







# A Protocol for Participatory Action Research into Universities' Role in Climate Justice: Principles and Tools

Transforming Universities for a Changing Climate
Working Paper Series, No. 3

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#### **Abstract**

This protocol aims to explore five parallel sets of principles and tools for developing Participatory Action Research (PAR) with a climate justice lens. It sets out how identifying sites of impact for PAR should be strategic and iterative, building towards a theory of change. In the second step, it explores setting up PAR groups, grounded in ongoing relationships and recognising marginalisation, through different tools for stakeholder analyses. The third part of the protocol describes convening PAR groups, and the process of collective immersion with questions of climate justice, giving an example of a case from Fiji of an ethos for community engagement. In the fourth part of the protocol, action planning is considered, shaped by the principles of recognition of diversity and knowledge co-production. Finally, the centrality of learning in PAR processes is considered, and a framework for monitoring, evaluating and learning is offered. Together, these five steps offer a route for researchers interested in PAR to follow, offering both practical steps and theoretically grounded principles.





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## Introduction

Climate Change is arguably the biggest challenge of our time. This working paper argues that universities have an important role to play in contributing to global mitigation and adaptation efforts, beyond their established work in climate research or establishing climate-change focused curricula. The working paper is grounded in theories of climate justice which highlight the importance not just of recognising the physical changes to our climate (which might imply technical fixes alone), but the ways in which climate change is embedded in histories of socioecological injustice, shaped by intersecting inequalities both within and between nations. The working paper sees climate justice as linked to other forms of justice, including epistemic, which require a recognition of multiple forms of knowledge that are sensitive to context and power, and that bridge connections between the university and broader society. As the IPCC (2018) highlights in its summary for policymakers:

Education, information, and community approaches, including those that are informed by indigenous knowledge and local knowledge, can accelerate the wide-scale behaviour changes consistent with adapting to and limiting global warming to 1.5°C. These approaches are more effective when combined with other policies and tailored to the motivations, capabilities and resources of specific actors and contexts.

(IPCC 2018, 22)

Within this context, this working paper is based on the premise that Participatory Action Research (PAR) is an approach that offers particular potential for universities' engagement with the climate crisis. To support such engagements, this working paper is designed with a specific and practical focus. It sets out a five-step guide for how to mobilise Participatory Action Research (PAR) within higher education settings around questions of climate, and aims to provide some useful principles and tools, along with suggesting some key readings that can take engagement further. The bibliography of this working paper has thus been designed to work both as a reference list for this document, and as a set of possible further resources.

The ideas and framing of this working paper draw on the initial planning for the research project 'Transforming Universities for a Changing Climate' (Climate-U), which aims to support the formation and running of PAR groups within universities in Brazil, Fiji, Kenya and Mozambique. As such, it reflects the discussions and interests of project partners in these four countries. The process and activities proposed respond to areas of engagement of partnering universities, within their priorities and the scope of this project. Nevertheless, we hope that this document can also generate insights to others interested in enabling climate action within higher education institutions and systems through PAR initiatives.

# Principles and purpose of PAR research

One key set of influential ideas on the development of PAR can be traced to emancipatory Latin-American thinkers such as Paulo Freire and Orlando Fals-Borda, and the need to "investigate reality in order to transform it" (Fals-Borda 2006, 353). PAR projects are thus explicit about their transformative values, and often begin with a vision or aspiration towards greater justice (Walker and Boni 2020). As Freire set out in his own definition of PAR, this concern with justice applies not only to the outcomes or aims of the research, but to the process:

Those promoting participatory action research believe that people have a universal right to participate in the production of knowledge which is a disciplined process of personal and social transformation. In this process, people rupture their existing attitudes of silence, accommodation and passivity, and gain confidence and abilities to alter unjust conditions and structures.

(Freire, cited in Boni and Frediani 2020, 480)

The principle of focusing on real problems – such as climate adaptation and mitigation – through research is thus underpinned by principles around *participation*. Often PAR is conducted by a trained researchers in collaboration with members of a community or an organisation, working across hierarchies such as those between university managers and staff, staff and lecturers, and bridging gaps beyond the walls of the 'ivory tower'. All participants in the process are seen as both co-learners and co-producers of knowledge, with the aim that all are equally invested in, and responsible for, the outcomes (Boni and Frediani 2020).

In PAR, this commitment to a deep or 'thick' form of participation is accompanied by a commitment to **action**, the 'A' of PAR. This action principle aims both towards substantive and long-lasting change, but also towards transformed relationships, in which existing connections are strengthened and dynamics associated with authority and power are shifted. Forms of action research often start with the question, 'how can we improve the situation?' PAR is concerned with both practical issues and human flourishing (Bradbury 2015).

These democratic and participatory actions and processes together combine in a form of **research**, the 'R' of PAR. Differentiations by process – researching 'with' rather than researching 'on' – come throughout PAR. Knowledge is coproduced, research questions are co-defined, and actions are co-implemented. This contrasts with the linear process of conventional research, in which a hypothesis or research question is generated, designed, investigated and reported on by researchers themselves (German and Stroud 2007).

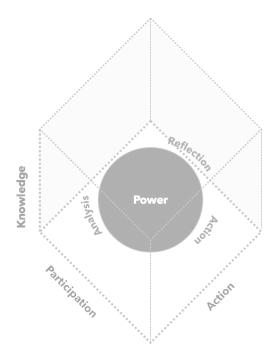
The final underpinning principle of PAR is thus that it is *iterative* in nature. PAR is defined by cycles of reflection and analysis, which feed into both expanding and deepening participation, and shaping future actions. For Gaventa and Cornwall, these



cycles are forms of awareness building, that includes critical self-reflection by participants. Such cyclical pauses for evaluation and learning, they argue, can generate space, time and knowledge for empowerment (Gaventa and Cornwall 2008).

These five principles of PAR – around transformative values, participation, action, research and iteration – are of course related, and each infused with power. Boni & Frediani (2020) conceptualise this relationship through a 'PAR cube' (Figure 1) in which power sits at the centre of iterative cycles that reflexively expand knowledge, participation and the outcomes of action:

Figure 1. PAR Cube (Source: Boni & Frediani, 2020, p.482)



Questions of power are thus embedded throughout the PAR process, but also relate to how PAR processes begin. At whose initiative do they start? How are different actors brought together? In some contexts, PAR processes are driven from the bottom up by grassroots social movements or community organising around a particular justice concern, including climate. In others, including the Climate-U project, PAR is initiated by university research teams, building on pre-existing networks and activities already happening on the ground. This kind of initiation is thus deeply sensitive to context. It requires careful work to ensure that processes are not 'top-down', transforming and not cementing hierarchies, and embedding change in the 'everyday' practices of communities to ensure sustained agency and ownership of PAR processes and outcomes (Kitagawa 2019).

Questions of power within the research process raise broader questions of justice. Climate justice includes questions of mitigation and adaptation, but broadens the framing of these actions to recognise historical and contemporary inequalities in contributing to emissions and their impacts. Climate

justice frames see the 'headline' level of an ecological crisis as underpinned by: structural levels in which social and economic systems militate against sustainability; epistemic levels in which knowledge practices struggle with the complexities of climate change; and foundational narrative levels in which ideas of what it means to be human can militate against developing sustainable relationships with the planet and with other beings (Facer 2020). It sees connections between climate and other forms of socioecological justice, and asks how transformation that works across these boundaries can be just (Schlosberg, Collins, and Niemeyer 2017). This justice lens thus raises questions for PAR: how can PAR contribute to transformative change in just ways?

This paper argues that participatory action research focused on climate change can help foster justice through:

- the ways in which the participatory action research groups are set up and run, aiming to support transformation in the individuals, groups and institutions involved;
- the ways in which the participatory action research groups engage with communities outside them, supporting broad bases of learning and challenging inequalities;
- the changes made in the external world (e.g. a new policy/strategy, a new curriculum, planting trees both on university campuses and the surrounding areas) which the participatory action research groups aim to make.

Within the PAR field which focuses on educational contexts, a useful way of understanding the transformative purpose of PAR is through the idea of 'empowered learning systems' (Clark, Biggeri, and Frediani 2019), in which individual and collective agency is fostered through both the design and implementation of PAR processes. The following questions draw on the Clark, Biggeri and Frediani's concept of empowered learning systems to reflect on how this might look within the specific context of climate change:

- 1. Supportive Institutions: To what extent are the activities of the participatory action research group making institutions (i.e. university, networks of civil society groups, local government) more supportive to learning and action activities associated with climate justice? How can they engage with the political economies and structural drivers of the climate crisis, and the ways that it is embedded in historical and contemporary inequalities?
- 2. Relationship of Solidarity and Trust: How are the activities of the participatory action research group building and/or strengthening relationships of trust and solidarity among actors and marginalised groups advocating for and/or involved in processes of climate justice? What work can they do to alleviate and contest the uneven distribution of environmental burdens?
- 3. Critical Pedagogy: In which ways are the activities of the participatory action research group enabling reflexivity and a more critical understanding about the drivers, experiences and practices of climate in/justices? How can they support and foreground diverse ways of conceiving non-hierarchical relationships with nature and other humans?



4. Emancipatory Outcomes: How could the outputs from the participatory action research activities influence policies, norms, procedures and practices associated with climate justice? To what extent can the impact of the group's activities make climate change adaptation and mitigation policy and practices more inclusive and equitable, supporting restorative and regenerative processes that democratises climate governance at multiple different scales?

These four dimensions of setting up the PAR groups help us to think of how adaptation and mitigation actions are embedded within broader social and ecological relationships. The following sections of the paper take forward these underpinning principles around the cyclical nature of PAR through five steps, and identify ten principles which those interested in designing PAR in universities should engage with. While each step will look different in different contexts, we would argue that each step is important to follow. In each step, a tool is provided to practically enact the principles associated with the step.

## **STEP 1: Identifying Site of Impact**

To define the 'area of action' which PAR groups will work within, it is useful to start the process of setting up PAR by identifying the site of impact that the initiative is targeting. What is the primary focus of impact for this initiative? Some teams might want to prioritise the focus on university norms and procedures, so that they take climate change more seriously in their day to day operations. Others might focus on university curricula, addressing the way courses are designed, accredited and reviewed. The PAR groups can also focus their activities on disadvantaged communities as primary sites of impact, trying to improve their capacity to adapt and respond to climate change. Or the activities can also be centred around policy and planning impact, trying to influence local or national policies on issues related to climate change. By defining the site of impact, teams would be able to clarify the **strategic** purpose for setting up PAR groups. A strategic purpose involves collectively asking questions:

- What is our motivation for doing this work?
- What change do we want to see?
- Where do we want change to happen? Who do we want to engage?

In the Climate-U project, one of the ways in which we have understood the potential impact of universities on climate change is in terms of different pathways, following the framework from the <u>first working paper</u> in our series (Figure 2, McCowan 2020):

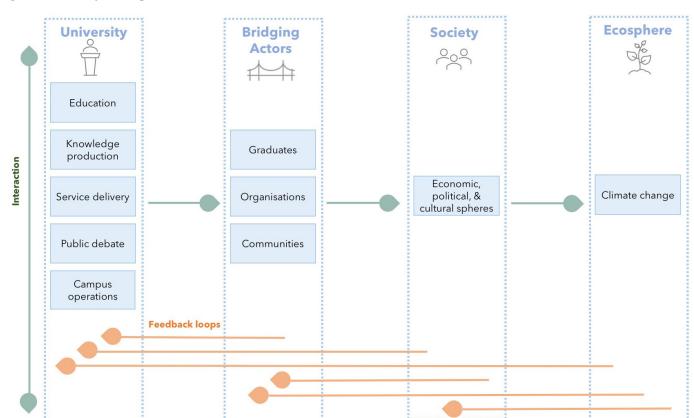


Figure 2. Pathways to impact (Source: McCowan, 2020, p.9)



The strategic purpose for setting up the PAR group might focus on any one of these impact pathways or might include more than one. A key idea for understanding impact is to think not just of the way that the university can influence the broader society, but how society can influence the university. 'Society' here can include communities affected by climate change in which universities are situated, but can also include other social groups, such as those participating in the wider education system, industry, civil society and non-governmental organisations. Each of these groups have a set of knowledges that can contribute to achieving the strategic purpose for the PAR groups. For Boaventura de Sousa Santos, these provide 'ecologies' of knowledge, in which knowledge produced at the university level is in dialogue with a range of other forms of knowledge outside the walls of the institution (Santos 2006).

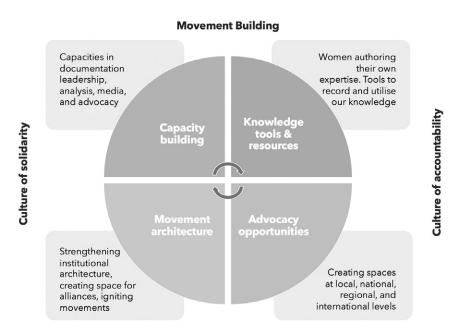
To support the process of defining the 'site of impact', we recommend that PAR groups develop an initial 'theory of change for their engagement. The site of impact and theory of change are not intended to be a fixed destination or set of objectives, but rather a point of departure, to help teams to plan their actions. Therefore, it is crucial that the definition of site of impact and design the theory of change are iterative processes, as something that will be revisited, reviewed and amended as the group advances their activities (Kindon, Pain, and Kesby 2007).

A theory of change (ToC) should be framed by the strategic site of impact – what change do you want to see? – and theorises how this change might happen. Theories of change are not value neutral, so require reflection by the research team on their underpinning values, and the same kinds of reflection once the PAR groups are constituted. An example of this might be a theory of PAR that draws on feminist understandings of the

relationship between gender injustice and climate-based injustice (Godden et al. 2020). In this work of the Asia Pacific Forum on Women, Law and Development (APWLD) the strategic site of impact – building movements – is broken down into four interrelated components: capacity building; producing new knowledge, tools and resources; undertaking impactful advocacy and strengthening architecture (Godden et al. 2020, 595). This work draws on these values to shape a ToC around how 'movements create and sustain change'. This site of impact aims to foster solidarity and accountability, supporting gendered and climate justice. The following three dimensions help guide how a ToC should be designed and developed:

- A ToC should be co-created with all PAR participants from the start – this helps to guide the process and to create a sense of collective ownership over changes made
- A ToC works at multiple levels and scales: in the Climate-U project there will be an overarching theory of change that conceptualises a cross-cultural understanding of the impact which universities can have on climate actions that aims to be comparative, but this will be translated into national level, and in some contexts institutional level, theories. Each of these different levels will be in dialogue with each other, and shaped iteratively over the course of the process.
- The ToC should include both the strategic aim of the participatory process the 'ACTION' in Participatory Action Research and change through the process itself the 'PARTICIPATORY' nature of this democratic research process. It should be designed to reflect on changes both for participants who are part of core PAR groups, and on changes for those who participate in actions.







# TOOL 1

## **BUILDING A THEORY OF CHANGE**

It can be useful to think of a ToC in terms of four quadrants that reflect on how PAR will support positive transformations in terms of resources, agency, institutional arrangements, and the broader socio-political context that the work of the PAR groups is framed by. Once these dimensions are identified, it is then important to think about the relationship between them. Filling in a diagram such as the figure below can be a good start.

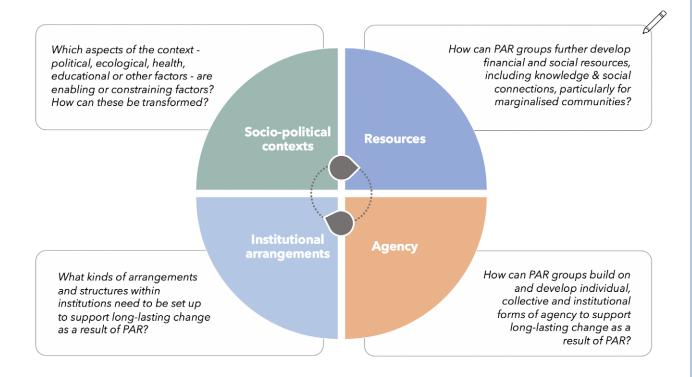


Figure 4. Building a Theory of Change (Source: Adapted from Godden et al., 2020)



# STEP 2: Identifying Group Participants & Defining Roles

Defining who should be involved in the activities of the PAR groups and how is a key and complicated process to undertake. An important starting point is to be *grounded* in histories of work and supporting ongoing relationships. At the same time, we need to be sensitive to the existing relations of power among different actors. This means that we need to involve groups in ways that involve *recognition* of marginalised voices and perspectives. We recommend carrying out a stake holder analysis (see Tool 2A), which maps out the various actors involved in the strategic 'site of impact' defined for your group's activities.

A 'stakeholder', most simply defined, is someone who holds a 'stake' or interest in the activities and impact which you are aiming towards. But stakeholders are diverse, and will bring different forms of knowledge, power and influence to the PAR groups. A stakeholder analysis is the identification of all primary, secondary and key stake holders who have a vested interest in the issues with which the project is concerned (Golder, 2005). It aims to develop a strategic view of the human and institutional background, and the relationships between the different stake holders and the issues that they are most concerned with. Below are three different but related tools which are useful for conducting stakeholder analyses.



# TOOL 2A STAKEHOLDER MATRIX

The first tool asks us to identify all the relevant different types of organisation for our PAR processes, the relevant stakeholders within this organisation, and to give a rationale for why this stakeholder would be interesting to engage with for the PAR process. In different countries and contexts within countries, the types of organisation stakeholders will come from will vary. For the Mozambique team in the Climate-U project, the process will be guided theoretically by the quadruple helix framework, which argues that regional innovation is strengthened by bringing together four different kinds of actors – academia, industry, government and civil society (Roman et al. 2020). Some kind of theoretical underpinning for who to engage such as this can be very useful.

After these columns around who and why, the table asks us to reflect on how best to engage these stakeholders (e.g. by what kinds of methods), their level of engagement (whether regular or irregular) and the potential role which each stakeholder might have (e.g. participation in the core PAR group, or by more strategic methods, such as key informant interviews at important moments in the process).

Name of stakeholder	Type of organisation	Reason for inviting	Role in PAR process	How best to engage?	Level of engagement	Contact details/
	e.g. NGO / youth movement	e.g. student leader / minister	e.g. core group / key informant	e.g. monthly meetings / invited to key events	e.g. regular / strategic	

In a cross-country study such as the Climate-U project, some common actors in the PAR groups may be useful to predefine. Across the four countries, lecturers, students, university management, local community, and in-country researchers. Additional members of the PAR group will vary and will be determined after the stakeholder analysis. There will not be a fixed number of PAR participants – it will depend on the kind of intervention and the categories of stakeholders involved – but between ten and fifteen is a probable number of participants for the core PAR group. It is important to consider other aspects too, such as ensuring that your PAR group has a good gender balance, as well as balancing other relevant categories of inequalities such as ethnicity or class.

A second useful tool is designed to help map power within the PAR process, and to structure the groups in ways that recognise marginalised voices. It can help guide questions of the engagement of particular stakeholders, and what their role in the PAR process might be. Understanding the power dynamics which underpin PAR is important not only to ensure that the PAR groups are inclusive in terms of who is invited to participate, but also important to guide facilitation of the PAR groups once the process begins to ensure that no single individual or group dominates the process. See **Tool 2B** below:



### TOOL 2B

## **INFLUENCE/IMPACT QUADRANT**

This tool uses reflexive questions should guide this process of adding stakeholders to the matrix and assessing their influence or impact on the process, such as:

- Who is directly responsible for decisions on issues important to the project?
- Who holds positions of responsibility in interested organizations?
- Who is influential in the project area (both thematic and geographic areas)?
- Who will be directly and indirectly affected by the project?
- Who will promote/support the project? Who might hinder it?
- Who has been involved in the area (thematic or geographic) in the past?
- Who has been left out of these conversations in the past, and should now be included?

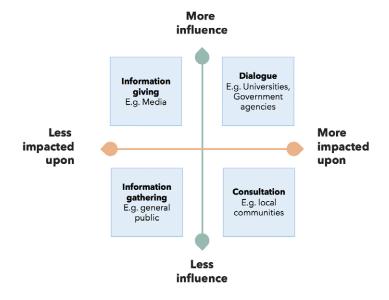


Figure 5. Example of Influence/Impact Quadrant (Source: Adapted from Golder, 2005)



Finally, the PAR groups need to be grounded in ongoing relationships which can be supported and developed through the process. Key to grounding the PAR process is to identify where actor networks already exist. This could be a useful tool in a facilitated, early meeting of the PAR groups, to help build

collaboration within the group. An alternative is to conduct early interviews and/or focus groups with each proposed PAR group member, to understand their work and relationships up to the time when the groups are formed.

See Tool 2C below:

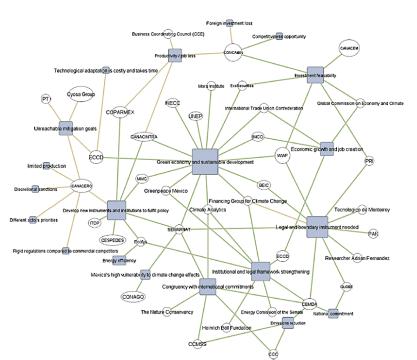


## TOOL 2C

## MAPPING RELATIONSHIPS THROUGH ACTOR-NETWORKS

Actor-Network Theory (ANT) analyses offer a useful way to build links between institutions and individuals, with powerful actors and institutions acting as 'nodes'. To develop an ANT analysis, a small group of participants are invited to discuss individuals and institutions which play a role in shaping their situation. The connecting nodes can be big or small, signalling how important they are, or the extent of the work which has been done. Once these individuals and institutions have been mapped, the participants should be invited to arrange them to indicate which individuals or institutions work together, to help to:

- show which individuals and institutions may play a role in shaping climate change adaptation and mitigation in various contexts
- group individuals and institutions that have worked together, so that new partnerships can be built, and existing partnerships strengthened
- highlight the extent of each stakeholder's involvement, and identify entry points for future involvement
- add particular phrases or words to suggest thematic or discursive links that can be the starting point for analysis of change through the process.



Awareness of these dynamics can help inculcate group values such as the sharing of responsibilities, mutual respect for diverse opinions, experience or expertise, and equal involvement in decision making. These analyses can also be used at the reporting stage of the project to analyse how relationships have shifted through the process, as a pre- and post- evaluation tool, as explored in **Step 5** of this working paper. Mapping the dynamics of stakeholders will also inform the ethical processes of convening the group, as the following section explores.

Figure 6. Example of ANT - mapping Coalitions for and against Mexico's 2012 General Law of Climate Change

(Source: Ortega Díaz and Gutiérrez 2018)

## **STEP 3: Convening the Group**

As groups are convened, it is important to share motivations and expectations to join the group, to start a process of developing a collective intent for the activities of the group. Meanwhile, part of the ethos of PAR is to engage with issues through the experience and perspective of marginalised groups. Therefore, a key initial step in the formation of a collective intent for the group is to enable a process of *collective immersion*. This can be done by allowing marginalised and most vulnerable groups to frame and expose their experiences of climate change. This process of community engagement needs to be done ethically, avoiding the risk of extraction or instrumentalization of community interactions.

The following tool reflects on seven dimensions of community engagement from the Fijian perspective. Fiji is a multicultural country that has different ethos for different cultural contexts. However, there are some common ethos practiced in these different contexts, which will be discussed here to guide our work. This ethos is described in Nabobo-Baba's (2006) Vanua Research Framework and Lagi's (2015) Na Bu ni Ovalau Research Framework. In the Fijian context, vanua is the most important aspect of one's life as it is the heart of one's survival (Nabobo-Baba 2008). Vanua includes the Fijian's chief or related chiefs, their people and their relationships, their land, spiritualties, knowledge systems, cultures and values (Nabobo-Baba 2008, 4). It is also the land, the sea, the cosmos, the people, all living things, the spirits, in a specific 'place' and how each of them is related to and responsible for each other. It also includes the culture, traditions, knowledge, skills, and ways of knowing, love, peace, prosperity and communalism (Lagi 2015, 54). A vanua is regulated by customs, traditions, ethics, rituals and practices (Lagi 2015, 55). Therefore, it is important that researchers or people who would like to work in Fijian communities are aware of these and follow them closely.

According to Nabobo-Baba (2006) research conducted in Fijian communities must benefit the members of the community by addressing their needs. In addition, the community's cultural values, protocols, knowledge processes and beliefs must be considered, and vernacular should be the language of conversation. Researchers also need to be conscious of etiquette regarding dress, seating arrangements, when and how to move through spaces, and when to observe silence. Using vernacular will allow the participants to express themselves freely as such and be open to exchange and give information relevant for the research or project (Lagi 2015). (see Tool 3 overleaf)

In addition to the ethos of community engagement, PAR groups themselves need to be facilitated ethically. All research is governed by research ethics, that may include respect for persons, the principle of 'do no harm', or a focus on contributing to justice. But participatory research has a deeper ethical commitment, beyond the technical processes of getting ethical approval at the start of the project (Brydon-Miller 2008), to ethics of the 'everyday' encounters in PAR meetings (Banks et al. 2013). 'Everyday' ethics of participatory research include a commitment to: representation, accountability, social responsiveness, agency and reflexivity (Manzo and Brightbill 2007, 36-9):

- PAR recognises participants' ability to represent themselves in the research, and shape the direction of the process. Advocates of PAR make a virtue of sharing and clarifying roles, responsibilities and decision-making on an ongoing basis
- PAR broadens traditional academic accountability; because participatory researchers are committed to collaboration as a means of building knowledge and fostering positive social change, they have multiple responsibilities and are also accountable to the participants themselves, as well as partners and communities where they work
- Because it is collaborative and change-oriented, PAR requires researchers to be responsive to the needs and perspectives of participants. Researchers and participants recognise that they are perpetually in relation to one another: the ethics of social responsiveness produces a research process that is fluid and flexible
- PAR requires ethical behaviour not only from the researcher, but extends this requirement to the participants themselves. It broadens the ethical principle of respect for persons: every participant in a PAR process has a right to a voice and a valuable contribution to make, supporting each other's ability to initiate and enact change
- Participants must reflect on their own beliefs, motivations and actions, and make these visible within the research and analysis.

Any facilitator of PAR groups needs to be aware not only of the power dynamics within the group but also of their own positionality. This can help to mediate power and privilege within the research, bridging the distance between different individuals and groups, and supporting encounters built on trust and respect (Muhammad et al. 2015). One of the key ethical 'everyday' encounters thus requires a particular importance to the dynamics of facilitating PAR groups. Chambers (2007) develops a set of guiding precepts to facilitate PAR groups, as provocations both for participatory action researchers themselves and to guide participants in their interactions with each other (figure 7).

Figure 7. Precepts of PAR (Source: Chambers, 2007, p.9)

Precept	indicating
Introduce yourself	be honest, transparent, relate as a person
They can do it	have confidence in people's abilities
Unlearn	critically reflect on how you see things
Ask them	ask people their realities, priorities, advice
Don't rush	be patient, take time
Sit down, listen and	don't dominate
learn	
Facilitate	don't lecture, criticise or teach
Embrace error	learn from what goes wrong or does not
	work
Hand over the stick	or chalk or pen, anything that empowers
Use your best judgement	take responsibility for what you do
at all times	
Shut up!	keep quiet, welcome and tolerate silence



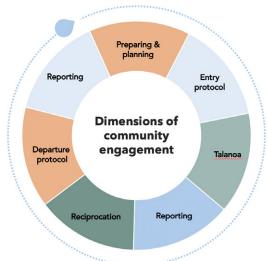


## TOOL 3

# COMMUNITY ENGAGEMENT IN CONTEXT - AN EXAMPLE FROM FIJI

- 1. **Proper planning & preparation** so that time in communities is productive and constructive to community interests.
- 2. **Isevusevu** or the **entry protoco**l: when entering a Fijian village, or before conducting any research activity, permission must be granted by gatekeepers, such as the chief of the village or the head of the community. This will facilitate the support of community members.
- 3. The talanoa or vitalanoa (multilogue) stage where the 'rules of engagement' are discussed and also where the exchange of information will take place. *Talanoa* is the culturally accepted way of sharing information orally, in Fijian communities, by which important decisions, negotiations, dialogues and teaching in an Indigenous Fijian community is done.
- **4.** Reporting, analysing and validation of information collected at the end of the *Talanoa*, information gathered will be analysed and reported back to the community members to validate. Once accepted by the participants, it can then be used in research.
- 5. Gifting or reciprocation reciprocating the intellectual property and knowledge shared by the community members is a significant aspect of working with Fijian communities. This should be done at the end of the activity or research before leaving the community.
- 6. Itatau the departure or temporary departure protocol where the researcher requests to temporarily leave the research site or community. Before the researchers leave the community, they should inform the community members that they are going to depart. During this protocol, the community will give their blessings for their journey.
- 7. Reporting back or revisiting the research site or community. After the research or project has successfully ended, it is appropriate to honour the vanua by informing them of the completion of the research or project. This is significant especially for an indigenous Fijian carrying out the research or project to do so that the community can know that their contribution was not in vain. In return, the community may organize a vakacirisalusalu feasting and dancing to mark the success of the research or project.

Figure 8. Seven dimensions of community engagement (Source: Nabobo-Baba, 2006; Lagi, 2015)



Building on this process of community engagement and ethical facilitation, a possible output of these steps is that the group could also develop together a set of key principles around how the participants of group would like to work together. This output could be approached as a 'social contract' endorsed by group members, and that could be useful in moments of disagreements and decision making.

## **STEP 4: Planning Activities**

After the development of a collective understanding about the objectives of the group as well as the group's social contract, participants could design in more detail the activities they want to implement together. **Knowledge co-production** (Osuteye et al. 2019) is a key characteristic of participatory action research initiatives, as diverse actors come together to produce knowledge and enable collective learning. Therefore, the plan of activities needs to outline how this collective process of research, learning and action will take place.

At this stage, it is crucial to be sensitive and *recognise diversity* in relation to participants' access to resources, capacities as well as social-political conditions. There will also be a diverse range of motivations and aspirations associated with planning and participating in the action-research activities. The recognition of diverse capacities, motivations and aspirations in the group is key to valuing different types of knowledge and expertise, as well as promoting equitable distribution of roles and responsibilities within the group. Secondly, it is important to design activities considering spiral cycles of action learning (experience, understand, plan, act: see figure 9).

Building on the cyclical nature of PAR, four different sets of activities can be identified (figure 10). These include activities focused on building the capacities and knowledge of the PARGs, conducting diagnostic and situational analyses of the problem which the group want to address, translating these analyses into action, through planning, and then implementing and reflecting on the success of these actions. Each of these activities will work in a cycle – the timeframe can be flexibly agreed within institutions or national PAR plans – but after each cycle key milestones should be identified. The following Tool 4 (overleaf), helps to translate these cyclical processes into a set of actions.

Figure 9. PAR Cycles (Source: Velasco, 2013)

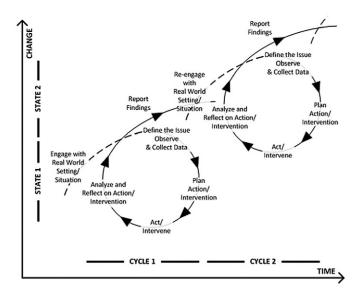
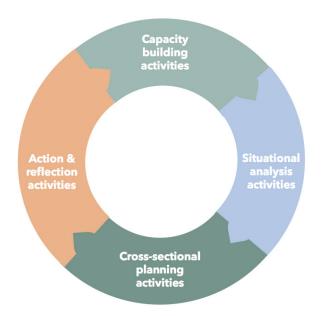


Figure 10. Cyclical Action Planning (Source: Climate-U, 2021)







# TOOL 4 ACTION PLANNING

In PAR processes it is important to be active, in the sense that planning processes outline strategic and long term actions, as well as immediate and short term activities. In this sense, PAR processes recognise the need to act together, not only for the purpose of achieving the particular outcomes, but also for nurturing relationships and collective bonds. Furthermore, actions need to embrace the need for 'quick-wins', addressing immediate challenges and building energy for change, as well as strategic vision on how a sequencing of actions can build pathways to advance the strategic visions of change.

Collectively filling out the following table, which represents one cycle of action, can be a useful activity for the PAR groups to help identify a strategic and sequential set of actions. The key questions to discuss together are 'how' and 'who' to engage with at each stage. Within planning cycles, there is an important difference between actions that can be taken immediately and actions that are longer-term or more strategic. Immediate actions can be seen as 'low-hanging fruits' that build collective confidence, keep momentum and deepen reflection through action. Tables such as these can help to break the overall strategic site of impact into these smaller sets of short-, middle-and long-term actions.

			/ <sub>Y</sub>
Cycle	Aim	How?	Who?
Experience	Engage with real world setting		
Understand	Engage with key stakeholders, diagnose, generate data		
Plan	Design of action to bring about positive change		
Act & Access	Implementation phase, reflecting with both PAR group participants and target audience		

# STEP 5: Strategy for documentation

The 'research' part of the Participatory-Action-Research approach can have two different key meanings. Within PAR, groups may want to conduct empirical inquiry of the types more typically understood as 'research' – trying to find out, for example, how climate change is understood or integrated into courses by interviewing lecturers or managers within universities. But the second dimension of 'research' in PAR is also important, and focuses on learning from the process itself. This gives an expanded understanding of *learning*, where assessments of the success of PAR focus not just on traditionally understood learning outcomes (for both PAR group members and beneficiaries of activities), but forms of learning that are personal, collective or institutional, and which speak to transformed socio-political or institutional arrangements and expanded agency.

A key aspect of PAR research is therefore to document the process of setting up and implementing the activities of the groups. This is important for two reasons: 1) to support process of *reflexivity* of the group, therefore deepening the learning generated by the participatory action research activities; and 2) to share experiences and lessons learned with the other groups in the project, helping in comparative analysis to respond to common overarching research questions. In this sense, this documentation process needs to capture the extent to which the group managed to advance on the goals they set up to achieve, as well as the personal and collective lessons learned from the process.

Documenting the learning from the PAR is one of the most important aspects of the research, and should be done from the beginning. As researchers, we should also write reflexive diaries or notes that help to reveal our underlying assumptions, work through challenges and think through opportunities. It is important to recognise that documenting subjective experience of everyday interactions (for both PAR group members and the research team) is an important part of the dataset.

The first stage of developing a participatory **monitoring**, **evaluating and learning** (MEL) framework is to decide on a research question for the PAR. In the Climate-U project, the MEL question is:

#### "How do PAR activities support transforming universities for a changing climate?"

To help us answer a MEL question, and document the activities of our PAR process, we need a combination of different methods. MEL are three distinct but related activities that together will contribute to documenting the activities of our PAR process. Within PAR (as with all research), it is important to recognise that data generation is not neutral, and that particular methods carry values and theoretical standpoints. Within a cross-country project such as Climate-U, different teams may use different methods to monitor, evaluate and capture learning in their PAR processes. Building these different methods into the MEL framework is the

first step towards collective analysis; the second stage will be to develop an analytical framework, that draws on a collective theory of change. The ongoing, collective process to critically engage with the methodological literature that explores the use and underpinning values of these methods, as well as their complementarities, means that protocols such as this are living documents. See **Tool 5**, overleaf.

The following are some possible methods, which may be useful in the MEL process:

#### **Monitoring methods**

Key performance indicators (KPIs) can be designed by each PAR group collectively (Shah 2004). These indicators depend on each activity, but may be related to indicators such as number of events undertaken; number of students/marginalised community members involved; diversity of participants such as gender balance or social position. These KPIs should be designed at the start of each cycle, allowing for reflection on any gaps between intended and actual outcomes of planned activities.

#### **Evaluation methods**

Within the evaluation stage, the questions will vary according to each country and PAR approach, as well as within different PAR cycles. It is imperative to involve all stakeholders in these activities – from senior lecturers/researchers to local community members. An important aspect of this component is to have participants acting as researchers: with the opportunity to guide actions, reflect on potential changes and contribute with additional resources (Van Mierlo et al. 2010). Diaries, videos, drawings, photographs, and other interactive forms of mapping (including virtual resources) can help capture these interactions.

To assess climate change literacy and behaviour-change outcomes, a useful strategy can be pre- and post-tests (Martí 2016). The same questionnaire (with context-specific questions related to each PAR group) can be applied to the same group of each cycle, before and after the intervention (e.g. course, training, experience), and also to a control group which will not take part of the PAR. Each element of the questionnaire can be compared between the two situations to assess differences in the participants' climate literacy and behaviour-change. These quantitative methods can provide a useful snapshot of change, which complements more in-depth and exploratory qualitative methods, which tend to ask 'why' and 'how' questions'. These qualitative tools can be semi-structured, allowing for both intended and unintended outcomes to emerge. Visual prompts, such as photographs, maps or drawings, can be a useful way to begin discussions in both interviews and focus groups. With complex or 'wicked' problems such as climate change or public health, evaluations will need to be flexible and adaptable, capturing 'deep' as well as surface forms of change (Charnes 2014).

### Capturing learning: methods

Within a project focused on educational settings, 'learning' can be a slightly confusing term. It will include what we will traditionally understand as learning outcomes, such as the more technical





# TOOL 5 **BUILDING A PARTICIPATORY MEL FRAMEWORK**

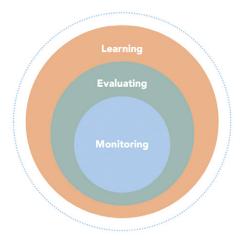


Figure 11. Nested understandings of MEL in PAR (Source: Climate-U, 2021)

**Monitoring:** this nested part of the documentation corresponds to measuring the individual actions which together make up the strategic site of impact. Monitoring is often the most quantitative component, involving the development of key performance indicators (KPIs) to monitor each PARG throughout the cycles. It can be used to generate questions for the evaluating components – for example, if KPI reveal a gender imbalance or the absence of a particular type of stakeholder, the reasons why can be explored with more in-depth methodologies. Monitoring focuses both on processes within the group, and the activities which the group undertakes.

**Evaluating:** this part of the documentation corresponds to assessing the extent to which the strategic site of impact has been affected, and is in dialogue with the theory of change. How far have the groups achieved what they set out to do? What unexpected outcomes have emerged? Were any of the hoped for impacts not achieved? If so, why not? This part of the documentation can be mixed in methods, and include interviews, focus groups, mapping and sorting tools as well as quantitative methods such as pre- and post- evaluations to assess change. Again, change can be assessed both as internal to the PAR groups, and in terms of external engagements with the actions that the groups undertake.

**Learning:** this part of the documentation is the broadest, and includes reflection on both the monitoring and evaluating components, as well as assessing other forms of learning. It is embedded throughout the PAR and can feed into cycles of action. 'Learning' in PAR is often tied to personal, institutional and collective outcomes for the participants and those whom they engaged with. 'Learning' in this sense is also related to power, and the emancipatory aims of PAR. How do participants see themselves and their agency differently through the process? How are institutional arrangements shifted? Capturing this learning is the least structured and most qualitative part of the mixed methods, and can be explored through methods which take as their starting point an open question — "what has changed since this process began?"

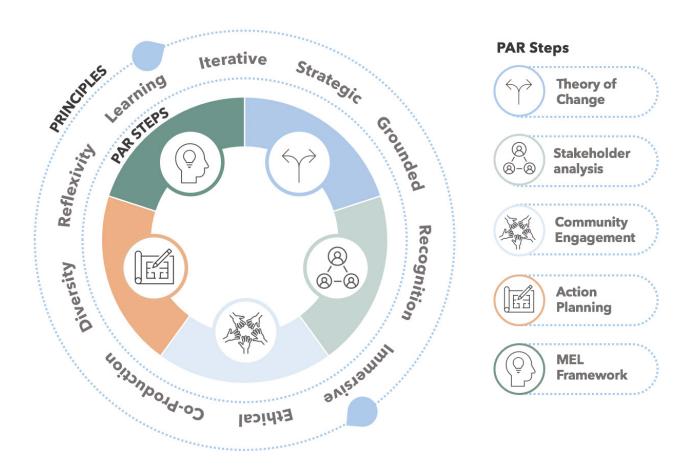
focus on climate literacy or social sustainability competencies that is common in the climate literature (Rey-Garcia and Mato-Santiso 2020). This might include individual knowledge development as well as values, norms and attitudes, as well as shifts in practices or increased agency in interactions. It will include collective learning, that particularly attends to shifts within the community relationships with key stakeholders such as policy makers or government, and can enhance democratic forms of decision making around climate (Campos et al. 2016; Youssoufa Bele, Jean Sonwa, and Tiani Anne 2013). It might also include institutional changes, such as the establishment of particular structures or spaces that further collective knowledge and engagement. Documenting this learning will require developing a 'portfolio' of different methods, in which differences in experience are triangulated and explored.

### Conclusion

As the protocol has made clear throughout, PAR is a cyclical process, and so while the steps in this protocol are presented in a linear way, it may be that the process of setting up and engaging with the actions and reflections from PAR is more organic, iterative and cyclical. Ensuring that the work to engage with the tools set out here is paralleled by the principles which guide them should be a useful scaffolding for setting up PAR groups engaged in climate actions, whether in universities or outside. Each of these tools can provide a useful output for analysis within PAR processes, and become part of the documentation. Figure 12 conceptualises this parallel process of principles and tools, as a visual reminder of the relationships between them.



Figure 12. Five steps and ten principles for developing a PAR process (Source: Climate-U, 2021)





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#### List of abbreviations

**ANT** Actor-Network Theory

APWLD Asia Pacific Forum on Women, Law and Development

KPI Key Performance Indicators

MEL Monitoring, Evaluating and Learning
PAR Participatory Action Research

**ToC** Theory of Change

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## **About Transforming Universities** for a Changing Climate

Climate change is the most significant global challenge of our time, and many of its effects are felt most strongly in the poorest communities of the world. Higher education has a crucial role to play in responding to the climate crisis, not only in conducting research, but also through teaching, community engagement and public awareness. This study contributes to our understanding of how universities in low and middle-income countries can enhance their capacity for responding to climate change, through a focus on the cases of Brazil, Fiji, Kenya and Mozambique. In doing so, it contributes to the broader task of understanding the role of education in achieving the full set of Sustainable Development Goals.

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