

**Title:** Meaningful engagement and ownership through pre-articulation of in-situ shared values

Obakeng Sethamo, Rachel Masika and Marie K. Harder\*

\*corresponding author: [m.k.harder@brighton.ac.uk](mailto:m.k.harder@brighton.ac.uk)**Abstract**

Effective engagement of local communities in externally driven development projects is problematic globally, including in the crucial development of locally appropriate plans for climate change adaptation, especially by rural communities. We present an exploratory case study of the purposeful use of an emerging values-based approach to first assist local communities to articulate and confirm their own, in-situ, shared values-in-action, as a pre-process to standard participatory vulnerability risk assessments (VRA). We separately engaged four Village Development Committees (VDCs) from the North East District in Botswana, where a widespread program of local VRAs is taking place. Results clearly demonstrate very significant and meaningful engagement by, ownership of, and relevance to, participants in the VRA process, evident through the bespoke and tailored considerations of local vulnerabilities and responses, and post-event focus group interviews. Specific details of links between the pre-process and the VRA process were mentioned by participants throughout. We conclude that the values-based process, known as the WeValue crystallization process, has very great potential for a step-wise shift in effectiveness of VRAs and local adaptation planning, and that a new agenda is needed to develop and test that WeValue's quasi-anthropological elements can be scaled up for widespread use internationally. (Maximum 200 words)

**Keywords:** climate change adaptation, values, participation, local communities**1. Introduction**

There are growing calls that adaptation planning must better engage the local communities to be successful (IFRC, 2009). The Paris Agreement elevated meaningful community participation and engagement in climate change adaptation planning to be considered issues of critical importance. At that United Nations climate change conference, the Talanoa style sessions were suggested as a concrete way forward to support the delivery of these concepts post Paris Agreement (UNFCCC, 2016). These are open focus group discussions covering issues of where we are, where we want to go and how we get there, all in the context of climate change action (UNFCCC, 2017). Although this is seen as a powerful move for participation proponents it does not bring any breakthroughs to existing challenges of producing valid community engagement, relevance of interventions, and ownership of interventions. Communities who have been engaged in climate adaptation planning through the use of standard methodologies of vulnerability risk assessments (VRA) have previously raised concerns about the outcomes of these processes, suggesting that they were unable to define which capacities need to adapt, or to even define levels of vulnerability (Bardsley & Rogers, 2010). There have also been fears expressed that participatory methodologies such as the VRA can actually constrain the openness of participation and limiting the contribution of participant input in project implementation (Sherman and Ford, 2014). It seems that, in practice, participatory processes have often been reduced to a means for powerful institutional actors to legitimize and build public acceptance for pre-determined agenda, policies and interventions (Scoones & Wynne, 2005).

Climate change adaptation planning is important. Without it, communities may be devastated by the manifestation of impacts associated with current and future climatic changes. Unfortunately, responses to adaptation have largely disregarded local complexities that include the social, cultural, and other economic and political realities that drive systems (Kattumuri et al, 2017). Successful adaptation happens when people understand and fully exploit the interconnected nature of each characteristic (Gogoi et al, 2014) that makes up their livelihoods. But in their recent report to the UNFCCC on the progress made so far on adaptation planning, African governments through the African Group of Negotiators noted that current assessments are insufficiently articulated to usefully indicate which communities, groups and ecosystems are the most vulnerable, and this can also lead to challenges in balancing the needs of vulnerable communities, groups and ecosystems with development needs (AGN, 2018). The United Nations Framework Convention on Climate Change (UNFCCC) initiated the National Adaptation Plans of Action (NAPAs) and National Adaptation Plans (NAPs) processes to support governments to systematically identify climate risks and develop suitable interventions (UNFCCC, 2012). The implementation of these two plans relies on the capacities to engage with local people and the local environment, and then to develop tailored adaptation priorities. These two processes encourage multiple participatory approaches to acquire local input, but issues of engagement, relevance and ownership repeatedly resurface in both (Samaddar et al, 2015). No alternative or innovative ways of involving communities more effectively and meaningfully have yet been developed, nor deeply explored. There is a general feeling that this is intrinsically unachievable. However, Kirkby et al, (2018) recently argued that, in principle, an active, free, and meaningful participation process could ensure that the output of vulnerability assessments, and the appropriate adaptation responses to them, would embed considerations of local priorities, concerns, vulnerabilities and capacities as articulated by the people themselves, according to their cultural perspectives. Although this line of argument is strong, the possibility of designing a process with these characteristics seems well outside the limitation of the current generation of participatory VRA methodologies. These have been reported to be highly ritualized and representing a deep naivety about the nature of participation and what it can and cannot achieve (Harrison, 2002). This impasse has prompted us to look at an entirely new pathway to improve participation by first strengthening local voice.

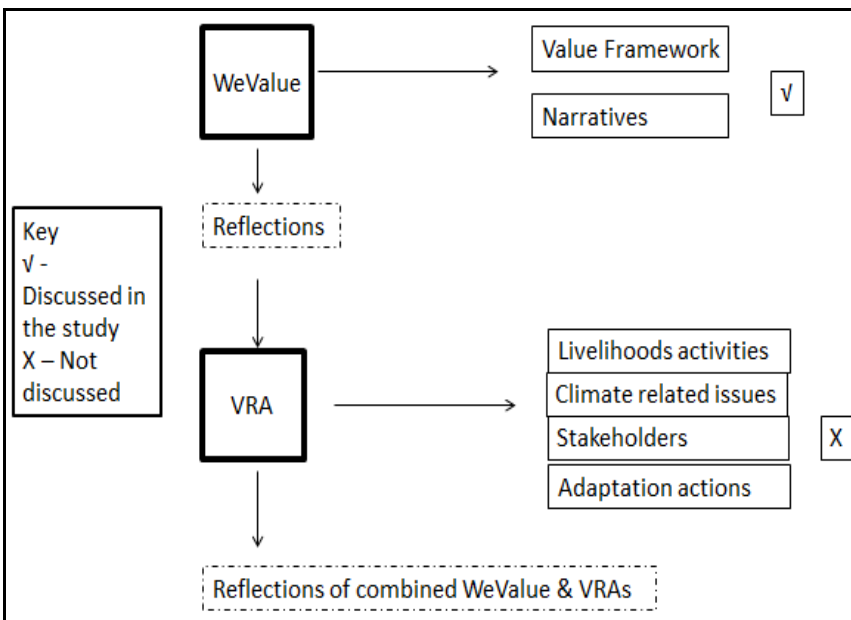
The case study presented here explores an approach from another field that shows potential to help with these challenges through a rather different pathway. The values-based approach known as WeValue was initially developed in 2007-8 (Podger, 2010) to help informal and civil society groups to better articulate the intangible, values-based aspects of their work which were important to them, in their own terms. This was to support them in having a stronger voice about their central aims, and thus to remain grounded in their own values when communicating and negotiating with external evaluators and agencies. Follow-on effects of using the WeValue approach were shown to include a lasting ‘crystallization’ of shared values and concepts; a profound feeling of self-expression and communication (via the bespoke values-statements and framework produced); a raised feeling of self-esteem and respect for others in the group; and a renewed energy, sense of purpose and motivation to move forwards in new work as a group (Burford et al., 2016). In a separate study about intangible project legacies, participants first engaged in the WeValue crystallization approach and then were asked to identify legacies relevant to them: it was found that their increased self-awareness and clarification of values and related shared vocabulary allowed them to identify around 3-7 times more legacies than prior (Brigstoke, 2017).

From these known effects of using the WeValue crystallization process, the idea arose that through it a group might be enabled to be engaged more deeply and communicate more effectively on topics brought

to them and framed by an ‘outsider’, possibly because of being grounded even more strongly in their own shared values. This was seen as a potentially very powerful mechanism to aid (co-)production of local VRAs and adaptation plans. In addition, it was hypothesized that post- the WeValue crystallization process the community might more easily and strongly take ownership of their VRAs adaptation plans. The exploration of a new, hybrid WeValue+VRA approach for this purpose became the aim of this study. In addition to contributing to what we see as a platform of new-generation participatory approaches, we expected that specific lessons from this case study would support pragmatic adaptation planning work in Botswana and other developing countries which are still entangled with trying to make traditional “community participation” methods work.

### 1. Methodology

We used a multiple case-study approach (Yin, 1994) to explore whether the application of the WeValue core principles improved perceived levels of engagement, ownership, and relevance of the VRA process. Four village sites in Botswana were chosen, explained below. It was first necessary to re-derive the WeValue materials for use in rural Africa. Secondly, the core WeValue crystallization process had to be integrated into a VRA process via a carefully considered method. Thirdly, a feedback process was designed to obtain participant perceptions of the levels of engagement, ownership, and relevance of VRAs. Note the emphasis is improvement of these perceptions due to use of the WeValue process: we will thus focus on data connecting the two, rather the VRA reports themselves (which will be presented elsewhere). Figure 1 clarifies which study elements are reported here.



**Fig 1: Schematic representation of the case study elements, with indications of those which are reported here (√) and not reported here (x).**

#### 1.1 Site choice

A site was desired where structures, in this case the Village Development Committee (VDC), already existed for national adaptation planning to filter down to (MLG&RD, 2008). Village Development Committees (VDCs) are strong local level planning structures, with considerable legitimacy as representatives of local people (MLG&RD, 2008). Their successful involvement in climate adaptation will be a breakthrough for local adaptation planning which is still in its infancy in Botswana and other developing countries. Botswana was selected due to the suitability of current activities in its National Adaptation Plan (MENRCT, 2016., MENRCT, 2018., GoB, 2017., Vision 2036 Presidential Task Team, 2016). District administrators were already sending out staff to encourage VDCs to consider climate change issues, develop VRAs, and draft local adaptation plans (LAPs). Prior VRA exercises reported difficulties establishing the relevance of its outputs, weakening ownership levels (Masundire et al, 2015). Our researcher is native to Botswana and had several years' previous experience with the standard VRA approach. The four specific villages were a convenience sample in an area of current VRA activity, and of sufficient number to identify likely outlier effects.

### **1.2 Re-derivation of the WeValue materials**

The WeValue materials were re-derived, to be locally appropriate. First, the photos used had images more typically locally encountered. The list of “prompting” or “triggering” statements was pre-constructed through analysis of related local interviews in the local language. The researcher engaged in pre-study visits to establish rapport and appropriate expectations. Local and external considerations of power were made, for example ensuring it was clear that input from all participants was sought. Throughout, the facilitator endeavored that participants felt free to express themselves in their mother tongue and were free from intimidation. It was pre-decided to simplify the third stage of the WeValue process, where participants usually construct a values framework which is sometimes quite complex. Instead, participants were encouraged to organize under three broad headings of: their foundation, how they work, and their vision (which are very often empirically produced independently by WeValue participants).

### **1.3 Integration into the VRA process**

The standard VRA process usually occurred over 1-2 days, including participatory identification and prioritization of existing and future vulnerabilities, risks, capacities and ambitions (Masundire et al., 2015). The WeValue process could have been integrated in a number of ways, including with interwoven alternating ‘chunks’. However, the criticality of the inter-dependence of the WeValue sub-processes is not yet fully known, so it was decided to keep those together, and the VRA elements together, resulting in a ‘bolt-on’ design. This would also assist future explanatory studies which might compare standard VRA processes. Our process thus took up most of two successive days, separately focussing on WeValue and VRAs respectively.

### **1.4 Elicitation of participant perceptions**

It was decided that the elicitation of participant perceptions about ownership, relevance, and participation should occur (directly) after both the VRA and WeValue elements were completed. We used a focus group semi-structured interview method. Initial open questions allowed free expression about ‘the experience’, followed by more specific questions.

In addition, as an exploration of potential changes of engagement level before and after the main elements, the participants were introduced briefly to the topic of local climate change issues at the very start of the two-day process, and asked the extent to which they thought these were relevant to them. This used open questions up to 20 minutes, after which the WeValue process was started.

## **2. Results and Discussion**

Four VDCs in the North-East District in Botswana were engaged, each over a two-day period.

On the first day participants were first asked, for exploration, if they had heard about climate change, whether they thought it would affect them, and what they think their own role might be, or not be, to address issues. The responses were generally brief and vague, showing little knowledge about the range of specific issues, and comments that they felt in no position to be active actors.

The participants were then told this day would be about exploring their own local shared values, returning to climate change topics the next day. They proceeded with WeValue sub-processes of photo-elicitation, discussion and framework construction.

During photo-elicitation, participants each chose two pictures that resonated with them as village members. They took turns to present what the pictures represented to them, with the facilitator maximizing 'listening' and keeping interruptions and discussions to a minimum. The locally derived 'trigger statements' were then used to carefully stimulate deep discussions of examples and ideas for expressing and negotiating shared values, which were written onto cards on the table. The facilitator ensured no-one dominated, carefully stimulating collective clarification. Participants seemed relaxed and interested to share their experiences, and both men and women seemed free to engage.

Participants then linked their 20-30 values statements into a framework, and gave a narrative of it – one example given in 2.1 below. After the second day of standard VRAs, participants happily gave specific reflections on the two-day event, providing a natural culmination and conclusion. These are given in 2.2 below.

## 2.1 Day 1: Values Frameworks and Narratives

Below we give one example of the four village frameworks and its accompanying narrative.

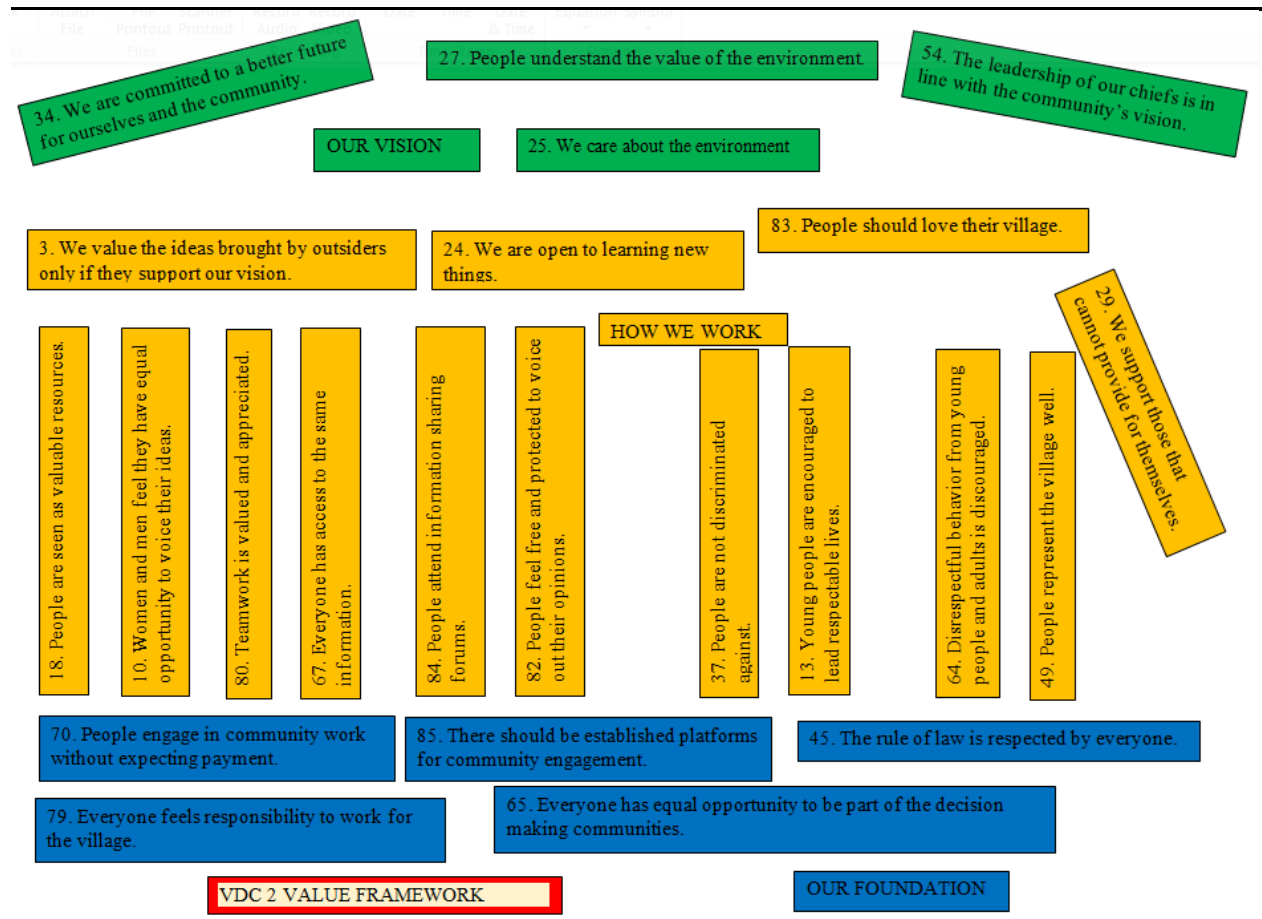


Fig. 1: Mosojane Village Values Framework (Source: VDC interviews February 2018)

### Accompanying Narrative

**Our Background/ Foundation:** Our (VDC) committee places great emphasis on community engagement, volunteering, rule of law and democratic processes. We believe it is important that everyone has equal opportunity to be part of the decision making committees. VDCs from other villages emphasized that those in authority should respect their positions, this means that those in positions of power should not exhibit questionable behaviour which will make it difficult for the community to respect them.

**How We Work:** Our emphasis is on openness, compassion, community engagement, inclusion, security, respect and teamwork. It is important that people feel free to voice their opinions so that contentious issues can be addressed. Another committee emphasized the importance of young people in the village. The future of the village depends on the ability of the older generation to mold the young generation.

**Our Vision:** For us, the traditional leadership plays a very important role in decision making and community development. It is important for the committee that the leadership of the chiefs is in line with the community's vision. All committees recognize the important role of the environment in the wellbeing of the village. They emphasized that village work is usually achieved through volunteering and people



going beyond the call of duty and (normal) expectations. Valuing the contributions of such individuals encourages them to do more and that helps achieve positive results.

**Box 1: Example of how participants summed up the Day 1 WeValue experience**

“It helps us map the way forward. The framework helps to open our eyes to see exactly what we are doing. At times you are busy trying to achieve something only to find that you are just in the dark, so this framework opens our eyes.”

“Now we have logic of looking at things. If you now have this logic and you have a new project that you want to undertake, you know you have an instrument to use as the barometer to get where you want to get to.”

(Source: VDC interviews February 2018)

**2.2 Day 2: Standard VRA processes**

On the second day, the standard vulnerability & risk assessment (VRA) approach of engaging participants in identifying risks and vulnerabilities, and then prioritizing them and co-developing responses, took place. What happened next in this study is so different to what is normally experienced that we feel we should point this out to the reader. Usually the researcher’s role would be to communicate to the concerned community group the basic climate change implications of flooding, drought, high temperatures and unusual seasonal variations, but these are not usually considered to be relevant to the participants, who typically display growing appearance boredom, fatigue, and disengagement.

There is general belief among adaptation practitioners that people in local communities are more concerned with everyday survival, and issues that directly affect their livelihoods, rather than any hazards that organizations ‘from outside’ are concerned about (Aalst et al, 2008). In our study, surprisingly, on the second day participants were observed to be highly engaged in identifying local climate issues and the possible adaptation actions to go with them. The results as revealed by the participants’ reflections (2.3 below) shows that participants deeply engaged in discussions, identified responsibilities and developed adaptation actions representing their village visions.

High levels of engagement were observed during the VRA sessions. Participants were willing to openly share their experiences with the group. This led to back and forth rich discussions that ended in clarified, negotiated, contributions. When other members lagged in contributions, other participants encourage them to share. This worked towards leveling the discussion: no individuals dominated. Participants regularly referenced some of the valuable insights about their village that were explored during the Day 1 WeValue sessions. In all four villages, the VRAs produced adaptation actions which participants felt appropriate to their village and how they wanted move forward. This is a very atypical result for traditional VRAs, and we were relieved to have built in to our research design the focus-group semi-structured interviews to provide data on what elements might have contributed to it (below).

**2.3 Reflections across Day1, Day 2**

The overall reflections at the end of two days showed them to be a fulfilling engagement, with detailed comments. Although the main aim of this study was to explore if the participants perceived significant

engagement, ownership and relevance of process and outputs, in order to reduce bias they were asked open questions about their overall experiences, such as, “What role do you see the VDC playing in local adaptation planning?” Sample answers are given below for each village.

In addition, this study aimed to identify any perceived linkages between the WeValue and VRA processes and outputs. Many examples were already given in the answers to the above question. But the final question was more specific: “In what way do you think the WeValue approach was important in this kind of adaptation planning?” Sample answers are given below. They identified various issues, livelihoods and stakeholders that are needed to advance climate action. They also very clearly indicate their perception of the usefulness – and sometimes even necessity – of first crystallizing their own shared values with the WeValue process.

### **2.3.1 Box 1: Reflections from Masunga VDC 1**

“The duty of VDC is to share knowledge on climate impacts with the community. The VDC has a stronger voice and this can help give these ideas weight.”

“For climate change adaptation to succeed the VDC needs to be involved in the initial stages not when things have already been agreed or when strategies are failing.”

(Source: VDC interviews February 2018)

### **2.3.2 Box 2: Reflections from Mosojane VDC**

“The VDC can be the ones to organize relevant stakeholders to train communities and share knowledge on the climate related issues.”

“Climate Change will affect the projects undertaken by the VDC in future. For example the lack of rain will affect the implementation of rainfall intensive projects. In Mosojane, the VDC might end up dealing with an increased number of dongas in the village.”

“The things we covered yesterday clarified our thinking; the process showed what the VDC can achieve in the village and who they can work with. Today as per our discussions it becomes clear that the VDC is the one that can lead the way in climate change planning at this level. It is important that we start with WeValue because it clarifies our roles and the expectations of other people from us.”

(Source: VDC interviews February 2018)

### **2.3.3 Box 3: Reflections from Masunga VDC 2**

“The VDC has not been involved because we did not have the understanding that we have now.”

“The VDC stands a better chance as the “parliament of the community” to teach people about the impacts of climate change on their livelihoods. They are the closest to the community.”

“In climate adaptation planning we are talking about things that affect our values. The same values that we discussed during the WeValue session.”

(Source: VDC interviews February 2018)



#### 2.3.4 Box 4: Reflections from Makaleng VDC

“There is a connection with what we did the previous day (WeValue session). You could see that even though we are not good with climate information our presentations with how it will affect us were grounded in the thought process we established yesterday of what is important to us.”

“Resolutions that were made today, for example our ambition to desilt the dams is in line with what we agreed yesterday that the leadership should implement the interests of the community.”

“It is important that we know what is important to us first as a community before we undertake activities such as adaptation planning to develop a thorough strategy.

“After these two days we now see the importance of VDCs to be involved in climate adaptation. We have just been working without clearly understanding our role.”

(Source: VDC interviews February 2018)

### 2.4 Analysis and Summary of the perceived levels of *Engagement, Ownership and Relevance*

In the reflections elicited across Days 1, 2 no specific questions about ownership, relevance and participation levels were asked, but the responses from the open questions provided considerable material for analysis of all three targeted concepts (below). Although they are analysed separately in relation to related conversations in the literature, in fact all three happened together. Participants demonstrated clear ownership of VRA outputs, including the leadership responsibility to address some agreed relevant climate change impacts at local level, made possible by deep and meaningful participation.

#### 2.4.1 Engagement

Traditional participatory processes, according to Scoones & Wynne, often seem to be used to rubberstamp predetermined decisions, and thus have very limited engagement. In this study it was clear that meaningful engagement was achieved, since it involved participants first being clear about the things that are important to them in the village: what they jointly shared and valued. Participants expressed that *“in climate adaptation planning we are talking about things that affect our values. The same values that we discussed during the WeValue session”*. This is a clear indication that participants in the Day 2 Adaptation Planning session are still thinking in terms of their shared values, drawing from their Day 1 engagement with the WeValue process. This is further evidenced in statements such as, *“you could see that even though we are not good with climate information, our presentations on how it will affect us were grounded in the thought process we established yesterday of what is important to us”*. These assertions are in line with sentiments of Granderson (2014) that, *“in adaptation planning attention must be paid to the ways in which communities define their shared experience, identity, values, and their way of life”*. The results shows that this kind of meaningful engagement can cause participants to connect deeply with their livelihoods: it promotes an introspection that looks deeper within for solutions. It seems that this approach helps clarify ‘purpose’ for participating groups, or to give them foundations to better focus on. As one participant shared, *“today as per our discussions it becomes clear that the VDC is the one that can lead the way in climate change planning at this level. It is important that we start with WeValue because it clarifies our roles and the*

*expectations of other people from us*". This level of meaningful participation is deeper than any found in the previous experience of the first author during standard participatory VRA processes, which did not, in any way, assist participants to deeply connect with their shared values and livelihoods.

#### **2.4.2 Ownership**

The clarification of the role of VDCs that happened on the first day was clearly important in enhancing ownership. As Yoseph-Paulus & Hindmarsh (2018) puts it, "for local adaptation planning to work, foremost local adaptation problems to address include nurturing community behavioral change, social learning, and community willingness to adapt to climate change." This is supported by the statement made by the participants that, "*after these two days we now see the importance of VDCs to be involved in climate adaptation. We have just been working without clearly understanding our role*". Lack of role clarity was identified as one of the main challenges, "*after these two days we now see the importance of VDCs to be involved in climate adaptation. We have just been working without understanding our role*". It is clear that for the four village VDCs in this study there is a resulting new understanding that is coupled with energy and eagerness to be part of the adaptation planning process. Their attitude now was that as the most relevant strategic body of the village it was very much their legitimate role to lead in planning adaptation for climate-related issues: issues which they only now recognized as being potentially very great burdens for their villages. Participants stated that "*the VDC stands a better chance as the "parliament of the community" to teach people about the impacts of climate change on their livelihoods*"... and: "*the VDC has a stronger voice and this can help give these ideas weight*". For this reason another benefit of using the WeValue crystallization process seems to be a shift towards ownership for the development of VRAs well beyond the simple identification of local vulnerabilities and towards planning concrete steps towards action.

#### **2.4.3 Relevance**

The statements of the participants presented in section 2.4.2 above speak also to the issue of relevance. Since the participants are meaningfully engaged, and have taken on great ownership of the climate adaptation issues, it is not surprising that they then saw the issues as relevant to them as villagers, and their office as a village committee. This led, in this case, to clear relevance of the discussion, and for locally valid suggestions to adaptation issues: each VDC identified bespoke priorities and responses. The discussions demonstrated clear connections to the WeValue processes on Day 1: "*resolutions that were made today, for example our ambition to desilt the dams, is in line with what we agreed yesterday: that the leadership should implement the interests of the community*", and: "*It is important that we know what is important to us first as a community before we undertake activities such as adaptation planning to develop a thorough strategy*". The extent of the resulting localization of the VRA process and results is in contrast to reports internationally in individual country NAPAs and National Communication Reports to the UNFCCC: that local plans are somewhat like their 'templates', and that they fail to be implementable because they tend to be too generic and lack micro level understanding, devoid of local communities' concerns, needs, and visions (Westerhoff & Smit, 2009).

### **4 Conclusion**

This case study explored how a value-based approach, the WeValue crystallization process, can be used to enhance the quality of standard participatory VRA processes by focusing first on assisting local groups to confirm and articulate their in-situ, shared, values-in-action through carefully designed meaningful group

discussion and negotiation. Evidence is found for significantly deep and meaningful engagement, ownership and relevance to the participants of the VRA processes and outputs, in sharp contrast to widely reported standard VRA results in nearby villages. Participants demonstrated clear ownership of VRA outputs, including leadership responsibility for specific local level adaptation planning. High relevance levels were indicated by the high levels of specificity and localization the agreed village adaptation priorities and responses. Deep and meaningful participation was exhibited and indicated throughout. These findings thus clearly indicate that this version of the WeValue crystallization process, which we name the In-Situ Shared Values Elicitation Process, is a useful pre-process for VRAs. Before proposing widespread field use of WeValue, a new brief research agenda is needed to establish whether the current version which contains some quasi-anthropological elements requiring expertise can be modified to be suitable to scale up for use by non-experts, e.g. possibly by detailed specification, or district-level localization, or by facilitator training with built-in quality control. In addition, the long term effects of the VDCs being more explicitly grounded in their shared values should be monitored, as this could potentially produce other impacts such as more widespread ownership, stronger voice, and resilience to outside nudging.

### Acknowledgements

This work was funded indirectly through the China National Thousand Talents Program funding the post of MKH, and builds directly on work funded by the European Union's Seventh Framework Programme (Grant No. 212237) under the 'Research for the Benefit of Specific Groups: Civil Society Organizations', ESDinds.

### References

1. Aalst, M., Cannon, T., & Burton, I. (2008). Community level adaptation to climate change: The potential role of participatory community risk assessment. *Global Environmental Change, 18*, 165-179. <http://doi:10.1016/j.gloenvcha.2007.06.002>
2. AGN. (2018). Submission by the Arab Republic of Egypt on behalf of the African Group of Negotiators (AGN) on Matters related to the Assessment of Progress made in the Process to Formulate and Implement National Adaptation Plans. accessed on 8/01/2018 at <http://www4.unfccc.int/sites/SubmissionPortal/Documents/201803040832---AGN%20Submission%20on%20National%20Adaptation%20Plans.pdf>
3. Bardsley, D. K. & Rogers, G. P. (2010). Prioritizing Engagement for Sustainable Adaptation to Climate Change: An Example from Natural Resource Management in South Australia. *Society and Natural Resources, 24(1)*, 1-17. DOI: 10.1080/08941920802287163
4. Brigstocke, J., Hoover, E., Harder, M., Graham, P., De Sousa, S., Dearden, A., & Gaubert, J. (2017). Implicit values: Uncounted legacies.
5. Burford, G., Hoover, E., Stapleton, L., & Harder, M.K. (2016). [An unexpected means of embedding ethics in organizations: Preliminary findings from values-based evaluations](#). *Sustainability, 8 (7)*, 612. doi:[10.3390/su8070612](https://doi.org/10.3390/su8070612)
6. Gogoi, E., Dupar, M., Jones, L., Martinez, C., & McNamara, L. (2014). Enablers for delivering community-based adaptation at scale. *Climate and Development, 6(4)*, 368-371. DOI: [10.1080/17565529.2014.918869](https://doi.org/10.1080/17565529.2014.918869)
7. Granderson, A. A. (2014). Making sense of climate change risks and responses at the community level: A cultural-political lens. *Climate Risk Management, 3*, 55-64. <http://dx.doi.org/10.1016/j.crm.2014.05.003>

8. Harrison, E. (2002). The problem with the locals; Partnership and participation in Ethiopia. *Development and Change* 33 (4), 587 – 610. [doi.org/10.1111/1467-7660.00271](https://doi.org/10.1111/1467-7660.00271)
9. Kattumuri, R., Ravindranath, D., & Esteves, T. (2017). Local adaptation strategies in semi-arid regions: study of two villages in Karnataka, India. *Climate and Development*, 9(1), 36-49. DOI: 10.1080/17565529.2015.1067179
10. Kirkby, P., Williams, C., & Huq, S. (2018). Community-based adaptation (CBA): adding conceptual clarity to the approach, and establishing its principles and challenges. *Climate and Development*, 10 (7), 577-589, doi: 10.1080/17565529.2017.1372265
11. Leach, M., Scoones, I., & Wynne, B. (2005). Globalisation and the challenge of engagement. *Science and citizens*, London, Zed Books
12. Masundire, H., Morchain, D., Raditloang, N., Hegga, S., Ziervogel, G., Molefe, C., Angula, M., & Omari, K. (2015). Vulnerability and Risk Assessment in Botswana's Bobirwa Sub-District: Fostering People-Centred Adaptation to Climate Change. Collaborative Adaptation Research Initiative in Africa and Asia, IDRC
13. Ministry of Environment, Natural Resources Conservation, and Tourism. (2016). Botswana Climate Change Response Policy (Draft).
14. Ministry of Environment, Natural Resources Conservation, and Tourism. (2018). Botswana Climate Change Strategy and Action Plan Issue Paper (Draft).
15. Podger, D., Piggot, G., Zahradnik, M., Janoušková, S., Velasco, I., Hak, T., Dahl, A., & Harder, M. K. (2010). The Earth Charter and the ESDinds Initiative: developing indicators and assessment tools for civil society organisations to examine the values dimensions of sustainability projects. *Journal of Education for Sustainable Development*, 4(2), 297-305. <https://doi.org/10.1177/097340821000400219>
16. Samaddar, S., Yokomatsu, M., Dayour, F., Oteng-Ababio, M., Dzivenu, T., Adams, M., & Ishikawa, H. (2015). Evaluating Effective Public Participation in Disaster Management and Climate Change Adaptation: Insights from Northern Ghana through a User-Based Approach. *Risk, Hazards & Crisis in Public Policy*, 6,(1), 117-143. [doi.org/10.1002/rhc3.12075](https://doi.org/10.1002/rhc3.12075)
17. Sherman, M. H. & Ford, J. (2014). Stakeholder engagement in adaptation interventions: an evaluation of projects in developing nations. *Climate Policy*, 14(3), 417-441. DOI:10.1080/14693062.2014.859501
18. UNFCCC. (2012). National Adaptation Plans, Technical guidelines for the national adaptation plan process. LDC EXPERT GROUP, accessed on 4/21/2018, [https://unfccc.int/files/adaptation/cancun\\_adaptation\\_framework/application/pdf/naptechguidelines\\_eng\\_high\\_res.pdf](https://unfccc.int/files/adaptation/cancun_adaptation_framework/application/pdf/naptechguidelines_eng_high_res.pdf)
19. UNFCCC. (2016). Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015, UNFCCC/CP/2015/10/Add.1. accessed on 12<sup>th</sup> December 2018 <https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf#page=2>
20. Vision 2036 Presidential Task Team. (2016). Vision 2036: Achieving Prosperity for All.
21. Westerhoff, L., & Smit, B. (2009). The Rains Are Disappointing us: Dynamic Vulnerability and Adaptation to Multiple Stressors in the Afram Plains, Ghana. *Mitigation and Adaptation Strategies for Global Change*, 14(4), 317–37. <https://doi.org/10.1007/s11027-008-9166-1>
22. Yin, R. K. (1994). Discovering the Future of the Case Study. *Method in Evaluation Research*, *Evaluation Practice*, 15, (3), 283 – 290.

[C:\Users\ti21\Downloads\Seth\\_Final Draft 3 Seth mkh tca prov authors added \(2\).docx](#)  
[C:\Users\mkh\Desktop\China\SBeRG\PhDs-20117-onwards\Seth\Seth Final Draft 1.docx](#)

23. Yoseph-Paulus, R., & Hindmarsh, R. (2018). Addressing inadequacies of sectoral coordination and local capacity building in Indonesia for effective climate change adaptation, *Climate and Development*, 10(1), 35-48. doi: [10.1080/17565529.2016.1184609](https://doi.org/10.1080/17565529.2016.1184609)