

ANNEX D

SSAC REPORT - SCIENCE AND EVIDENCE FOR PLACE-BASED ADAPTATION

Summary of Roundtable Notes

Notes in response to 3 questions posed during 3 breakout group sessions:

Question 1 - What are the particular challenges around PBA? How can communities have a voice when initiating PBA, and remain influential throughout the process and beyond?

Language

- Outside of our 'bubble' people struggle to understand what adaptation is/means.
- Adaptation has difficult language; moving people onto understanding adaptation is the first challenge (applies for communities and practitioners)
- Communities are fluid there is migration, people move jobs etc. Consultation a few years later may have moved on.

Participation – different voices

- Challenge with place-based is that communities of interests in a particular place (e.g. gurdwara community) are represented in a place plan.
- Communities are not homogeneous, there will be voicing that are not at the table that may be more impacted.
- To move forward, also a need to reconcile differences of opinion within communities.

Participation – resources to do so / way it is done

- Many of the consultations people get involved in are extractive and/or long-term.
- Communities have a voice, but to maintain that the voice needs to be heard.
- Resource barriers for many communities.
- Question of who 'owns the solutions'

Dialogue at scales bigger than place

- It is complicated to have dialogue across different communities (e.g. at catchment scale where flooding efforts in one area affect another) What is a meaningful scale for participation?
- Huge challenge with water under CC is that one place affects another, which makes
 it difficult knowing how to bring the appropriate communities together (e.g. coastal
 communities will see the biggest impacts the quickest defending one area will
 affect another.) challenges is connecting across different scales

Complicated decision making

- If people can see a concrete wall, they feel safer. But future solutions need to be more innovative.
- Misalignment of policy and funding, we need some kind of review (near/mid/long term).
- The decisions being made by sectors (e.g. planners); we have the knowledge and skills to make good decisions, but the risk, finance etc. is stopping us doing different things.
- There are some trade-offs with mitigation agenda.

Responsibility

- More and more is expected of communities, with a successive redistribution of responsibility to communities – "fend for yourself".
- In resilience policy, there is an emphasis on community empowerment, but we need to enable this.
- There is responsibility for others (not just communities) in terms of interaction, what knowledge exists and how it is shared
- Funding, annual funding cycles versus long-term objectives and retaining staff
- Limits of public/private partnerships but keen for permission to explore innovative models,
- Finding the right governance model
- Funding models (and disciplinary/ traditional role boundaries) make it difficult to sustain support for communities to drive action over the longer cycles that PBA requires to deliver change "Who is meant to stay in place to make things happen?"
- Need to get better at storytelling and continuously engage with people and whilst
 making sure they don't feel the fatigue of consultation by making it more
 attractive and less of a formal process. Potential here for the use of novel
 approaches, including digital, social, games and citizen science.
- Defining the "community" How do we have a meaningful conversation with young people and those heard to reach. Community and those most impacted need support and resourcing to engage effectively. Need to ensure diversity in groups e.g. not just young graduates but also those on jobs seekers allowance, children, and disabled children.
- We cannot assume that there is knowledge out there how do we get that
 incredibly complex data and make it matter for local communities and making it
 relevant to them. If community is deprived, why should you care about Climate
 change. The communities which are engaged are the ones that have resources
 already and tend affluent communities.
- Community engagement and ownership of process is vital they need to know their voices is being heard and how it has shaped the process.
- Integration and sharing of knowledge and best practice is vital particularly there is
 a need for better monitoring, assessment, and reflection, and for knowledge
 dissemination and shared learning post implementation. There is lots of
 information, but is it available, and or used appropriately? Concern about academic
 "mining" or extraction with limited reciprocity in terms of benefit to the actual
 providers of the knowledge and information.

Question 2 - What are the right skills for different stages of building resilience, what is missing?

Finance skills

• The ability to secure investment and build business cases; it's particularly difficult for adaptation vs mitigation. SFT, SNIB and ECCI are talking about this but needs leadership.

Participative engagement skills and understanding of governance mechanisms

- Coastal change has need for visioning, engagement, and data processing skills/capacity. Need for integrated design skills at design phase. A pool of visioners is needed!
- Use of correct, positive language about change. E.g. it is really difficult when the best thing for someone is to change (e.g. move in coastal erosion zone).
- Need to align knowledge from lived, everyday resilience. Bridge the gap to the language of policy makers.

Building on existing skills

- Lots of the 'green skills' efforts is focuses on net zero, but missing resilience and land skills (e.g. sustainable drainage). There are opportunities to change current skill sets to add in new ones for future.
- At local community level, it is about capacity and mixture of skills and ability to pass on the skills to others. Also support from outside in an emergency. Ballater/Gereie contract - Ballater had an 'everyday' resilience (but was experiencing flooding for the first time).
- As well as skills, should we be talking about responsibilities e.g. governance so that funding is fairly distributed, responsibility on govt to communicate knowledge of assets.
- From a Local Authority perspective, the group felt that there was a lack of clear and concise collaboration across all the organisations that have a role in developing places, often working in silos, and not talking to each other.
- Lack of capacity in "boundary" (soft) skills. Not enough appropriately trained
 practitioners at the science- policy- practitioner-community interface, and these are
 specialist skills. Some of the right people are there but are too busy with their day
 jobs or nor resourced appropriately. Need more people with boundary crossing
 competencies (soft skills) particularly with politicians and leaders.
- Need upskilling of place-based information and needs to be geo-spatially tagged.
- Need full time staff and people not just volunteers on the ground.
- Indigenous knowledge is highly valued and intergenerational knowledge especially so need to ensure this knowledge is captured effectively and practitioners are skilled in capturing and translating it to action.
- Need to develop new ways of integrating positive engagement and knowledge sharing without biasing towards those "usual suspects" and those who want to be involved.
- Lack of geographical "justice". How are projects and initiatives prioritised? Particularly when considering rural-urban, island-mainland, small population-large population outcomes.

 Need to share "skills" from successful implementation from one project to anothercould this be done; how could it be better coordinated? Could provide continuity of service for practitioners.

Question 3 - What are the future science challenges for adaptation and how can they be integrated within the development of policy?

Multi/inter disciplinary practice

- You have to integrate all the side disciplines to get the best solutions but that means splitting the money available.
- Maybe what we need is more social science about how communities respond and help them make a better society?"
- Multi/inter disciplinary science / "undisciplined" science is needed to address complex challenges.
- Agriculture is ~50% of land use; regenerative agriculture is so important to adaptation outcomes.

Reducing uncertainty and helping to understand uncertainty

- Science can help demonstrate the impacts of climate change more locally (to stop the risk being uncertain and being able to be kicked down the road)
- Data is a barrier to investment.

Monitoring

• Monitoring is important so that we know our trigger points for any adaptation pathway.

Models for action at different scales

- Can science help us create a model for what adaptation action is appropriate at difference scales.
- Struggle to find an academic / research community around place-based adaptation (which is why PBA is still mainly in the realms of practical project delivery). Problem with the visibility of and ability to connect across the scientific community. Adaptation Research Colloquium perhaps? Need to connect policy, research and delivery across disciplines
- Although PBA is happening in practice, it's difficult to access scientific support, particularly for monitoring PBA adaptation outcomes across a range of indicators, especially over the longer term
- National Adaptation Plan needs to be accessible for communities, land with them.
 Current SCCAP isn't helpful from a practitioner's POV
- Lack of climate literacy/ carbon literacy among academics and amongst decision makers – eg treasury / economics
- Suggestion of developing [non-negotiable] climate adaptation targets for each local area/region but communities have to decide how to achieve them
- Lack of data and baseline data (especially the localised data) to inform adaptation innovations [action]. Also a lack of context for these data.

- Linking in social vulnerability indicators with risk data is still missing from science/evidence base or hasn't fed into policy yet – again, cross-disciplinary nature makes this particularly challenging in the current research model
- Need for more radical approaches and more radical research to support this to treat climate change like the emergency that it is – call for values-based research to drive and support action, and for working WITH communities (over the longer term) to be seen as (and funded as) a core part of researchers' work.
- Challenge to get funding for long-term cross-disciplinary research projects not attractive to or supported by current model of research councils. How do we support the long-term monitoring? PBA is complex and takes time funding cycles are not long enough to be able to reap (record/evaluate) the benefits.
- Time and resource are key challenges participants reported going above and beyond, at personal cost.
- Cohort studies in public health, go on over decades need that for adaptation but cross-disciplinary also
- Integration of green space research, health research challenge of siloed working, exacerbated by siloed funding
- Need for local-level data that can be communicated to and explored with communities to inform action
- Difficulty of translating research into community-focussed information/ resources
- Wider systemic issue about careers in academia and in the NHS under pressure/on strike/underpaid etc.
- Need to better integrate "grey" knowledge (often from LA's) which is contained in reports, analysis and synthesis carried out by non-academics and often contains a large amount of 'lived experience' which is key to PBA. Likewise, comprehensive academic outputs need to be made available to all practitioners. Due to this there is a barrier to knowledge flow. All this knowledge is really what "boundary" intermediators need in agenda setting and planning.
- **Need on a shareable stable platform/ a geolocated data base**. This would help track the data constantly and allow stakeholders and actors to know exactly what information is out there and have open access.
- There is no national view of what groups are working and where and how this could be better aligned to maximise the use of resources funding research. All very ad hoc and pet project focused, poorly linked. Where is the shared learning?
- Literature gap regarding the Appraisal of cost and benefits in PBA need to bring it down to local level of what the cost and benefits are.
- Challenge in making sure the data drives actual action we need the date to work
 for decision makers and enable them to use it to have greater influence in how
 resources are spent with wider political and institutional buy-in.
- Whole systems approach is vital. Need to go beyond physical and need to have better understanding of socio-political context and cultural context, including place identity and how people relate to the place. There is overlap and we'd need to address in meaningful way.
- Need to overhaul and refine how we communicate science to communities and agenda setting is part of that – Start from grassroots ideally but lots of academic

- scientist already have string view on what the issue are need to communicate and collaborate on competing values and views. People feel the climate change action is a threat and there is a lot of denial.
- Need more collaboration across the board between disciplinaries. Much better
 agenda setting needed (science, planners, communities), with a strong focus
 needed on expected outcomes and timelines. In this context science needs to be
 action based and better time lined to have real impact, not work to its own agenda.
- Need to fully understand what the localised effects are for PBA. What does the
 science mean for local areas and how can that be integrated into policies? There is
 also a wider challenge of climate justice as people need to recognise cost will be very
 large in coastal areas for those people in central belt. The focus will be on cities, rural
 island and coastal communities may not get funding they need and be washed away.
 Need to communicate what we know better in holistic activities and views. Science
 needs to be place appropriate.
- Challenge of appreciating the different scales of place diff scales of place need to fully understand what it means at lower levels of granularity.