

PROJECT PHOENIX



# APPLIED RESEARCH COMMUNITIES OF PRACTICE, PEOPLE AND SCIENCE



PROJECT SUMMARY

JUNE 2021

*Across all of our Project Phoenix activities and actions we pay respect to the Traditional Owners and Custodians of the lands and waters on which we work. We honour the resilience and continuing connection to country, culture and community of all Aboriginal and Torres Strait Islander people across Australia. We recognise the decisions we make today will impact the lives of generations to come.*

First published 2021  
Project Phoenix  
Greening Australia (National Office)  
Level 3, 349 Collins Street  
Melbourne VIC 3000  
Tel: 1300 886 589  
Email: phoenix@greeningaustralia.org.au  
Website: www.greeningaustralia.org.au

ISBN: xxx-x-xxxxxx-xx-x (Book)  
xxx-x-xxxxxx-xx-x (epub)

Author: Dr Laura Baker, ACIL Allen  
Title: Applied research — Communities of practice, people and science

Copyright © Project Phoenix 2021  
Cover by Kerry O’Flaherty, Design Consultant  
Internal design by Kerry O’Flaherty, Design Consultant  
Proofread by Puddingburn Publishing Services

This report is copyright. Except for private study, research, criticism or reviews, as permitted under the *Copyright Act 1968* (Cth), no part of this report may be reproduced, stored in a retrieval system or transmitted in any form or by any means without prior written permission. Enquiries should be made to phoenix@greeningaustralia.org.au.

Project Phoenix is supported by the Australian Government’s *Wildlife and Habitat Bushfire Recovery program* and coordinated by Greening Australia.



Australian Government



# ACKNOWLEDGEMENTS

Greening Australia would like to acknowledge the hard work and dedication of the Project Phoenix Management Team: Samantha Craigie, Patricia Verden, Brian Ramsay, Irene Walker, Courtney Sullivan, Rowan Wood, Paul Della Libera, Kim Philliponi and Ella Campen.



# CONTENTS

EXECUTIVE SUMMARY .....	5
About the project .....	5
Scope .....	5
Introduction .....	6
Issues .....	7
Key output .....	7
Comment .....	7
Outcomes .....	7
Findings .....	8
Evidence .....	9
RECOMMENDATIONS.....	10
WANT TO KNOW MORE? .....	12



# EXECUTIVE SUMMARY

## About the project

*Applied research — Communities of practice, people and science* looks at options for developing a draft framework to support the seed sector through applied research.

**This review investigates a cross-sectoral model among conservation seedbanks, the tertiary sector and industry to support innovation and inform research.**

Increased coordination of applied research may lead to innovation through greater engagement with different organisations and sectors.

## Scope

The scope of this project was to:

- conduct a desktop review of good practice approaches to coordinating and structuring applied, cross-sectoral research and development (R&D) and
- develop and apply a framework to identify partnership opportunities for the native seed sector.



## Introduction

The native seed sector currently operates in a siloed manner. It lacks coordinated access to resources (including funding), skills and knowledge to conduct effective R&D. This is hindering the extent to which the native seed sector is able to identify and address research and knowledge gaps.

**To improve restoration and conservation outcomes, there is an urgent need for coordinated research programs, monitoring and evaluation so as to ensure that research gaps are identified and addressed, and knowledge is current and easily accessed.<sup>1,2,3</sup> This should be driven through a cross-sectoral framework for applied R&D.**

This project identifies, reviews and assesses good practice approaches to coordinating and structuring applied, cross-sectoral R&D. It also develops and applies a framework to identify partnership opportunities for the native seed sector.

Good practice R&D models are those that work well and produce results for the intended purpose, or have become a standard way of conducting R&D. In this report, good practice applied R&D models have been described based on the approach to collaboration/coordination, the funding mechanism (co-finance/leverage; industry/non-profit/government) and the delivery approach (partner/procure).

**The purpose of the review is to develop a draft framework for supporting the native seed sector through applied research.**

---

<sup>1</sup> Hancock, N., Gibson-Roy, P., Driver, M., & Broadhurst, L. (2020). *The Australian Native Seed Survey Report*. Canberra: Australian Network for Plant Conservation.

<sup>2</sup> Commander, L. (2021). *Snap! A picture of the Australian Seed Sector in 2021*. Project Phoenix.

<sup>3</sup> Insights obtained by ACIL Allen through the Strategy Design Workshops for the Project Phoenix Strategy.



## Issues

The native seed sector does not have a coordinated approach, such as an R&D framework, to conduct cross-sectoral applied R&D. This is hindering the extent to which the native seed sector is identifying and addressing research and knowledge gaps.

## Key output

The key output from this review is the report *Applied research — Communities of practice, people and science*.

Engagement was undertaken with representatives of 114 organisations across all states and territories in Australia as part of the Strategy<sup>4</sup> Design Workshops.<sup>5</sup> Refer to the full report *Applied research — Communities of practice, people and science* for an overview of stakeholders and workshop attendees and outcomes.

## Comment

Not applicable

## Outcomes

Australia has a strong R&D sector, supported by a range of funding and collaboration models.

**The desktop review identified 23 models that are relevant to the native seed sector. Most of these are not discipline-specific. They attempt to build cross-sectoral collaboration through funding incentives/requirements and most use a competitive grant mechanism to deliver funding.**

Four of these models were detailed in case studies and assessed for applicability to the Australian native seed sector.

<sup>4</sup> This report contributes to the evidence base for a ten-year strategy to guide the native seed and landscape sector. The document, which is untitled until endorsement in September 2021, is referred to as the Strategy in all Project Phoenix publications

<sup>5</sup> In April and May, 2021 a series of 14 Strategy Design Workshops were conducted as part of the Strategy. R&D was discussed as a part of each of these workshops.



## Findings

A Draft Framework for applied R&D has been developed for the native seed sector using the lessons learnt from the desktop research of applied R&D funding models as well as findings from the Strategy Design Workshops (Refer to the Strategy, the full report *Applied research — Communities of practice, people and science*, Section 4 and below).

**The Draft Framework is an innovative and good practice model for use in the native seed sector. It should aim to be outcome-driven, facilitate cross-sectoral collaboration and knowledge sharing, be overseen by a national cross-sectoral advisory body, and leverage a broad range of opportunities to secure funding from existing models.**

There are a range of applied, cross-sectoral R&D models in Australia that could potentially be applied to the native seed sector.

The key findings from the workshops on R&D are as follows:

- The native seed sector operates in a siloed manner.
- There is a need to reduce silos and competition and to better fund and coordinate across the sector.
- The native seed sector should be coordinated at federal and state government levels.
- R&D should aim to better match resource and skill availability, and leverage private businesses and Traditional Owner priorities and knowledge to conduct/support R&D.
- Grant funding and commercial income streams should incentivise collaboration and focus on longer-term projects that will deliver longer-term outcomes.

Two of the four case studies were determined to be highly applicable to the native seed sector:

### Case Study 1 — Linkage Projects

- Linkage Projects is an established national model, to which participants in the native seed sector can apply. It does not focus on a specific discipline.
- Primary applicants (eligible universities) are required to engage with cross-sector participants.
- Matched funding requirements would secure additional funding for the sector (with exemptions for non-profits and small businesses).





## Case Study 2 — Rural R&D Corporations (RDCs)

- RDCs are part of a successful and established national R&D system with existing collaborative relationships.
- RDCs operate in the agricultural, regional and environmental spaces (complementary to the native seed sector).
- AgriFutures Australia (one of the 15 RDCs analysed) has an Emerging Industries Program which is designed to develop industries through R&D and capacity building.

Lessons learnt include:

- Implementation of the Draft Framework requires sufficient resourcing to support longer-term collaboration and outcome-driven applied R&D.
- Continual monitoring of the progress of the Draft Framework will allow for its adaptive management. This will ensure that the Draft Framework can best meet the sector's needs for applied R&D as it scales and matures.

## Evidence

Refer to the report *Applied research — Communities of practice, people and science* for a full list of references, case studies and an overview of workshop attendees.



# RECOMMENDATIONS

The following recommendations have been made based on the lessons learnt from the case studies and the assessment for applicability to the Australian native seed sector.

The lessons learnt from the case studies are summarised in the [Findings](#) section above and are provided in detail at the conclusion of each case study.<sup>6</sup>

The assessment of applicability to the Australian native seed sector indicates the suitability of each case study as low, medium or high.

- Two of the four case studies, **Case Study 1 — ARC Linkage Projects** and **Case Study 2 — Rural R&D Corporations** were assessed as being highly suitable for the native seed sector as they are existing R&D funding models to whom organisations could readily apply.
- **Case Study 3 — CSIRO Innovation Connections** is also an existing model that businesses and researchers could readily apply for. However, it has been rated medium on its suitability for the native seed sector as businesses and researchers would need to demonstrate that they intend to contribute to a growth sector (i.e. Food and Agribusiness). As such, not all organisations in the native seed sector would be eligible.
- **Case Study 4 — NSW Adaptation Research Hub** was identified as a useful partnership model that focuses on applied R&D directed towards policy objectives. This model identifies the intended outcomes to be achieved and then assembles partnerships and activities to drive progress towards the outcomes. It has been rated medium on its suitability for the native seed sector as the model requires considerable government investment and coordinated policy effort. These are unlikely due to the dispersed responsibility for native seeds across federal, state, territory and local governments. However, it provides a useful framework for coordinating activities across sectors to design and achieve outcome-based applied R&D.

---

<sup>6</sup> Refer to the full report *Applied research — Communities of practice, people and science* for detail of the case studies.



Key recommendations from this review are as follows:

## RECOMMENDATIONS

 <b>1</b>	<b>A national advisory body should be established to develop and implement the Draft Framework for applied R&amp;D. The advisory body should include participants from across the native seed sector.</b>
 <b>2</b>	<b>The Draft Framework should be outcome-driven. The advisory body should identify outcomes and applied R&amp;D priorities, following consultation with the sector and a review of existing literature and research gaps and priorities. The intended outcomes should guide the work programs/activities to be conducted and the partnerships that need to be formed.</b>
 <b>3</b>	<b>An online platform should be established and annual fora held, to share knowledge, track progress and facilitate collaboration.</b>
 <b>4</b>	<b>Native seed organisations should leverage opportunities to secure funding from existing applied R&amp;D funding models.</b>



## WANT TO KNOW MORE?

For further information read the full report *Applied research — Communities of practice, people and science*.

### Related project

- *Join the National Seed Network!*

This project contributes to the evidence base for a ten-year strategy to guide the native seed and landscape sector. The document, which is untitled until endorsement in September 2021, is referred to as the Strategy in all Project Phoenix publications.

PROJECT PHOENIX

