments and change is applicable to events and tourism. In fact, limits are imposed all the time by policy makers, regulators, and decision-makers who lack either the resources to do what they want or are responding to resident and stakeholder concerns. We cannot talk about IA, evaluation, or planning without at some point dealing with capacity and limits. The diagram below is the original LAC planning process and it most closely resembles the 'forecasting' IA model. The big difference is that in LAC standards, leading to limits, are established early on in the process (step 5), which is something you are more likely to encounter in social and cultural IAs where the consultations result in input of this kind: "we cannot accept any development/event that diminishes our access to nature and community leisure facilities".



Exercise: Discuss the meanings and applications of thresholds, standards, and capacity. This will lead to the 'precautionary principle', an integral part of sustainable development, and the issues that it raises. Can students identify any cases of limits being imposed in the events and tourism domains? What were the reasons and the implications?

The World Tourism Organisation (see below) has defined capacity in a kind of TBL manner. Link this to 'over-tourism' and limits.

Tourism Carrying Capacity

- "Tourism Carrying Capacity" is defined by the WTO as "The maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors' satisfaction"
- Physical carrying capacity
 - This is the max number that area is actually able to support. In the case of an individual tourist attraction it is the maximum number that can fit on the site at any given time and still allow people to be able to move. This is normally assumed to be around 1m per person. "PCC per a day = area (in metres squared) x visitors per metre x daily duration" (Mowforth and Munt) This is a formula which has been used to calculate the physical carrying capacity.
- Economic carrying capacity
 - This relates to a level of unacceptable change within the local economy of a tourist destination, it is the extent to which a tourist destination is able to accommodate tourist functions without the loss of local activities, take for example a souvenir store taking the place of a shop selling essential items to the local community. Economic carrying capacity can also be used to describe the point at which the increased revenue brought by tourism development is overtaken by the inflation caused by tourism.
- Social carrying capacity
 - This relates to the negative socio-cultural related to tourism development. The indicators of when the social carrying capacity has been exceeded are a reduced local tolerance for tourism as described by Doxey's Index of irritation. Reduced visitor enjoyment and increased crime are also indicators of when the social carrying capacity has been exceeded.
- Biophysical carrying capacity
 - This deals with the extent to which the natural environment is able to tolerate interference from tourists. This is made more complicated by the fact that because it deals with ecology which is able to regenerate to some extent so in this case the carrying capacity is when the damage exceeds the habitat's ability to regenerate.

2.8 Summary of Theories, Concepts and Models In This Book

Figure 2.6 provides a summary of theories, concepts and models in this book. I am certain it can be expanded by bringing in material from other sources. Refer back to the Introduction to the Series to see how all theory could make a contribution to event management, but I have had to be selective when it comes to evaluation and impact assessment.

Assessments: Lectures 3 and 4

Short-Answer Test Questions

- ◆ **Learning Objective:** Understand the Outcomes System model and its relevance to impact assessment, including the use of indicators

Q: What is the difference between 'controllable' and 'not necessarily controllable' indicators in Duignan's model?

A: The model leads us to Theory of Change, so students need to understand the importance of specifying outcomes and indicators. The controllable indicators are those the organisation or event believes will measure real outputs and outcomes of its actions. The other indicators are likely to be influenced by external factors or collaborators.

Q: Give examples of how various stakeholders take part in the Duignan outcomes model.

A: There has to be stakeholder engagement to set goals (the desired outcomes) and acceptable indicators. Many event and tourism goals cannot be realized by one organisation or event alone, so collaboration is essential.

- ◆ **LO:** Be able to employ both Logic and Theory of Change models in evaluation and impact assessment, and know how to integrate them in strategic planning

Q: When do you use 'logic models' and 'theory-of-change models'? What are the differences?

A: Both are logic models, but the main point of difference is in the orientation of TOC to longer-term impacts or outcomes, whereas a simple logic model can be used for any evaluation or planning application. A good answer should define outputs versus outcomes. TOC and logic models can start with theory, or be conceived as experiments.

- ◆ **LO:** Learn the nature of evidence and the types applicable to IA for events and tourism

Q: Compare the types of evidence available for impact assessment and evaluations relevant to events and tourism.

A: A table would suffice, with point form (see Figure 2.4). A definition of facts or proof, versus evidence, would add a lot to the answer, particularly to explain how evidence can be contracted among stakeholders (i.e., agreement on what methods and measures will be accepted for determining impacts and evaluating effectiveness).

Q: What 'voices' should you listen to when conducting an impact assessment, and how are they used as evidence?

A: Of all the types of evidence, 'voices' are particularly important. The answer should describe the ways in which evidence can be obtained from residents, those potentially impacted, and other stakeholders, including surveys, consultations and available data. The most common evidence is residents' perceptions of impacts. A fuller answer would discuss the related issues, including bias and reliability.

- ◆ **LO:** Understand the Forces-Pressure-State-Impact-Response (FPSIR) Model and its importance in impact assessment

Q: What kinds of forces: and 'pressures' do events and event tourism exert on communities and the environment? Give examples.

A: What is a force or a pressure can be a matter of perspective and scale (or aggregation), as tourism might be thought of as a global force shaping the modern world, exerting pressures such as traffic, crowding, inflation, job creation or demand for resources. Events can be part of this dynamic change process. At a smaller scale, a portfolio of events can be the driving force, with more specific pressures such as traffic, over-tourism in critical heritage areas, jobs and in-migration, or pollution.

Q: How do the 'responses' to known or forecast impacts shape the future?

A: If it is believed that events and tourism are good for the local economy, then policies and strategies to grow event tourism are often the response - which leads to more pressures. If negative impacts are perceived, then imposing limits on the scale of events or their locations might shift demand elsewhere. What is needed in this answer is an understanding of dynamic systems and the interplay of policies, strategies and impacts.

- ◆ **LO:** Know the meaning and nature of impact interactions and cumulative impacts, with reference to synergies, cascade effects, feedback, risk and uncertainty, and tipping points

Q: Define cumulative impacts and state why these are very challenging to measure and evaluate.

A: The whole idea behind the CSR and sustainability paradigms is that we all take a longer-term perspective on planning and consider how everything we do affects the environment and society. That means we have to be able to measure and evaluate how interacting events, combining with other trends and policies, can accumulate impacts - these can be unpredictable, necessitating risk assessment, and they can be very complex in nature. For example, how can we predict (perhaps using a TOC model) that a portfolio of events will improve the economy while preserving essential cultural and ecological assets?

Q: Define 'positive and negative feedback' as it relates to long-term, cumulative impacts.

A: Event-specific examples would be best when defining these terms, such as: 'positive feedback' to the growth of event tourism includes new investment in infrastructure such as venues and in marketing, thereby stimulating more growth; "negative feedback to the increasing size of events and their costs could take the form of a taxpayer revolt leading to political change and the imposition of limits".

Q: Give an example to explain how events might interact to create positive, synergistic benefits for residents.

A: A portfolio of events can be managed to increase synergistic benefits that single events cannot achieve on their own, such as fostering social capital by better networking and collaboration among events and institutions, more volunteering opportunities, and improved access to culture, entertainment and venues.

- ◆ LO: Be able to adapt theory on Limits of Acceptable Change (LAC) to impact assessment, including the related concepts of thresholds, standards, capacity, and the precautionary principle

Q: What types of 'standards' and 'limits' could be placed on the events sector to prevent negative impacts? OR ... Is it justifiable for governments to limit the number and size of events? How could it be done?

A: A simple, short answer would merely list or describe the types of standards and limits, whereas a more complete answer would also address LAC and capacity. It is a matter of opinion whether or not governments should regulate the size or growth of the events sector, but with the growing concern over negative tourism impacts it is certainly worth debating. Therefor the pros and cons could also be addressed in a good answer.

Q: Explain the various uses of 'capacity' in event and tourism management.

A: Students should at least be able to distinguish between design capacity (i.e., the fixed or planned attendance for optimal experience), capacity fixed by venues or regulations (i.e., fire standards on how many people a room can hold) and capacity to absorb tourism/events, which is a management concept that in part depends upon stakeholder input (e.g., perceptions and attitudes, use and non-use values).

Long-Answer Questions

1) Explain the Outcomes System Model of Duignan and how it informs Theory of Change models.

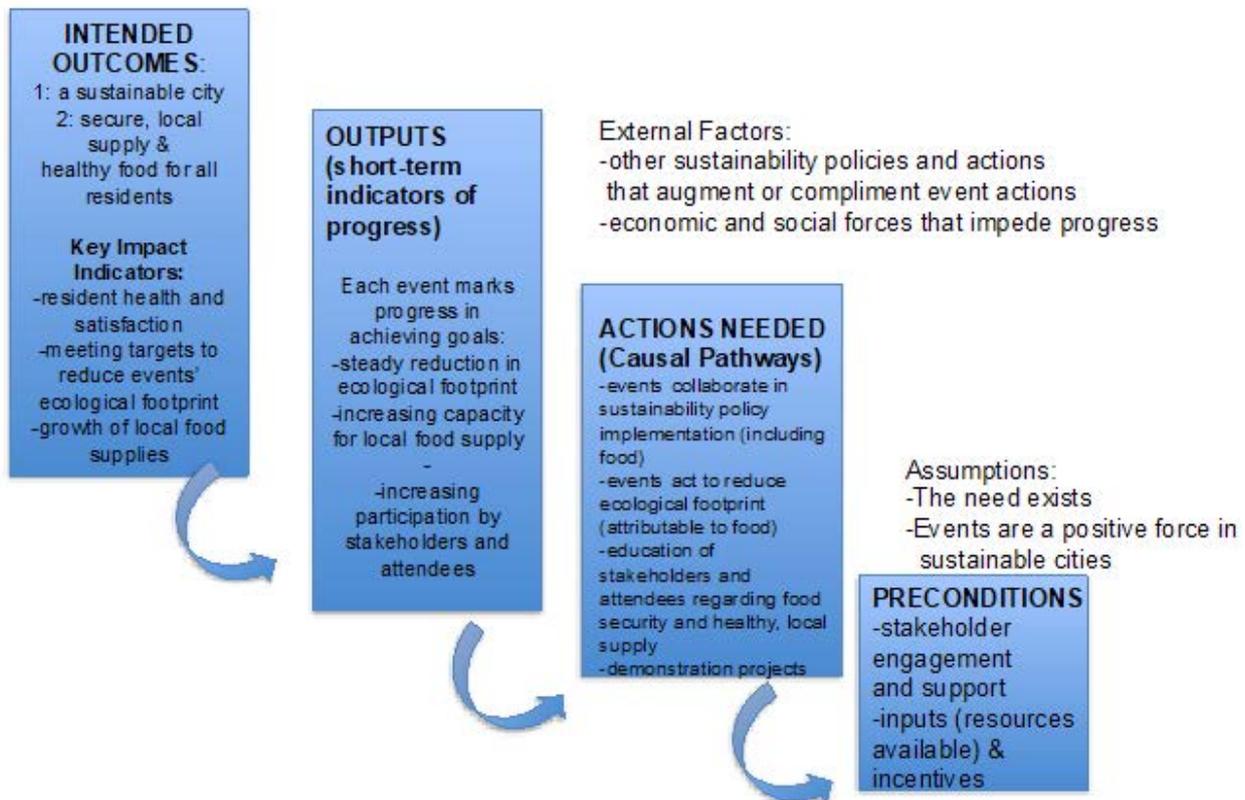
A: A diagram could also be requested, or form part of a good answer. Particular attention should be given to explaining the differences between 'outputs' and 'outcomes', and between 'controllable' and 'not necessarily controllable' indicators. It is also necessary in a full answer to compare 'performance improvement' with 'impact evaluation attributing change', as this relates to what I have called the differences between routine evaluation of outputs with longer-term impacts or outcomes - and that is where the theory of change comes in. TOC is specifically intended to guide the planning and evaluation of events as agents of change. Duignan's model also covers strategic IA in the box labelled 'economic and comparative evaluation'. Stakeholders have to be brought into the answer, as there must be agreement as to accountability, and that might even form a contractual arrangement between the event(s) and funding bodies or sponsors. Agreement as to appropriate IA methods and evaluation criteria will be needed.

2) Illustrate a TOC process to show how it is to be integrated in strategic planning and how it shapes impact assessment.

A: Probably a diagram is necessary. The student might go back to the logic model and illustrate TOC for an event portfolio with economic outcomes as its main goal, or they could elect to deal with two examples given in the book, namely social integration and social capital. The logic of these models has to be explained, with the key point being to work backwards from desired outcomes/impacts, then carefully develop the action pathways that will achieve the goals. Few events can act alone to generate a change process, but it is not impossible. Stakeholder engagement is absolutely necessary. Again, the student must differentiate between outputs (to be measured along the way) and outcomes,

as covered in the Duignan model. A really great answer will elaborate upon externalities, risks/uncertainties, and assumptions.

Below is another model I created for food contributing to a sustainable city. If you can reference my 2017 article from Event Management entitled “Developing a framework for sustainable event cities” you can see many similar opportunities for TOC planning/modelling to help make events a positive force for sustainability.



3) Discuss the difference between ‘proof’ and ‘evidence’ in the context of event impact assessment. What types of evidence do you think will be most convincing when it comes to a political decision on whether or not to bid on a mega event?

A: Any discussion of ‘proof’ should refer to the process of experimentation and the search for cause-effect relationships. This requires a discussion of methodology and methods, particularly the positivistic paradigm that leads many mainstream evaluators to only do experimental designs, whereas in many applied fields including events and tourism management that standard (or bias) is not particularly feasible or desirable. We often rely upon qualitative measures, and especially the various ‘voices’ that reflect perceptions and attitudes. I would want to see a comparison of the different types of evidence that can be use in IA and evaluation, and that could actually be the starting point for the answer. Another starting point can be the Duignan model, as it distinguishes between indicators of proof and other indicators that can be used but are ‘not necessarily controllable’. Indicators have to be discussed, as they are the measures we use as evidence when doing IAs. As to the mega-event bid, that is a tough one, and the answer could go in many directions, so look for the logic and how well it is explained. To me, I want proponents of mega events to not only forecast benefits but also costs, then make it clear who is going to benefit and who will pay - or be negatively impacted.

4) The FPSIR model is a starting point for thinking about event and tourism impacts. Use the elements of this model to demonstrate how a new arena might impact residents of a city.

A: The answer has to show an understanding of both the elements of the model and how they all flow in cyclical fashion - i.e., being a dynamic process. Explanation can start anywhere: given the example of a new arena, it could be argued that it is a response to perceived impacts on the local economy that have been generated by competition within a globally competitive marketplace. It can also be argued that the decision to build a new arena is the starting point, reflecting broader forces in the economy and society, and it will generate specific pressures on the local community that have to be evaluated. Now the job is to analyse existing, and forecast possible, changes attributable to the arena and the events that will be held in it, looking some ways into the future, then craft appropriate responses (i.e., mitigation). To complete the cycle requires monitoring and possibly revised strategies that will impact upon the community and environment in different ways. Indeed, this model illustrates growth in general and, to a sharp student, will lead to discussion of how each decision affects sustainability.