11. For What and for Whom?

In this and the following four chapters, the five-question framework is used to provide starting points for more systematically understanding and managing diverse unknowns. Let us now address the first question: '*What is the understanding and management of diverse unknowns aiming to achieve and who is intended to benefit?*' Basically there are three aims

1. recognising that in considering complex real-world problems many different unknowns are relevant and require a range of responses
2. acknowledging that there are no perfect answers to complex problems
3. in the long term, assisting policy makers and practitioners in taking unknowns and imperfection into account in order to both make better decisions and respond rapidly and effectively when their actions lead to unexpected detrimental outcomes.

In other words, the primary intent of this first question is to prompt integrative applied research teams to think expansively about unknowns and how they might be dealt with. The issue is to move beyond the discipline-based focus team members will most probably have been trained in (which looks for individual productive unknowns to convert into knowledge) and instead to consider the unknowns that are most important from the perspective of the complex real-world problem, even if they cannot be responded to in conventional ways. The second purpose is to remind teams about the dangers of hubris and in particular that, for the problem they are investigating, unknowns are most likely unlimited, so that ways of dealing with the problem will be imperfect. These two purposes are combined into the ultimate goal of improving decision-making processes for complex real-world problems. That goal is still a way off and the focus in this book is primarily on the first aim.

In the long term, the beneficiaries are policy makers and practitioners, as well as those affected by their decisions and actions. But in terms of the narrower goal, which is the focus of this domain, the beneficiaries are those whose expertise in or concerns about specific unknowns are taken into account. For example, in the diamorphine prescription feasibility research, where we tried to consider all the identified problems about a trial proceeding, all key stakeholder groups who expressed anxieties were beneficiaries.

The first question also sets the scene for evaluating this domain of integrative applied research, as described in Chapter 15. It allows the approach to understanding and managing diverse unknowns to be differentiated from other research aims and assessed independently of the rest of the research.

Task for the I2S Development Drive
Compile case examples demonstrating: a) different ways of describing the purpose of thinking expansively about unknowns, b) how the inevitability of imperfection was incorporated, c) the contribution to the overarching research aims, and d) the beneficiaries (that is, which perspectives were included).

This text is taken from *Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems*, by Gabriele Bammer, published 2013 by ANU E Press, The Australian National University, Canberra, Australia.