

Writing a Research Proposal

Writing an effective research proposal is an essential step in defining, articulating and promoting your research interests. The proposal is limited to 300 words, so each sentence and paragraph must be concise and relevant. The proposal should also have a succinct title which accurately reflects its content.

First, clearly define the issue or problem that you intend to investigate. This can be expressed in one or two sentences (e.g. "A recent United Nations report found that increasing salinity is posing a major threat to the Australian environment.") If there is no clearly defined issue or problem, your proposal will become less focused and more descriptive.

You will need to briefly identify the causes and the extent of the problem, including some background (e.g. "Over the last two decades, salinity has rendered the soil unusable in many parts of Australia, largely due to inappropriate land use"). Explain for what or whom is it a problem and under what circumstances? (e.g. "This threatens to degrade the environment to a point where it will be unsustainable for both biodiversity and agriculture.") Outline the scope of your proposed research – how will you limit your investigation? It could include, for example, by country and/or time-period (e.g. "This paper will concentrate on land-use practices in Australia over the last two decades").

It is also important to provide some justification for why your topic is important and worth researching. For example, in what way will your research affect Australia and/or the world? Or in what way will it make a significant contribution to knowledge in a particular field? (e.g. "Without urgent attention to this problem, it is likely that significant areas of the Australian landscape will become desert").

Clearly state the aims of the research. This should be a succinct and specific statement of intent rather than a generalisation. For example, statements such as "This research will investigate salinity in Australia" are too general to be regarded as an aim for higher degree research. A more specific and focused aim would be: "This research will identify the major causes of salinity in eastern Australia, and propose viable alternatives to destructive land-use practices."

An important component of the research proposal is the methodology you will use to complete your project. How will you go about getting the information you need? For example, will you use quantitative or qualitative methods? How long will the project take to complete? Will the project involve experiments, surveys or interviews? (e.g. "The research will incorporate empirical evidence obtained by interviews and surveys within the farming and conservation communities.")

Your research proposal should also indicate some awareness of the current issues and debates within the literature of your field. In a brief research proposal (e.g. 300 words) a comprehensive literature survey is not expected, but it is important to locate your proposal within the context of current academic research.

Finally, the proposal should indicate what the expected outcomes of the research are. It may be, for example, a solution to a problem or a new methodology. Providing expected outcomes creates a more focused approach to the research.

A sample research proposal has been attached for your reference.

References:

Australian Conservation Foundation Report: Science and Australia's Salinity Crisis Inquiry into the Coordination of the Science to Combat the Nation's Salinity Problem, Cory Watts, 2003.

Australian Story (ABC TV), Of Droughts and Flooding Rains, 06/02/06. Murphy, Justin, Salinity: Our Silent Disaster, ABC online (news story for The 7.30 Report), www.abc.net.au/science/slab/salinity/default.htm.

Murray Darling Basin Commission (CSIRO) Summary Report, Groundwater Flow Systems Framework, Walker, Giffeder, Evans, Dyson & Stauffacher, 2003.

Sample Research Proposal

Reforming Australia's Agricultural Sector: Investigation of a Natural Antidote to Salinity

Defining the problem

A recent Australian Conservation Report found that increasing salinity is at crisis levels in the Australian environment. Over the last five decades, salinity has rendered the soil unusable in many parts of Australia, largely due to inappropriate land use. This includes wide-scale deforestation, overuse of chemical fertilisers and pesticides and intensive cropping of nonindigenous plants.

Causes and extent of the problem

Salinity threatens to degrade the environment to a point where it will be unsustainable for both biodiversity and agriculture.

Extent and severity of problem

According to the CSIRO, environmental damage in Australia is so severe that replanting 80% of cleared areas would not restore the land to a healthy state for many generations (2005).

Justification for research

This damage is not confined to agriculture; lakes and rivers are also affected by salt, which results in loss of biodiversity and unusable drinking water. According to Dr John Williams, Deputy Chief of CSIRO Land and Water Division: "We must face radical land use change, because we don't have farming systems that can control salinity and at the same time generate sufficient income for social and community well-being in the rural sector" (2005).

Elaboration of the issue

Although there is general consensus among the scientific and conservation communities that salinity is a critical issue, some disagreement exists about how to improve land-use. While most farmers continue to rely on traditional water and land management practices, a relatively little-known practice of decelerating creek and river-flows to restore plant growth has shown extremely positive results. Landscape ecologist Professor David Goldney cites evidence of land transformed from severely degraded to highly productive (Australian Story, 2006).

Research aims

This research aims to evaluate the viability of natural sequence farming in Australia.

Methodology

It will employ interviews, surveys and questionnaires to obtain empirical information on this practice.

Expected outcomes

The research is likely to recommend further investigation of natural sequence farming in Australia.

(292 words)