






BRIEF REPORT OPEN ACCESS

Practical Application of Ethical Research Principles: Developing and Implementing Grassroots Food Security Research With the Yarrabah Aboriginal Community

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Received: 4 September 2025 | **Revised:** 16 February 2026 | **Accepted:** 23 February 2026

Handling Editor: Carmel Williams

Keywords: aboriginal communities | ethical research principles | food cubes | food security | home gardening

ABSTRACT

Introduction: Nutrition sensitive urban agriculture that supports self-determination for Aboriginal Peoples and Communities has the potential to promote food security, health, and wellbeing. This paper aims to (1) describe the evolving processes and pathways of a home gardening project development and (2) demonstrate the alignment of research practices with ethical principles for working and researching with Aboriginal Peoples and Communities.

Methods: Project development and the journey through grassroots engagement, cultural connection and collaboration, and ethical considerations are described. The research team reports on how ethical principles that support respectful and reciprocal research in an Aboriginal Community were practically integrated.

Results: The project unfolded in an iterative, nonlinear fashion, where community connections and reciprocity in practice were prioritised. We demonstrate the ways in which research team members applied the ethical principles of spirit and integrity, responsibility, respect, reciprocity, equity, and cultural continuity.

Conclusions: Employing ethical and authentic engagement practices in research with Aboriginal and Torres Strait Islander Peoples and Communities is crucial for maintaining ongoing respectful research relationships.

1 | Introduction

In Australia food security is a major concern for many Aboriginal Communities. Food security exists, “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” [1], is a fundamental human right recognised in international law in article 25,

Universal Declaration on Human Rights [2]. Aboriginal and Torres Strait Islander Peoples are at greater risk of food insecurity than their non-Indigenous counterparts [3, 4]. A complex range of factors including invasion and ongoing colonisation in Australia has undeniably been a strong catalyst towards the destruction of the traditional native food sources and practices of Australian Aboriginal Peoples, particularly given their forced removal from traditional lands [5, 6]. As a result, many

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Aboriginal Communities now rely on Western food sources, with food insecurity further exacerbated by geographical location and economic factors [7, 8].

Nutrition-sensitive strategies that promote self-determination of Aboriginal Peoples and Communities, address barriers to food access and promote health and wellbeing, and align closely with the Closing the Gap strategy [5]. Aboriginal Peoples have immense knowledges in cultivating and manipulating the land in respectful and sustainable ways over many thousands of years [9]. Alongside traditional food procurement, small-scale community or home-based urban agriculture, like home gardening, can increase the resilience of local food systems [10–15]. Despite this potential, home-based gardening has not been described in the literature. Food cubes are an Australian wicking bed garden product designed to provide stable conditions for plants, with easy-to-attach frames and netting to protect from pests and animals, meaning they are suitable for those new to home food production. In this report, we describe the evolving processes and pathways undertaken as part of a grassroots research project that used Food cubes to support home gardening. Baseline and follow-up evaluation will be reported elsewhere. Here we focus on navigating project development that aligns with ethical principles for working and researching with Aboriginal individuals, families, and communities. The broader project involved partnership between the Yarrabah Aboriginal Shire Council, (YASC), Health and Wellbeing QLD (HWQld) and the University of the Sunshine Coast (UniSC). While this paper outlines how we navigated the project development, the outcomes of this work will be presented elsewhere. In this paper, we use the term Aboriginal to respectfully identify the Indigenous Peoples engaged in this work, in accordance with the Community's preference.

2 | Project Background

This research work was conducted in an Aboriginal Community on the traditional Land and Sea Country of the Gunggandji and Yidinji peoples in North Queensland. Guided by Community members' self-determination, the Yarrabah Aboriginal Shire Council (YASC) identified the priority area of local food systems change to address household food insecurity. A market garden feasibility study, commissioned by (YASC) in 2022, identified the lack of available land and recommended investigating the role of home gardening as part of a suite of proposed strategies. In addition, HWQld previously worked with Community alongside UniSC to understand food security challenges and identify possible solutions.

In 2022, HWQld and UniSC staff met at a conference which led to the initiation of the project in late 2023 “Gardening with Food cubes: Growing, eating, and enjoying good food in Yarrabah,” a community-based project, supported by the YASC, HWQld, and the UniSC. The aim of this research project was to learn about the (non-monetary) value, impact, and practicality of home gardening in the Yarrabah Aboriginal Community. All partners contributed cash or in-kind contributions. The funding brought partners together, supported local employment, built capacity, and ensured remuneration for people's contributions, creating a strong foundation for collaborative efforts.

Our research team comprised both Aboriginal and non-Aboriginal Australians. Researchers new to working with Aboriginal Peoples and Communities received mentoring from an Aboriginal Academic Indigenous knowledges adviser, experienced Aboriginal Community members, and an experienced non-Aboriginal team member. Collectively, our team shares the value of promoting health and wellbeing for Aboriginal Australians, by prioritising Aboriginal voices and experiences, and as knowers of what is best for their families and communities. It is widely acknowledged that Aboriginal Peoples are over-researched with negligible if any direct benefit received by the Community [16]. In this project, Food cubes were considered a benefit to the Community, for ongoing use beyond this project.

3 | Project Development and Implementation Journey

While the work for this project “started” in 2022 with the YASC feasibility study, the development and implementation of the Food cubes project followed a nonlinear process. Navigating the tensions between Western research structures and timelines with the realities of Aboriginal community-based work highlights the need for flexibility across all aspects of the project. The following section describes the evolving processes and pathways (Figure 1) involved in navigating project development and demonstrates how these aligned with ethical principles for working and researching with Aboriginal individuals, families, and communities (Table 1).

Grassroots connection, stakeholder engagement, ethics development, and cultural and Community governance training occurred simultaneously, enabling the team members to progress and hold timeframes in mind. In alignment with Cultural Safety protocols, all team members participated in cultural immersion sessions delivered by Yarrabah Aboriginal Elders and Community leaders. These sessions were based on cultural protocols specific to working in partnership with the Yarrabah Aboriginal Community [17].

Between the Sunshine Coast and Yarrabah, and HWQld staff based in Cairns, the sense of physical distance and therefore relational connection was important to consider. The HWQld lead spent significant time meeting with council and supporting Yarrabah lead within Community. The UniSC project lead spent 2 months in the Cairns and Yarrabah areas with her family to be local to work alongside the Yarrabah Community. Key priorities during this time were building relationships, project planning logistics, materials and resource procurement, and enriching understanding of place, Community and context. The team worked in the spirit of reciprocity participating in Community events, assisting with Community activities and purchasing locally as practical expressions of grassroots engagement.

Building on relational connections and through yarning with stakeholders, existing capacity within the Community was identified, opening options for onboarding community-based team members. Two community-based positions were created—(1) a garden mentor and (2) a community engagement lead. These positions were pivotal to project implementation and aligned with the project's intention to make resources available and build capacity

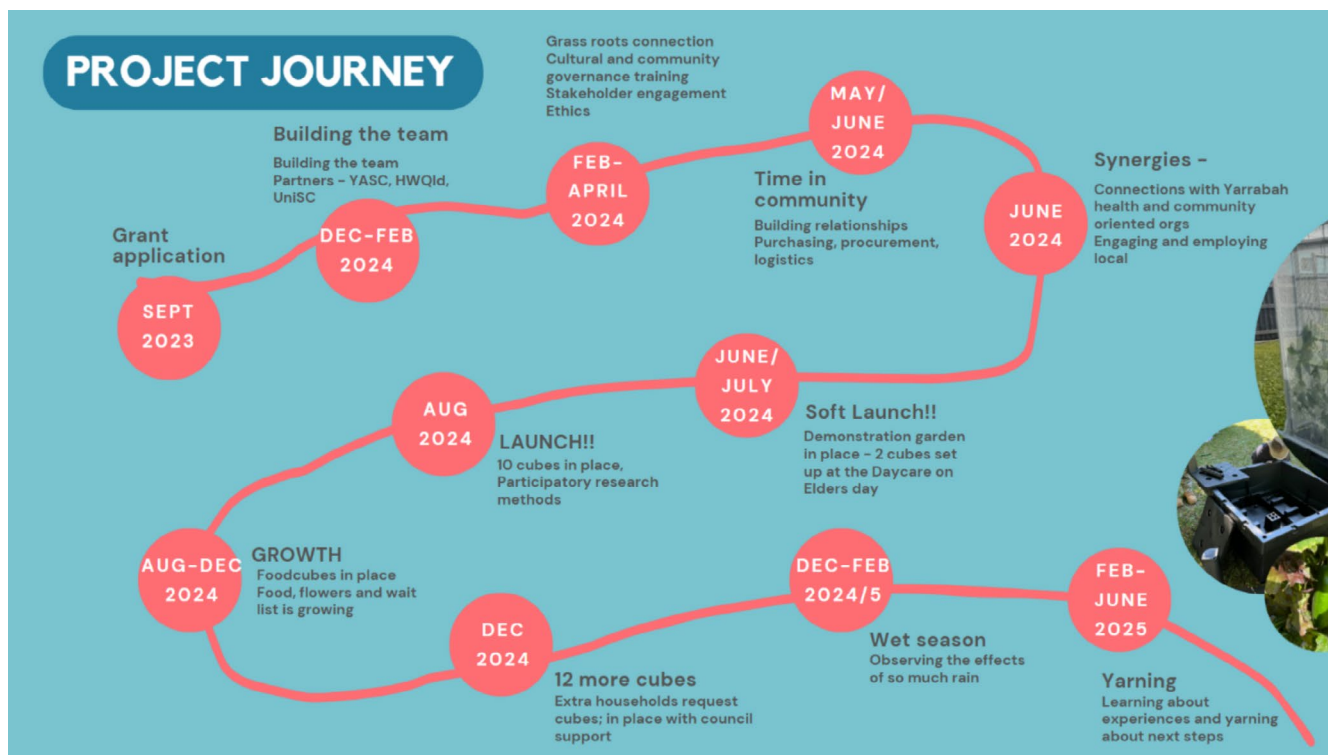


FIGURE 1 | Project development and implementation journey.

TABLE 1 | Alignment of Food cubes project development process with the NHMRC ethical guidelines for research with Aboriginal and Torres Strait Islander Peoples' and Communities [17].

Values and ethics	Project application
<i>Spirit and integrity (central)</i>	Respecting cultural heritage <ul style="list-style-type: none"> • Cultural and Community governance training • Understanding local historical and current context • Adherence to the following five (5) values:
<i>Responsibility</i>	Core responsibilities are central to Aboriginal cultures <ul style="list-style-type: none"> • Recognition that participants include individuals and families • Feedback mechanisms and inclusion in research processes • Engaging workforce connected to local Community
<i>Reciprocity</i>	Shared responsibility and obligation through kinship networks <ul style="list-style-type: none"> • Community capacity building approach to project • Team spending time and participating in community activities • Listening to Community and participants embedded in project approach
<i>Respect</i>	Holistic regards for participants involved in research <ul style="list-style-type: none"> • Openness and engagement across organisations and individuals • Prioritising face to face Community engagement • Ethical and consent norms
<i>Equity</i>	Commitment to showing fairness and justice <ul style="list-style-type: none"> • Benefit received by Community—Food cubes, produce, local support • Indigenous Cultural and Intellectual Property (ICIP) statements in research participant information sheet (RPIS) to ensure participants are confident of data ownership • Participants identify what they want to grow
<i>Cultural continuity</i>	Shared cultural identity, bonds between individuals, Community and Country <ul style="list-style-type: none"> • Training in history, culture and Community governance structures • Flexibility in delivery of project to ensure cultural expression and Community Engagement • Continual engagement with local Community cultural broker

within the Community. Community-based team members and broader Community members contributed local knowledges and connections, which were foundational to all interactions for the duration of the project, ensuring privileging Community voices, input, and collaboration at every stage.

4 | Data Collection Process

The project launched later than planned due to Community needs and other factors outside of our control such as sorry business and extreme weather. This flexibility strengthened the project's validity knowing that significant weather events are common in the Yarrabah region. Originally a quasi-experimental design, planned methods included pre- and post- yarning [18] workshops and surveys (food security, dietary diversity, demographic, and wellbeing) as well as photovoice and photo observation during implementation, all underpinned by a participatory approach. The team adapted by modifying methods, seeking amendments to ethics, and extending the grant timeline. Approaches remained participatory and were updated responsively to Community and circumstances including refining question wording to incorporate traditional foods, context specific questions, and data collection guided by participants (self-administered or researcher assisted options). Post project yarning was conducted either individually or in groups. A closed group on a social sharing platform was initiated in response to Community member suggestions although this was not included in the research data collection.

Once launched, the project was met with strong Community interest, particularly as recommendations from the YASC feasibility study was being implemented. Key activities during this phase included establishing a demonstration garden at a community location to increase awareness and visibility and building further interest in the project. According to local advice, an expression of interest was shared through the YASC social media page to support recruitment, maintained by order of request to ensure fairness and transparency with the selection process. A waitlist was kept, allowing for changes in circumstances or the availability of additional cubes. Following the initial Community yarning workshop Food cubes were put in place. Vegetables (e.g., cucumber, tomatoes, spinach) and companion flowers (e.g., marigolds, alyssum) chosen by participants ($n = 12$ households) were planted through significant collaborative efforts between project partners, participating families and project staff. Garden support was provided through bi-monthly project team visits, a local garden mentor and social sharing platform. Multiple seedling offerings were provided on an as needed basis. Growing demand for cubes (as per waitlist) led to additional investment from HWQld for additional cubes enabling a further 10 households to participate. This expansion required shifting the research design to a more exploratory approach rather than a strict pre-post framework. Analytical approaches are responsive to these changes and will follow Thought Ritual processes described by Yungaporta [19].

5 | Conclusions and Future Dreaming

This grassroots project journey described how through valued partnership and respecting Aboriginal Peoples' self-determination created the context for advancing Community health and wellbeing.

While western research imperatives define what good research is, employing ethical research principles when working alongside in partnership with Aboriginal Peoples and Communities is always the best way forward. From this project, we recommend that future initiatives include a diverse partner skill set, a tangible project with Community, local employment opportunities, flexibility, and extended consultation. Applying the ethical research guidelines for working with Aboriginal and Torres Strait Islander Peoples has been both purposeful and rewarding for this project and has opened the way for future research. While research is often framed as having the "answer," *Lillian Watson and Aboriginal activists group Queensland, 1970s* offered enduring guidance: "If you have come to help me, you are wasting your time. If you have come because your liberation is bound up with mine, then let us work together." [20] The research team are committed to continue striving to align their research practices with the ethical guidelines and wise counsel of Lillian Watson and colleagues.

The plan for future dreaming is one of flourishing—moving beyond sustainability. The research team is personally and professionally invested in working alongside Community members and organisations who are dedicated to advancing food security, health, and wellbeing. This vision centres on listening to the voices of the Yarrabah Aboriginal Community and participants, and following the direction they want to continue or grow this work. In collaboration, partners plan to seek further funding opportunities to support the development of a flourishing local food system that enhances food security, supports livelihoods, culture, and continues to build Community capacity to contribute to closing the gap.

Acknowledgements

We acknowledge the Yarrabah Peoples and Community and make special mention of the participants from Community that made this research possible. We further acknowledge stakeholders in Yarrabah that worked in partnership to provide support and guidance for the project. This project has been funded by the University of the Sunshine Coast Internal Grants Scheme and the Queensland Government through Health and Wellbeing Queensland. Open access publishing facilitated by University of the Sunshine Coast, as part of the Wiley - University of the Sunshine Coast agreement via the Council of Australasian University Librarians.

Funding

This work was supported by the University of the Sunshine Coast, 980028526.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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