12 Summary and conclusion

The environment domain plan presents over 61 questions about our environment. Most of these questions are broad and complex, and need significant amounts of information to answer them.

The analysis of official environmental data showed that of the 61 supplementary enduring questions, four were highly informed, 25 were moderately informed, and 32 were poorly informed. There are deficiencies in the information we require on our environmental issues. This analysis was a qualitative assessment based on expert opinion.

The gap analysis process suggested there were still significant information needs at a lower level for those questions that were highly informed. For example, not one of the gap analysis was an under estimate. Many of the experts suggested the analysis overestimated the level at which the questions were informed by the data. For example, how well informed the land use questions are depends strongly on how much detail is needed in assessing land use. If not much is required, then an assessment of 'high' is correct (eg Land Cover Database 3 will satisfy broad land-use information needs). But if more detail is required (eg land use intensity, farming type, stocking rates, and rotations), then a rating of 'low' is more appropriate.

The workshops helped identify over 150 initiatives to address these information needs, of which 36 were the highest priorities. There were several common themes in the initiatives, namely around governance, common reporting frameworks, centralised or federated data storing, and baseline information.

Tier 1 statistics are key official statistics produced by a number of government agencies.

Tier 1 statistics have priority to be produced as they are:

- essential to critical decision-making
- are of high public interest
- allow for international comparability
- meet international statistical obligations
- allow for long-term data continuity
- meet expectations of impartiality and statistical quality.

The greatest value to informing questions about our environment will occur where the environment domain plan initiatives align with Tier 1 statistics.

Examination of the supplementary enduring questions showed that all of them align with at least one Tier 1 environmental statistic. Around 40 percent of the environment domain plan initiatives are aligned with Tier 1 statistics. This result is not surprising, as Tier 1 statistics were developed before the environment domain plan initiatives, that is, the initiatives were often identified to support or extend the Tier 1 processes. There were common themes in the domain plan initiatives, such as governance and creating information portals that do not link to any particular Tier 1 statistic, but which will be useful, nevertheless.

A further analysis was also undertaken of the relationships between the supplementary enduring questions and Tier 1 statistics. For each of the 12 environmental Tier 1 statistics, a supplementary enduring question was identified as relevant. How well each of the supplementary enduring questions rated was compared with the current status of the Tier 1 statistics.

We found that a Tier 1 statistic could be well informed, even when its associated supplementary enduring question has a low level of information. For example, Tier 1 statistics on marine protected areas are well informed, but the associated supplementary enduring question on environmental protection efforts in the coastal and marine topic is not.

Policy questions, including those behind Tier 1 statistics, often have a very narrow focus. The supplementary enduring questions are deliberately wide ranging. The result is that many of the Tier 1 statistics could be well informed while the supplementary enduring questions have significant information needs.

A similar analysis of the 22 national state-of-the-environment indicators shows the associated supplementary enduring questions were either rated 'high' or 'medium'. On the surface these indicators appear better informed than the relatively new list of Tier 1 statistics, perhaps reflecting the effort put into developing them over the years.

Next steps

The challenge now is to act on the environment domain plan initiatives, especially as they are regarded as aspirational. There is no formal obligation for any organisation to make progress against any of these initiatives. Statistics NZ's role, together with the Ministry for the Environment and the Department of Conservation, is to champion the implementation of this environment domain plan.

The next steps may be to determine which agencies might lead each of the high-priority initiatives, and to work together to scope out a plan of action, including time scales and costs. Possible lead agencies have already been identified for some of the initiatives. This does not imply they have agreed or consented to do this work.

Before further work is undertaken on the initiatives, an assessment is needed on what they would cost to implement and how long they would take to complete. This is part of the scoping process that will follow from here. The initiatives are presented in this report in the same form they were developed in the workshops. There may be value in combining a number of them together and then reworking the scope of the work under the combined initiative.

The next step is to work with the Natural Resources Sector chief executives forum, data gatherers, funding organisations, researchers, and data users to see what can be achieved in promoting, scoping, and acting upon the ideas in these initiatives.

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