Unleashing the Potential of Capacity Development for Climate Action

Fixing a Broken Link on the Pathway to Transformational Change



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PlanAdap Creating a Climate for Change

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1 Setting the Scene

For decades, there has been agreement in the climate and development community that capacity development (CD) is a driving force towards social transformation. It is commonly defined as the process by which individuals, organisations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time. With contexts rapidly changing due to the impact of climate change, the need to smartly invest in CD is bigger than ever before if we are to boost the transformation processes and the climate action required in the 21st Century.

However, the results of investment in CD within a development and international cooperation framework have been widely recognised as unsatisfactory, unsustainable and, in some cases, piecemeal (see, for example, Ould-Dada (2018)). This assessment is shared by the majority of actors along the CD value chain (funders and donors, CD support service providers and the intended beneficiaries), despite their differing roles in the CD process. This discussion paper thus aims to highlight persistent shortcomings while focusing on possible solutions and the way forward.

The term 'capacity' is probably one of the most amorphous and nebulous terms in the world of international cooperation. It deals with something that goes beyond financial and technology transfer or infrastructure-focused support, which usually flows from someone who provides it to someone else who requests or receives it. The reality of CD appears significantly more complex and tricky though.

Funders of activities that support endogenous CD processes are faced with difficult questions: Whose capacity development should be supported – that of individuals, organisations or systems, such as an economic sub-sector or a value chain? How can CD be assessed and thus good practices be identified for CD? Do we need to challenge the way we assess CD (support)? Can we rely on established assessment

logics, such as return on investment or value for money, to gain a sound understanding of the relationship between monetary inputs (e.g. grants and other investments in CD interventions) and nonmonetary outputs (e.g. learning, improved skills and attitudes, professional growth)?

A number of further questions show that we operate in a complex system distinctly different from financial, technology and material transfers. These questions include: Who holds the prerogative of interpretation to state that someone else lacks capacity? How can the intended type and amount of capacity be measured? Can it be measured at all? Are there unintentional effects? Is there a cause-and-effect relationship between the support activities under the banner of CD and the outcome of developed capacity? How does enhanced capacity translate into enhanced action? Who carries the risk of failure?

This discussion paper does not seek to answer all of the above questions, but rather acknowledges the 'wickedness' of many of them. It attempts to present a consolidated overview of prevalent shortcomings and, more importantly, provides pointers for possible solutions, giving special consideration in the process to a funder perspective.

In order to avoid the muddy waters of inconsistent definitions of the term capacity – whether intentionally or unintentionally propagated by many stakeholders – the authors describe capacity as an amorphous set of aspects and sub-aspects that are referred to across the literature and project documents (see Figure 1 for the broad range of terms frequently used in relation to capacity). The authors are well aware that using such a vague reference point may lead to generic statements. However, the focus is on providing an overview of shortcomings (Chapter 2) and possible solutions (Chapter 3 and 4) for pathways to smart and effective investments in CD for climate action.



Figure 1 Terms that are frequently used in relation to capacity (development)

The paper is based on unambiguous and undeniable trends that are derived from a literature review of recent publications on CD. These findings have been commented upon and reviewed by renowned experts in the field of CD for climate action (see Annex 3). More specifically, the views shared in this paper are drawn from three sources: (a) a literature review; (b) semi-structured interviews with selected renowned, internationally leading experts in the areas of delivery of CD support in the climate sphere and beyond, monitoring and evaluation of CD, and funding CD, and (c) the vast, collective experience of the PlanAdapt network members in CD projects, knowledge-brokering services and research-into-use projects around the world.

2 The Bugs in the System of Funding, Delivering and Sustaining Impacts from Capacity Development Measures

»... When I was asked by the donor 'What do you think about this CD project? My colleagues and I reported that the project idea is flawed and that it would be a waste of money. However, the project continued unchanged and created no results ... «

Dimitry Kalmykov

Director of the NGO EcoMuseum Karaganda, Kazakhstan, in 30 years of extensive on-the-ground experience with international cooperation projects

This summarises widespread shortcomings encountered by planners and practitioners of CD support in recent years, mostly financed by international and national public funders. The descriptions of shortcomings are deliberately brief and will be referred to in the chapter 3 in which potential solutions are introduced.

One of the most frequently mentioned limitations is the fact that the term 'capacity' in itself appears too broad and all-encompassing, particularly when operationalised in project designs, plans and strategies. Questions such as 'Whose capacities exactly?', 'Which capacities exactly?' and 'How do these enhanced capacities realistically translate into systemic changes' frequently go unanswered or only vaguely addressed to offer guidance on successful implementation. Notwithstanding the widely acknowledged issues related to the assessment of CD outcomes, and therefore any effectiveness or efficiency considerations remain unclear. Furthermore, experts state that the CD project activities of larger projects are often considered a side issue, rather than a distinctive and well-resourced project goal, and hence do not receive the same attention as technology transfer or infrastructurefocused projects that generally have significantly higher financial values and costs.

Many projects have applied a somewhat static understanding of CD instead of a process-focused one. In linear 'technical' approaches to CD, skills and knowledge are often transferred to fill a deficit in specific individuals or organisations as a result. The underlying rationale is focused on CD as an activity (e.g. providing training and workshops, developing training modules) and not as an outcome (e.g. abilities, competencies and skills of individuals and organisations to adapt or transform), which is most likely derived from a desire to control the planning,

implementation and therefore results. Investors want to know how their funds are being used. Needless to say that such mechanistic approaches oversimplify the CD process, that is, they are to some extent not plannable or controllable. Certainly, this fact makes funders uncomfortable. But CD is an emergent process. The intangible yet crucial aspects (such as the effects of improved relations, networks, trust, etc.) are difficult to plan for and to anticipate.

The need to monitor and measure the results of CD activities based on a results-based management logic is an additional reason for the overemphasis on CD as a controllable set of activities. Overall, planning is also hampered by poor target-setting and insufficient understanding of capacity baselines. A true understanding of the CD process would require a more consistent and in-depth approach to monitoring and evaluation (M&E) measures, even for the prevalent 'mechanistic' approaches to CD activities. Funders are often satisfied by reports that represent a few oversimplified indicators, such as 'number of participants and training courses'. While more sophisticated M&E approaches already exist, they would require more attention and funding.

One consistently mentioned shortcoming concerns power relations between actors. Some of the interviewees stated that decisions and opinions by funders prevail and cannot be challenged by others such as project implementers or beneficiaries. While progress in participatory approaches to project planning are recognised, daily practice seems to lead to a situation where actors in partner countries especially still view the power imbalance as an essential factor in disabling conditions for the effective implementation of CD investments.

In the current system, there is an overemphasis on technical and scientific experts and their expertise as providers of CD support services. This illustrates a lack of skills and insights associated with education, learning, communications, future visioning and knowledge brokering that have seen significant advances in the last ten years. As reported in the interviews and the following insights into current tendering practices, the latter skillsets are consistently underrepresented in terms of requested reference

» ... what often gets called capacity development is the activities that people (i.e. providers of CD support) do. And I think that's a real problem. The activity is often confused with the outcome ... «

Catherine Fisher

Learning Process Designer and Facilitator in International Development, with several years working as Capacity Development Coordinator at Institute of Development Studies (IDS) and Amnesty International

experiences and expertise (in relation to both previous projects and proposed CVs, i.e. human resources). Similarly, it shows that existing frameworks and guidance tools on systemic CD are under-utilised (see Annex 2 for a selection of innovative existing frameworks).

Furthermore, the relationship between changes in capacity and wider transformational societal and political changes is rarely defined or seriously examined. There appears to be a consistent mismatch between ambitions regarding the dimension and scope of intended change on the one hand and means and resources provided on the other. CD activities often fail to reach higher levels of required system change. This is partly due to poorly defined specifications of the level of CD interventions (individual and institutional system) and insufficient alignment with the level of ambition. Insufficient time horizons would also appear to play a role in making it more difficult for the positive change in capacity to translate into a wider social change process.

The role of 'outsiders' – in terms of culture, language, ethnic background, religion, belief system, etc. – is fiercely debated at overall level. Some interviewees and authors consider the influx of new thinking and technologies from elsewhere to be closely associated

> with the role of outsiders who bring these 'inputs' with them, whereas others are concerned about the related barriers. The proponents of the latter group state that advice, teaching and methods are often insufficiently aligned with the context of the recipients.

Another significant constraint on effective CD is the brain drain (e.g. key staff in public sector institutions leaving their home countries), particularly in least developed countries (LDCs) and lower-middle income countries. This reflects the specificities of CD and knowledge transfer in relation to support that is focused on financial and technology transfer. The recipients of CD are human beings who are subject to incentives and disincentives set by the local, national and international labour markets.

For more insights into the shortcomings of previous CD efforts, see Annex 1.

» ... I think, first of all, there's an issue about power, and the way that power is enacted in aid programmes, but it's much easier to be the expert and teach and measure uptake in an essentially colonialist paradigm ... probably, you can make a lot of money out of standard training programmes, [...] you can make a lot of money, doing one way stuff (i.e. CD activities). So that there are temptations to retain a part of the power based on one-way flow of knowledge ... «

» ... A lot of people [...] are attracted to the mandate of strengthening capacity in Southern institutions. And so, for example, a competitive call process can be really tricky, if you want to support what we might consider weaker institutions or lower capacity actors. ... «

Heidi Braun

Program Officer, Climate Change Program at the International Development Research Centre (IDRC)

John Colvin

Director of Emerald Network Ltd, with more than 20 years' research and consulting experience in integrated and adaptive approaches to sustainable development, covering expertise in social and institutional learning processes, including monitoring and evaluation

Mizan Khan

Deputy Director of ICCCAD and Programme Director of Least Developed Countries Universities Consortium on Climate Change (LUCCC); former Vice Chair of the Least Developed Countries Expert Group under the United Nations Framework Convention on Climate Change (UNFCCC) » ... Capacity building cannot be imposed from above.
[...] The problem is that foreign consultants used to sit on the driver's seat and yes, this paradigm needs to be changed ... «

3 Possible Solutions

This paper is forward-looking and attempts to indicate possible solutions to the aforementioned shortcomings. The literature review and the interviews conducted have been undertaken in this spirit. The following list of solutions is derived from this research effort. The various solutions are linked to the shortcomings that have been confirmed in the interviews and up-to-date literature (see column on the right of Table 1 and more specifically in Annex 1). Following the comprehensive summary of solutions and proposed changes and instruments (see Table 1), six selected solutions will be discussed in more detail (see Chapters 4.1 to 4.6).

Table 1: Solutions and entry points for more systemic CD from a funder's perspective (source: authors' elaboration)

	SOLUTIONS	POTENTIAL INSTRUMENTS FOR CLIMATE ACTION FUNDERS/ PROPOSED CHANGES	RELATED Short- Comings
1	Enhanced use of existing monitoring, evaluation and results measurement of CD results, e.g. with (a) an increased focus on CD as an outcome; (b) better target- setting and understanding/measuring of baselines; (c) inclusion of new OECD DAC evaluation criteria 'coherence'; (d) reflection of intangible outcomes (see also solutions 5, 8 and 9)	Integrate latest/up-to-date monitoring, evaluation and results measurement of CD in guidelines & requirements, etc.	2, 3, 11, 12
2	Enhanced focus on and recognition of skills in education/pedagogy/didactics in addition to technical/scientific knowledge and expertise	 (a) Tender for or fund (teams of) service providers that have both skill-sets (b) Better integration of technical/scientific assistance and CD assistance 	4, 11
3	The role of external experts/outsiders is recognised but should be more carefully framed and planned. They should not replace internal national and sub-national experts, but rather support them, facilitate process.	Re-conceptualise role of international experts	8, 14
4	CD activities need to be more rigorously designed and better embedded in the project design to overcome the situation in which CD activities appear as an add-on.	Better integrate CD activities in overall project design	3, 10

5	There is a significant role for an intermediary or a broker (e.g. knowledge broker/change broker/transformation broker). Transformation can only be achieved if careful attention is paid to the process (design), underlying aspects of power relations, vested interests, etc. based on a context-specific understanding of all actors/stakeholders	Integrate these 'new' roles for intermediaries and brokers in project design	5, 11
6	Goals/objectives stated in logframes (generally and for CD activities) of international cooperation projects are seen as completely out of proportion	More realism, more humility in setting ambitions and targets	9
7	Enhanced recognition of intangible aspects of CD such as network- and relationship- building, trust-building, etc., more support	(a) More funds for emergent processes and preparation of CD activities during design phase	5, 11
	(financial and technical assistance) during project/activity planning phase	(b) Reframing the relationship with a grant recipient or funding recipient as more of a partnership, e.g. instead of competitive calls, proactively build relationships and even select grant recipients	
8	From controlling the use of funds to supporting the evolution of successful CD. Project planning and appraisal should make room for flexible and adaptive management, including an inception phase that allows for upperfainty and	 (a) Allow for adaptive management, more flexible administrative and financial procedures (b) Involve recipients/learners in the design and not only the service 	2, 5
	co-evolution of activities instead of a straight-jacket. Too narrow and pre- defined definitions of outcomes/results should be avoided.	provider (c) Build support capacity on the side of the funder (d) More recognition to co-design, co- production and co-evolution processes	
9	Overcoming unintentional support of commercialisation trends of less impactful CD activities as a result of current procurement processes. Given that enhanced co-production approaches are less plannable, output and activity- focused approaches that allow for efficient input resource planning (often required as per tender documents) hinder more flexible and agile provision of services.	(a) Adapt selection and assessment criteria (b) Change tender procurement practices	2, 4
10	Long-term approaches, enhanced recognition of the time after the project, identification of legacy partners, ideally not public administration partners but rather	(a) Adapt/change requirements and guidelines to identify and integrate legacy partners in addition to implementation partners	13
	This also relates to selection of learners, which should be based on self-motivation and interest in professional growth. This is also in view of overcoming supply-driven approaches.	(b)Adapt/change requirements and guidelines in view of learner selection	

11	With reference to CD for climate action: Do not overemphasise climate aspects, and look at livelihoods and society from an integrated perspective (particularly in countries in the bottom half of the world population)	Apply integrated frameworks and strategies, instead of overly focusing on climate aspects	10
12	More generally in relation to changing the aid paradigm : The overall attitude regarding experts and non-experts needs to be revised. In view of adaptation action especially, it is necessary to pay more attention to and attach greater importance to the experience of locals/practitioners	(a) Establish less expert-heavy approaches (b) Channel funds directly to local-level organisations	7, 8
13	Conducting an overview analysis of shortcomings/challenges of CD approaches is a common sense course of action for most stakeholders. More needs to be done to utilise and apply existing tools, approaches, expertise, etc.	Integrate existing knowledge on good CD practice into guidelines, requirements, management/administrative procedures	

It is apparent that the majority of the identified solutions relate to the funding mechanisms, and hence the setting of incentives or disincentives for relevant stakeholders. Many of them even go beyond the thematic focus on climate action. This reveals that funding institutions have a significant influence and hold the power to calibrate set-ups about 'Who does what by when?' in view of investments in CD. This power comes with a great deal of responsibility (for more on power relations see also Chapter 4.6).

All interviewees have confirmed that there is no lack of knowledge on how to provide better support for effective and systemic CD. However, there are a significant number of distortions and disincentives to do a better job. In view of this, it is important to differentiate between different actors, i.e. funders and donors, support service providers and the intended beneficiaries. This paper focuses in particular on the opportunities for funders and donors to improve the situation.

Overall, it is important to learn from the plethora of existing frameworks and approaches to systemic CD (see Annex 2). They can broadly be divided into three categories. First, the frameworks that focus on the capacity development process, secondly, those that home in on the question 'What are the required capacities?', and third, those concentrating on climate hazard-specific capacities. The insufficient use of existing approaches leaves questions as to why they are not widely adopted and used. In any case, there are plenty of opportunities to improve this situation and encourage adoption of the latest knowledge.

For each of the solutions, the authors have indicated 'potential instruments for climate action funders and suggested changes' (see Table 1). The interviewees provided more detailed ideas about each of these instruments and potential changes. Hence, this paper is considered an initial appetizer or toolkit of entrypoints to navigate the solution space.

Further reading: Aragón & Giles Macedo (2010), BUND (2019), Dapilah et al. (2020), Fisher (2010), Jackson (2010), Khan et al. (2016), Land et al. (2009), Melore & Nel (2020), Philipps (2019), Soal (2010), Woodhill (2010).

4 Spotlights on Selected Solution Areas

Each of the solutions in Table 1 warrants in-depth elaboration and, potentially, a more detailed design process of specific instruments and measures. However, within the scope of this paper, the authors have selected six areas to showcase potential solutions in more detail. These have been selected as lowhanging fruit for feasible improvement.

4.1 From Measuring to Learning – Enhanced Use of Existing Approaches to Better Monitor, Evaluate and Measure Outcomes of Capacity Development

Overall, there is a clear trend of moving beyond narrow monitoring and evaluation (M&E) indicators for training and workshops (e.g. number of workshops, number of participants). The most important step would be to consider CD from an outcome perspective and not only as a set of CD support activities to be implemented.

During the past decade, a great deal of progress has been made in terms of measuring CD outcomes more effectively, many of which could be labelled as fairly intangible. They focus, for instance, on an enhanced way of understanding the positive effects of networks, improved connections and relationships or changed attitudes and behaviour as a result of CD interventions. These are widely considered examples of aspects that are hard to measure. However, there are robust ways of doing so, including approaches such as <u>outcome harvesting</u>, <u>most significant change</u>, <u>summative evaluation</u> and <u>realist evaluation</u> that emphasise the qualitative identification of outcomes. These techniques may be more time-consuming and may 'only' provide qualitative findings, but they are widely regarded as better capturing benefits generated through network and relationship building, communities of practice, etc. <u>Tracer studies</u> have also been mentioned as a suitable instrument for identifying long-term changes.

Besides better post-project evaluations and reviews of results, an enhanced focus on the understanding and development of baselines, i.e. the situation before the CD intervention, has been identified as an area requiring improvement. In this category, <u>KAP surveys</u> and similar approaches may be useful.

Such approaches require not just enhanced attention, but also a recognition that more funds in project budgets needed to be set aside to implement them. Furthermore, one interviewee pointed out that

> long-term knowledge partners that are well-established in the institutional landscapes of partner countries, such as universities, could be engaged to ensure longterm impact monitoring beyond the project period.

» ... So, there's an issue about the people who are doing the capacity development and their relationship with whoever's funding the work as well. So that if you do a workshop, you can have a photo of a workshop, you can have a workshop report, it produces these kinds of outputs that enable you to justify what you've done. It doesn't though if you co-create something with someone, and you spend time, a lot of conversations, a lot of time, quite laborious and time consuming. But probably at the end of that process, that other organization, next time they do it, they could probably do it on their own ... «

Catherine Fisher

Learning Process Designer and Facilitator in International Development, with several years working as Capacity Development Coordinator at Institute of Development Studies (IDS) and Amnesty International It is essential that a CD intervention is well embedded in the given context and compatible with other interventions in a country, sector or institution. The new DAC evaluation criteria of 'coherence' (OECD, 2019) has been introduced to shed more light on this. It looks at internal coherence that addresses the synergies and interlinkages between the intervention and other interventions carried out by the same institution/government, as well as the consistency of the intervention with the relevant international norms and standards observed by that institution/ government. External coherence considers the consistency of the intervention with other actors' interventions in the same context. This includes complementarity, harmonisation and co-ordination with others, and the extent to which the intervention is adding value while avoiding duplication of efforts. The DAC evaluation criteria will be very useful in overcoming stand-alone types of CD intervention and in aiding the design of well-adapted and embedded CD activities.

Further reading: OECD (2019), Pearson (2010).

4.2 The Science-Politics Interface – The Role of Knowledge Brokers and Boundary Organisations

CD is often one piece of a complex mosaic of factors that enable transformational change. In many real-world examples, the distinction between CD, advisory services and knowledge transfer is somewhat blurry. Given the complexity of governance systems in the 21st Century, many experts underscore the fact that managing and facilitating knowledge transfer and other aspects of system change require a specific skill set that goes beyond the technical and scientific knowledge often contributed by external experts as part of CD projects. This does not neglect the importance of scientific advice and the provision of evidence and knowledge for effective climate change policy-making, but makes a case for recognising the additional skills necessary to walk the last mile towards transformational climate action.

The recent literature and evidence on the sciencepolitics interface in climate change governance reveals that productive interaction requires boundary work (Hoppe et al., 2017) to coordinate between the worlds of science and policy/politics. The relationship between science and politics has too often been conceptualised as a linear process of knowledge transfer, research use or impact. Policymakers and politicians like to suggest that they are 'on top' and call on the services of scientists who are 'on tap'. Scientists see their role as neutral, objective and independent experts, speaking truth to power. However, both of these 'sacred' or frontoffice narratives of idealised worlds neglect the more 'profane' or back-office truth such that the production of policy advice cannot realistically be described in terms of clear boundaries between science and politics; the zones of engagement and transgression are inevitably fluid and vague.

Many experts therefore suggest that it is essential to use boundary organisations and engage brokers to facilitate work along the policy-science boundary. Besides other skills, careful attention to process design, an understanding of underlying aspects of power relations and vested interests and deep knowledge of stakeholder engagement techniques should be part of the standard toolbox of such actors. In the climate-change-policy sphere, the navigation and treatment of uncertainty represents an additional challenge in boundary work. Addressing these aspects in an evidence-based and serious manner is another key skill of a climate knowledge broker. In the field of climate change adaptation and climate impacts especially, knowledge brokering is now widely recognized as a set of effective techniques for improving learning from climate information and integrating these insights in evidence-based decisionmaking (see for example *Climate Knowledge Brokers* Manifesto, 2015)

Further reading: Ndebele-Murisa et al. (2020), <u>Future</u> <u>Climate for Africa</u>, <u>Climate Knowledge Brokers (CKB)</u> <u>Group</u>, <u>PlanAdapt Network</u>, <u>Climate Adaptation</u> <u>Competency Framework</u>. » ... There's something around capacity not being fully integrated into the scope of work. What we do, as consultants, is to respond to Terms of Reference, we produce proposals [...] following the spirit of the ToR. And if the ToR integrated capacity much more fully from the start, we would integrate it in the proposal and the inception report, and everything else flows from there ... « » ... I have seen it where we've used intermediaries for capacity-building, and it's worked really, really well, because they are the right kind of people to engage with the audience, have the kind of local and cultural understanding that we don't always have ... «

James Harris

Principal Technical Consultant at Ricardo Energy & Environment, with extensive experience in the provision of consulting services

» ... There's lots of talk about adaptive management and the need for it, and obviously, there's huge need for it in the context of climate change adaptation and mitigation. But, it's generally not allowed within funding streams ... «

Catherine Fisher

Learning Process Designer and Facilitator in International Development, with several years working as Capacity Development Coordinator at Institute of Development Studies (IDS) and Amnesty International

4.3 Flexible and Adaptive Fund Management – From Controlling the Use of Funds to Supporting the Emergence of Capacity

Many studies illustrate how key aspects of organisational or system capacity do not necessarily result from a purposeful and planned intervention, but rather emerge from a complex and difficultto-chart process of organisational learning and adaptation. In many instances, such processes are implicit rather than explicit and not necessarily guided by any form or recognisable intervention. It is helpful to think of organisations and systems as human and social systems that somehow evolve organically in unpredictable ways in response to a wide range of stimuli and through multiple interactions. From this perspective, the task of CD can be considered akin to shaping and influencing processes driven by local contextual factors, including politics, and culturally defined norms, values and practices.

Many practitioners argue that systems thinking and the concept of *complex adaptive systems* can help to better understand how capacity develops within organisations and large systems, and thus what external partners need to do differently to improve their support for endogenous CD processes. From this perspective, CD can be considered a form of change that follows a process over time characterised by moments of coherence, collapse and re-emergence. Often labelled 'emergence', this is an unplanned and uncontrollable process in which properties such as capacity emerge from the complex interactions between all actors in the system and produce characteristics not found in any of the elements of the system (Land et al., 2009). From a funder's perspective, this is a rather uncomfortable reality. In the majority of funding schemes, applicants are forced to feign the plannability of CD outcomes. In order to advance this practice, project planning and appraisal should allow for flexible and adaptive management, including an inception phase that permits uncertainty and the co-evolution of activities. Too narrow and pre-defined definitions of outcomes and results should be avoided.

One of the interviewees highlighted further experiences in which external consultants and providers of CD support are expected to know what the capacity gap and need are and that this mindset is a barrier. People have been trained to expect supply and expert-driven approaches.

4.4 Long-Term Approaches Are Needed – Sustaining the Legacy of Project Impacts

As mentioned above, CD is a long-term process. Project-based CD approaches frequently consider only the CD support activities (and not the process of capacity evolution itself) and measure the delivery of these activities (see also Chapter 4.1). However, it takes many years for results and actual changes in organisations and systems to emerge. Project planning and resource allocation are, however, constrained by disbursements that are limited to the project term. It was further stated that the key impacts tend to materialise after the CD project.

As a result, many in-country practitioners are calling for better identification and involvement of legacy partners, i.e. organisations and institutions that maintain the know-how of the project and provide long-term monitoring of real-world capacity changes. As these are mostly knowledge-based activities, some experts have pointed towards universities as legacy partners. Funding mechanisms should recognise this by identifying these legacy partners as part of the project design, in addition to the call for longer project terms. There is a need for innovative ways of involving legacy partners during the project so that they can fulfil their role in the long run. It is well noted that project design requirements have requested sustainability or exit strategies for quite some time now. However, qualitative assessment of their effectiveness by experts and practitioners has been critical and negative overall.

Furthermore, it has been highlighted that governmental institutions have often failed to make a meaningful contribution to a long-term legacy for CD project impacts. In conclusion, it was proposed that academic partners take on this responsibility, not » ... Change will happen years after the project is finished and gone. And so, if you are building capacity to adapt to the impacts of climate change, you must invest in something that will last way beyond the project period. It's not about project outputs anymore. It's not planting trees or digging wells etc., which is completely fine. But essentially, it is about building a foundation that will continue beyond the project ...

So, the sustainability to me is the number one criteria, and it must be designed from the very beginning. You have to design your exit strategy, not what you're going to do. But what you're going to leave behind. That's the number one criteria that you have to design. I call it a legacy strategy ... «

Saleemul Huq

More than four decades of global leadership on climate change solutions from a Global South perspective. ICCCAD Director, IPCC Lead Author, IIED Associate, Chair of the Expert Advisory Group for the Climate Vulnerable Forum (CVF), Senior Adviser on Locally Led Adaptation with Global Centre on Adaptation (GCA)

least because their staff retention levels are higher than in governmental agencies.

4.5 Climate Action Is 'Only' One Piece in Complex Development Challenges – Embedding Climate Policy and Projects into Diverse Contexts

Several interviewees that have been involved in CD for Climate Action projects for decades have stated the need to embed any climate-focused intervention into wider livelihoods and the social contexts of the intended beneficiaries. Vulnerabilities are manifold and only partly due to climate change. By recognising that climate adaptation and mitigation objectives are not always of primary concern to individuals and communities, acceptance of project interventions can be enhanced. It has been observed that CD strategies were more effective in cases that promoted integrated and holistic approaches to tackling problems in a multi-objective manner.

While less common in practice, transformational approaches to adaptation are more likely to lead to real vulnerability reduction. To this end, trends in the recent literature overwhelmingly call for adaptation projects to address the underlying causes of vulnerability—promoting a transformational approach as opposed to incremental adjustments to maintain current systems. As such, adaptation efforts should target the 'dynamics of living with change while also transforming the processes that have contributed to vulnerability in the first place' (Church & Hammill, 2019). The social and political dynamics of poverty, gender, geography, livelihoods and access to information and infrastructure need to be addressed in addition to the experienced and expected climate change impacts.

Adaptation is then seen as a larger practice to transform development, through efforts that

bolster opportunities for learning, empowerment, leadership and collaboration across sectors, organisations and institutions.

Similarly, climate-based decisions for new energy or mobility solutions (or other mitigation-focused projects) should be embedded in the socio-economic context of users, and emissions reduction potential should ideally be integrated with other livelihoods or socio-economic objectives. At the same time, there are trade-offs involved not just between the mitigation and adaptation objectives, but also with other environmental goals. Trade-offs emerge from the complexity and diversity of these linkages across geographical scales. They need to be well understood and managed so as not to risk undermining the ultimate policy objectives (OECD 2021).

Further reading: Church & Hammill (2019), Few et al. (2017), *Hammill & McGray 2018*, *ICAT*, O'Brien et al. (2015), Wienges et al. (2017).

4.6 Moving Beyond the Expert Paradigm – Removing Unconducive Power Relations and Enabling Co-Creation

The era of unidirectional, expert-driven knowledge transfer is long over. However, it appears that many projects still apply methods of this outdated CD » ... But they will not die because of climate change, today, but they will die right now, because they don't have access to markets. Because they don't have roads. They don't have infrastructure. They don't have health facilities. So, climate change, in short, should not be addressed in isolation. But you really should consider it as a development issue and integrated into a package... If you provide climate information to producer or farmers, and you don't offer them the opportunity to have access to markets, better yields, so my goodness, you will waste your time ... «

Edmond Totin

Former Researcher at ICRISAT, Climate Analytics etc., Assistant Professor at Université d'Agriculture de Kétou/ Benin and IPCC Author with over 15 years of experience in international cooperation and research projects in Africa

model. The reasons are probably manifold. Lack of attention to this type of project component is reported by interviewees, confirming that such aspects are often treated as secondary. Other reasons include resource constraints and lack of sufficient knowledge about the latest CD approaches.

Co-development and co-production processes have taken the front seat and proven to be more effective. In the area of climate services especially, there has been a recent trend of moving away from a narrow, supply-driven emphasis on products and towards advocating a process-centric approach defined by transdisciplinary collaboration that intentionally seeks to generate fundamental, long-term benefits. Such benefits include increased human and institutional capacity, and the creation of relationships that are essential components of science-informed decisionmaking for climate adaptation and beyond (Daniels et al., 2019). practical and ethical importance of ensuring a range of perspectives on a given issue. Achieving pluralistic co-production entails bringing together academics (from different disciplines) and people from other sectors (for example from government, business, civil society, local and indigenous communities) to generate knowledge and catalyse change. It is important to ensure

that those involved represent a range of skills (for example, analysis, translation, synthesis, facilitation and evaluation) and types of knowledge and expertise (for example, experiential, local, traditional, academic and official). This diversity generates an enriched understanding of the ecological, political and technical aspects of an adaptation or sustainability challenge. Moreover, research suggests that under the right conditions, knowledge outcomes are enhanced by including various other dimensions of diversity, such as gender, ethnicity, age and nationality.

These new approaches pose questions, given the established power relations in the international cooperation sphere. 'Funders have the final word', 'experts from the global North drive the process and eventually draft the report and policy', 'experts are the ones that are listened to' – such phrases are mantras of practitioners that have been involved in CD projects for decades.

Knowledge co-production is an iterative and collaborative process involving many different types of expertise, knowledge and actors to produce context-specific knowledge and pathways towards a sustainable, low-carbon and climate-resilient future.

Co-production processes explicitly recognise the multiple ways of knowing and doing. It has been persuasively argued that all knowledge is inevitably situated and partial, highlighting the » ... And one of the main things we learnt from the ASSAR project in Mali; when we talk about capacity development, we often don't take time, and ask questions such as: Capacity for who? Whose capacity are we developing? And often we assume that we (i.e., the CD support provider) know everything and then we are going to build the capacity of others, it's something that appears one-way on paper, while in practice, it's both ways ... «

Edmond Totin

Former Researcher at ICRISAT, Climate Analytics etc., Assistant Professor at Université d'Agriculture de Kétou/ Benin and IPCC Author with over 15 years of experience in international cooperation and research projects in Africa A re-think is needed in order to achieve this. Staff of development organisations and capacity support providers in the global North should no longer view themselves as experts and strategists for a given country, let alone an entire continent. Project and financial planning needs to be more flexible to allow the ideas of partners to shape CD projects to a significant degree. This is also the only way to jettison part of our colonial heritage. Researchers and intellectuals from the partner countries should receive financial and non-material support to help them develop and disseminate their own ideas. This would encourage equal and reciprocal dialogue (Kornprobst & Schwachula, 2020).

» ... We need a paradigm of respecting experiential knowledge of people tackling climate change, and then bringing the more formal educationbased knowledge to work with those with experiential knowledge and knowledge on adaptation will be a co- production between practice and theory, not from theory to practice, but practice to theory, and new ideas and new solutions come out of joining forces between practitioners, researchers and learners.

But researchers need to have open minds. They have to have humility. They must understand they don't have the answers, they have to learn first, before they can start offering any kind of advice, takes a lot of time, takes a lot of investment in effort, takes setting up trusted relationships with the practitioners and only then do they have the ability to offer solutions that are likely to be more effective on the ground.«

Saleemul Huq

More than four decades of global leadership on climate change solutions from a Global South perspective. ICCCAD Director, IPCC Lead Author, IIED Associate, Chair of the Expert Advisory Group for the Climate Vulnerable Forum (CVF), Senior Adviser on Locally Led Adaptation with Global Centre on Adaptation (GCA) Further reading: Becsi et al. (2020), Hunter et al. (2021), Nacipucha et al. (2017), Norström et al. (2020), Pettit (2010), *Resurgence*, Vignola et al. (2017).

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Annex 1: Identified Shortcomings of Investments under the Banner of Capacity Development

1 The term 'capacity' is too broad, all-encompassing, often not defined. 2 Understanding of the term '...development' or '...building' is often static. Linear causal logic and replicable best practice are inappropriate as approaches to complex problems such as climate change. In linear technical approaches to capacity development, skills and knowledge are frequently transferred to fill a deficit, in specific individuals or organisations. 3 Monitoring and measuring of CD results is focused on CD as an activity, not as an outcome, which limits its potential. In addition, poor target-setting and understanding/measurement of baselines is common. This also encompasses insufficient planning/design. M&E approaches of CD activities are too report-focused and not outcome-focused. 4 Overemphasis on technical and scientific experts/expertise in the selection processes for CD service provision. 5 Inflexibility and overemphasis of controlling the use of funds by funder. CD is an emergent process, and the intangible but crucial aspects (relations, networks, trust, etc.) are particularly difficult to plan for/anticipate. 6 The relationship between changes in capacity and wider (transformational) societal/political changes is rarely defined and not often seriously considered. 7 Capacity building and knowledge transfer are often conceptualised as 'unidirectional', i.e. from a provider to a recipient. Essential underlying principles of effective learning are not recognised. 8 Power relations are often overlooked as underlying but essential enabling or disabling conditions. 9 Mismatch between ambition/expectations (in terms of the dimension and scope of intended change) and means/resources, hence CD is carried out 'on the side', rather than as a clear project goal. 10 The activities often fail to reach the higher levels of required system change. The level of CD intervention is rarely specified (individual-institutional-system) or aligned with the level of ambition (see also 4), and time horizons appear insufficient for a change in capacity to translate into a wider social change process. The role of outsiders (in terms of culture, language, race, religion, belief system, etc.) and the related barriers are underestimated/overlooked. 11 Existing frameworks/guidance tools on systemic CD are underused. The current ICI appraisal, monitoring and evaluation methods are not up to date, nor are they adjusted 12 in relation to existing frameworks/guidance tools on systemic CD (often limited to a view of quantitative indicators). 13 Effective CD is undermined by a significant brain drain (e.g. key staff in public-sector institutions are leaving their home countries), particularly in least developed countries (LDCs) and lower-middle income countries. 14 CD activities are (too) frequently provided by outsiders who lack understanding of context, cultural aspects and a feel for the right language/terminology to be used. The role of external experts/outsiders/international experts is recognised, but it often takes time until the inputs/advice, etc. start to be better contextualised, etc.

Annex 2: Capacity Development Frameworks and Concepts

Framework/Concepts	Short Description	
Adaptive Development, Thinking and Working Politically (TWP), Problem-Driven Iterative Adaptation (PDIA), and Doing Development Differently (DDD) DDD Manifesto	Emerging community of development practitioners and observers, who believe that development initiatives can – and must – have a greater impact and who have formulated a set of common principles.	
Capacity Works (GIZ)	Five success factors (strategy, cooperation, steering structure, processes, and learning & innovation) delineate the various facets that help focus on the objectives and results of complex cooperation systems. The conceptual framework underlying the success factors is clearly set out, and the success factors are supplemented by an extensive toolbox to support practitioners working in these five areas.	
Make Change Happen (The Open University, Oxfam)	A set of modules (as part of a MOOC) for discovering what drives positive social change and the role of a change-maker. Understanding power dynamics, systems and influencing strategies that can shift the status quo to make lasting social and political change.	
Making Change Happen (IIED)	IIED's institutional approach based on the following principles: 'We believe that policy and social change are not rational and linear processes. Instead, they emerge from many different angles of influence and types of knowledge creation and are shaped by imbalances in power and voice To ensure that engagement is effective, we work in ways that question and change power dynamics between the different actors involved. Our 'co-creation' approach results in powerful propositions that bring about changes in policy and practice.'	
Climate Adaptation Competency Framework	Provides (a) a defined set of competencies to ensure that individuals and teams have expertise and abilities to perform climate adaptation job functions; (b) a practical approach to identify skills gaps and monitor performance in organisations offering climate adaptation services; (c) terminology for those hiring and those applying for jobs to communicate the skills, behaviours and attitudes for climate adaptation work.	
Capacity for Disaster Reduction Initiative (CADRI)	Global partnership composed of 20 organisations working towards the achievement of the Sustainable Development Goals by providing countries with capacity development services to help them reduce climate and disaster risk. CADRI's underlying conceptual framework for capacity development is under revision (as of June 2021).	

Capacity Diagnosis and Development – Transforming Responses to Climate Change (Climate Sense)	Approaches for measuring and improving the performance of organisations, and the systems of organisations they form part of, to manage climate change risks and opportunities – both climate impacts and carbon management.
Making Cities Resilient (UNDRR)	The 'Ten Essentials for Making Cities Resilient' map capacities directly against the Sendai priorities for action and their indicators for monitoring actions on disaster risk reduction. They are the critical and independent steps that need to be undertaken to build and maintain resilience.
Flood Resilience Measurement for Communities (FRMC)	A tool of the Flood Resilience Alliance (a multi-sectoral partnership which includes IFRC), which measures communities' resilience to floods. The sophisticated online tool is based on 44 capacities that build flood resilience (science-based).

Annex 3 Short Bios of Interviewees

- Catherine Fisher: Learning process designer and facilitator in international development, with several years working as capacity development coordinator at the Institute of Development Studies and Amnesty International
- Prof. Saleemul Huq: Director of the International Centre for Climate Change and Development (ICCCAD), Professor at the Independent University Bangladesh (IUB), Associate of the International Institute on Environment and Development (IIED), Chair of the Expert Advisory Group for the Climate Vulnerable Forum (CVF), Senior Advisor on Locally Led Adaptation with Global Centre on Adaptation (GCA). Published hundreds of scientific as well as popular articles and was recognised as one of the top twenty global influencers on climate change policy in 2019 and top scientist from Bangladesh on climate change science. Lead author of the third, fourth and fifth assessment reports of the Intergovernmental Panel on Climate Change (IPCC), with a focus on adaptation
- Dimitryi Kalmykov: Director of the NGO EcoMuseum Karaganda, Kazakhstan, with 30 years of extensive, on-the-ground experience of international cooperation projects
- Edmond Totin: Research Scientist (ICRISAT, Climate Analytics), Assistant Professor at Université d'Agriculture de Kétou/Benin and IPCC author with several years of experience in international cooperation and research projects

- Heidi Braun: Program Officer in the Climate Change Program at the International Development Research Centre (IDRC)
- James Harries: Principal Technical Consultant at Ricardo Energy & Environment, with extensive experience in the provision of consulting services on climate mitigation and transparency
- John Colvin: Director of Emerald Network Ltd, more than 20 years' research and consulting experience in integrated and adaptive approaches to sustainable development, covering expertise in social and institutional learning processes, including monitoring and evaluation, particularly in the context of climate change adaptation, water resources governance, ecosystem services, sustainable livelihoods and sustainable urban development
- Prof. Mizan R. Khan: Deputy Director of ICCCAD and Programme Director of LUCCC; former Vice Chair of the Least Developed Countries Expert Group under the United Nations Framework Convention on Climate Change (UNFCCC) and lead negotiator on climate finance with the Bangladesh delegation under UNFCCC since 2001

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