

## Gauging Citizens' Voice: Strengthening Resilience in Nsanje District, Southern Malawi



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## Acronyms

ACPC	Area Civil Protection Committee
CARD	Centre for Agricultural Research and Development
CDD	Center for Deliberative Democracy
DCPC	District Civil Protection Committee
DEC	District Executive Committee
DP	Deliberative Polling®
DRM	Disaster Risk Management
EA	Enumeration Area
GVH	Group Village Head
LUANAR	Lilongwe University of Agriculture and Natural Resources
NCST	National Commission for Science and Technology
RAN	ResilientAfrica Network
SA RILab	South Africa Resilience Innovation Lab
TA	Traditional Authority
VCPC	Village Civil Protection Committee

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*Southern Africa Resilience Innovation Lab (SA RILab)*  
**Lilongwe, Malawi**  
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## Executive Summary

The Nsanje District in Malawi is home to two regions (Traditional Authorities) that face severe challenges from recurrent flooding: TA Nyachikadza and TA Ndamera. When flooding occurs in TA Nyachikadza the residents of this lowland community seek refuge in the upland, where TA Ndamera is located. In 1997, the Malawi government declared TA Nyachikadza a flood-prone area and prohibited the population from residing there. However, the community has refused to relocate for a variety of reasons, including issues relating to livelihood and population pressure.

The problems facing these two communities have only worsened over the years and it has become ever more dangerous for its residents. Government policies have been ineffective and unenforced and therefore, the government leaders have opted to implement a Deliberative Poll (DP), to have both communities provide more informed input about the issues at stake.

This first Deliberative Poll in Malawi was led by the South Africa Resilience Innovation Lab (SA RILab) working with Dr. Donald Makoka of the Centre for Agricultural Research and Development (CARD) of the Lilongwe University of Agriculture and Natural Resources<sup>1</sup> in Lilongwe. The Deliberative Poll drew a random, representative sample of the populations of both TAs, with a total of 480 participants completing the two days of deliberations. All 254 participants drawn in the initial sample of TA Nyachikadza, as well as 226 of 230 participants drawn in the initial sample of TA Ndamera, attended the Deliberative Poll. This is a 99% recruitment rate, the highest of any Deliberative Poll conducted anywhere in the world.

Since the sample was recruited via stratified random sampling of households with random selection of participants within the households, and because virtually everyone agreed to participate, we have a strong basis for concluding that the sample is representative.

Over the weekend of June 3-4, 2017, the entire sample of 480 participants was gathered to a single place to discuss thirty-two policy options. The discussions covered three main areas: relocation and resettlement, reducing vulnerabilities in the existing communities, and issues of population pressure, gender and access to social services. Upon arrival at the DP, the sample was shown a briefing video that explained the problems and policy options to be discussed. The DP agenda was carefully vetted by an advisory committee and checked for balance and accuracy. The Advisory Committee is listed in the Appendix at the end of this report. The video presented both the pros and cons of each of the thirty-two policy options. Over the two days of deliberation, the participants alternated between moderated small group discussions and plenary sessions where their questions were answered by a

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<sup>1</sup> The Lilongwe University of Agriculture and Natural Resources (LUANAR) is one of the partner universities under the Southern African Resilience Innovation Lab (SA RILab) that is coordinated by the University of Pretoria. The SA RILab includes LUANAR (Malawi), University of Limpopo (South Africa), and the University of Pretoria (South Africa).

panel of experts. This was done for each of the three main topics. After the deliberations, the views of the participants were captured in an orally administered confidential questionnaire, the same that was used at the time of recruitment.

The results show many statistically significant changes after deliberation. In examining the two communities together, seventeen of the thirty-two proposals experienced significant changes (below 0.05 significance level). The topic relating population pressure, gender, and access to social services **had the most changes**, eleven out of fourteen policy proposals changed significantly. Five of nine policy proposals changed significantly for proposals relating to reducing vulnerabilities in the existing communities. And only two of nine policy proposals relating to relocation and resettlement changed significantly for the sample as a whole.

## **Conclusions and Policy Implications**

While it is obvious from the results on the resettlement proposals that the TA Nyachikadza residents are not prepared to engage in permanent community resettlement, there are many practical areas of agreement on what should be done. Hence, we think the proposals that really stand out are the proposals that garnered strong support from both communities after they considered all the arguments on either side. The proposals prioritized by the communities that should be given detailed consideration by the policymakers as well as other key stakeholders are the following six key policies;

1. Government should not prohibit provision of social services in TA Nyachikadza
2. Government should allow TA Nyachikadza communities to “access” land upland to temporarily relocate during floods and return afterwards
3. Government should promote increased temporary shelters for evacuation instead of classroom.
4. Government should provide wide access to free family planning services
5. Community by-laws should be used to restrict child marriages.
6. A woman should not lose the family land if her husband dies.

The Deliberative Poll sheds light on the reasoning of the communities, both for why they supported these proposals and for why they resisted others. Detailed evidence, both quantitative and qualitative follows in the report below.



# 1. INTRODUCTION

Lilongwe University of Agriculture and Natural Resources (LUANAR), one of the partners in the Southern Africa RILab, in collaboration with the Center for Deliberative Democracy (CDD) at Stanford University conducted the first Deliberative Poll (DP) in Malawi. Consultations were conducted in Nsanje District. Two Traditional Authorities (TA), TA Nyachikadza a lowland community, and TA Ndamera, an upland community, were involved in the DP. A random, representative sample of each was selected and assembled for a two-day face-to-face deliberation at Nyachilenda primary school in Nsanje from 3-4 June 2017.

Deliberative Polling (DP) is an innovative public consultation method designed to listen to people's voices and in turn, provide evidence for responsible advocacy. It employs rigorous social science methods to determine what people would think about an issue if they became more informed. The DP procedure provides a random, representative sample of a population an opportunity to deliberate on specific topics of public interest. The sample is polled before and after it has had an opportunity to truly contemplate the issues and discuss them in depth. The idea is to collect a good representative sample and involve it in good conditions for considering the advantages and disadvantages of competing policy options. The premise is that when policy options are essential for a community, then public consultations about them should be representative of the population and permit thought and discussion based on the best information available.

The DP method offers some advantages over other public consultation methods. DP offers opinions that are both representative and informed. Polls can be representative but they just offer the public's impression of sound bites or headlines. Focus groups offer more discussion than do polls but they are too small to be representative. Open meetings will employ self-selection and hence are unlikely to be representative because attendance could be primarily by those who feel most strongly or by paid lobbyists. By combining random sampling with deliberation, Deliberative Polling shows what the public really would think about an issue if it could examine it in depth. It offers a road map to the policies the public would accept, on reflection and for what reasons. It can also offer a guide to policies the public would have reservations about and for what reasons.

## 1.1 Context of the Study

Nsanje district lies on the Southern part of Malawi and is one of the lowland areas in the country (Figure 1). In the district, there is TA Nyachikadza that is faced with recurrent flooding during the rainy season. Flooding is becoming a more frequent hazard because of the high siltation of the Shire River, and the cultivation in the Ndindi Marsh, which ecologically could have been trapping the waters and reducing the incidence of flooding.

Serious flooding took place in: 1989, 1997, 2001, while the most recent floods of 2015 were the worst. Following the floods of 1997, the Government of Malawi declared TA Nyachikadza as a flood-

Figure 1: Map of Malawi





prone area and prohibited any individual from staying in the area. There have been various arguments by the local communities over why they would not be willing to relocate. Initially, the community claimed that the government did not adequately consult them. However, there is also a belief that the area is highly fertile, when the floodwaters cede, there are alluvial soils that are very fertile. As such, farmers do not apply inorganic fertilizer to their crops. In addition, the community also argues that the government plays double-standards in the sense that it denies the community social services and yet during general elections, politicians (from the government and opposition) visit the area with campaign promises. The community is allocated five voting centres during general elections, providing evidence that despite the area being a disaster risk area, it displays a considerable importance in the country.

The issue in TA Nyachikadza provides a good case for the use of DP because there is a feeling that current policy processes do not adequately involve the community. The commitment to community engagement has been present in Malawi government language for some time. However, this engagement tends to be inconsistently practiced, with much engagement conducted at minimal levels with short consultation processes built around community submissions. While consultation processes provide some opportunity for the community to contribute to the policy process, the community's input is limited, with no opportunity for two-way discussion, learning, and dialogue. Community engagement needs to go beyond traditional consultation if meaningful community input is to be achieved.<sup>2</sup> There is increasing evidence that the community can contribute in a meaningful way to policy decisions, but this requires an interactive and deliberative approach. Several policy options have been formulated and implemented by government and other development partners without input from community members and some of the options have not had promising results.

In order to address these concerns, the Malawi Deliberative Poll was implemented. Below we describe the method in detail.

## 2. STUDY METHODOLOGY

### 2.1 Understanding the Deliberative Polling® Process

The Deliberative Polling® approach is an attempt to use public opinion research in a new and constructive way. A random, representative sample is first polled on the targeted issues. After this baseline poll, members of the sample are invited to gather at a single place for a weekend in order to discuss the issues. Carefully balanced briefing materials, in this case a video, are given to participants upon arrival. The participants engage in dialogue with competing experts and political leaders based on questions they develop in small group discussions with trained moderators. After the deliberations, the sample is again asked the original questions. The resulting changes in opinion

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<sup>2</sup> McBride T and Korczak V. (2007). "Community consultation and engagement in health care reform." *Australian Health Review*, 31(1): S13-5.

represent the conclusions the public would reach, if people had opportunity to become more informed and more engaged by the issues.

## 2.1 Study Area

The location for the DP was TA Nyachikadza (lowland) and TA Ndamera (upland) in Nsanje District on the southern tip of Malawi, neighbouring Mozambique. The district is subdivided into 9 Traditional Authorities, two of which are TA Nyachikadza and TA Ndamera. TA Nyachikadza is home to over 1,000 households, which are located across 9 group village heads (GVHs). The community is affected by frequent flooding. When flood waters come, residents of TA Nyachikadza seek refuge in the neighbouring TA Ndamera.

TA Ndamera has 28 Group Villages (GVH). Of these 14 GVHs are neighbours with TA Nyachikadza (lowlands). In these 14 GVHs, around 80% of the households grow crops in the wetlands of Nyachikadza. Half of these households actually own the land in the wetlands of Nyachikadza, and the remaining half grow their crops on rented land. The other 14 GVHs that are further away from Nyachikadza are less dependent on the marsh. In contrast to the group mention previously, in these GVHs, approximately 30% of the population grow their crops in the wetlands of TA Nyachikadza. In general, the community members from TA Ndamera are increasingly less dependent on rain-fed agriculture.

In general terms, these two communities depend on each other due to the recurrent flooding and for food production. Through consultative meetings with various stakeholders in the district, the project came up with three thematic areas for the DP:

- a. Relocation and resettlement of the lowland community (TA Nyachikadza);
- b. Reduce vulnerability in the existing communities;
- c. Population pressure, gender and social services.

## 2.2 Sampling

A household listing exercise was undertaken in both TA Ndamera and TA Nyachikadza to develop the sampling frame from which the sample was drawn<sup>3</sup>. Stratified random sampling was used to select the participants in the villages from TA Ndamera and TA Nyachikadza. TA Nyachikadza, only Enumeration Area (EA) 1 and 7 were used for data collection since these were the areas that were registered. Sampling involved randomly selecting participants from a randomly selected household and then counting up to the 8<sup>th</sup> household before selecting another household. TA Ndamera had 230 interviewees and TA Nyachikadza had 230 participants.

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<sup>3</sup> The household listing followed the demarcation of the communities by enumeration areas (EAs) that was previously done by the National Statistical Office.

## **2.3 Ethical Considerations**

Ethical clearance was obtained from the National Commission for Science and Technology (NCST) clearing committee. Permission to further conduct the study was sought from Nsanje District Executive Committee (DEC). Apart from the questionnaire, a consent form was given to each participant to explain the study objectives, benefits and risks. This was done in the local language. In addition, participants had the opportunity to ask questions or clarification before providing written informed consent for the interview to proceed. All information obtained during the study was treated as confidential.

## **2.3 DP Advisory Group**

Following a rapid appraisal of vulnerability issues in TAs Nyachikadza and Ndamera, Lilongwe University of Agriculture and Natural Resources (LUANAR), through RAN, convened a Deliberative Polling Stakeholders Advisory Group meeting. The Workshop was convened in Nsanje District on 9 February 2017 (Figure 2). The Workshop was convened by Nsanje District Council, through the Office of the District Commissioner, to promote ownership and buy-in of the local stakeholders. The District Council, through the office of the Disaster Risk Management Officer, worked closely with, LUANAR, a RAN-partner university, in preparing for the workshop. The participants to the workshop were drawn from various government ministries and departments in Nsanje District, the district council, local and international NGOs operating in Nsanje, traditional leaders and community-based organizations.

This advisory group was made up of experts around the issues brought up in the community consultations on relocation and resettlement of the Nyachikadza community. The purpose was to have a group of experts review the findings and focus on key issues that could be taken to deliberators for debate and consideration. Upon a series of meetings and discussions of trade-offs, the Advisory Group agreed to collapse the issues into three main ones: (i) Proposals on Relocation and Relocation; (ii) Proposals on Reduced Vulnerability in Existing Communities; (iii) Proposals on Population Pressure, Gender and Social Services. From the participants of the workshop, four stakeholders were identified to provide their expertise during the plenary sessions at the DP event, by being part of the final expert panel (see Annex 2).



**Figure 2: Stakeholder Panel Workshop, Nsanje District, Feb 2017**

The main role of the expert panel during the DP event was to respond to questions generated by the DP participants in their small groups. The experts provided information and clarification on the implications of the various policy issues raised in the DP (see Figure 3).



**Figure 3: The District DRR Officer Responding to a Question During the DP Event.**

## **2.4 Recruitment and Training of Research Assistants**

Twenty research assistants were recruited for the pre-DP data collection. The research assistants went through a training whose main aim was to enable them to collect data and to clearly understand the DP methodology. The Pre-DP survey training was conducted from 16-17 May 2017 in Lilongwe. The training emphasized on the following areas:

- i. The role of the research assistant in data collection;
- ii. An overview of the main problem and history of flooding in Nsanje district;
- iii. An overview of the DP process and the focus of the assignment in Nsanje district;
- iv. Proposed policy issues for the DP;
- v. Translating the pre-DP questionnaire into local language.

## **2.5 Pre-DP survey**

The pre-DP survey was conducted from 19-24 May 2017 in TA Ndamera and TA Nyachikadza, both in Nsanje district. In order to reach some households in TA Nyachikadza that were part of the sample,



the research team had to use a boat (see Figure 4). Trained research assistants administered the DP survey orally with participants randomly selected in the sample. This confidential questionnaire consisted of policy proposals centering around the three themes of the DP (see Figure 5). Participants also had to confirm their availability to attend the DP over the weekend of 3-4 June 2017. They were then issued a copy of a card number that acted as a form of identification for the DP. Participants were specifically requested to arrive at the venue at 8:00 am and to carry their card number without which they would not be allowed at the venue to participate in the deliberation. It was also emphasized that there could be no substitutions from those originally interviewed. Chairpersons of Area Civil Protection Committees (ACPC) helped with mobilization of participants at the TA level and in the villages. They also made follow-up calls to ensure smooth running of the mobilization of those selected in the sample.



**Figure 4: Research Team Travelling to TA Nyachikadza on a Motorized Boat**



**Figure 5: A Research Assistant Conducting a Pre-DP Survey in TA Nyachikadza**

## **2.6 Selection and Training of Moderators**

One of the crucial steps during the DP is to provide a space for participants to share their opinions on the policy proposals presented. Participants are randomly assigned to small groups that are led by a trained moderator. Twenty-four moderators (most of whom were the research assistants during the pre-DP) were selected and trained from 1-2 June 2017 in Blantyre, Malawi (see Figure 6). The moderators were trained by researchers from Stanford University's Center for Deliberative Democracy and members of the RAN from: the RAN secretariat, SA RILab, and LUANAR. The selected moderators had a minimum of a bachelor's degree, prior experience in research, specifically qualitative research-interview skills, and able to speak the local language. Each moderator was also trained on how to operate a recording device that they would use during the small group discussions.





**Figure 6: Moderators' Training in Blantyre, Malawi**

## **2.7 At the Deliberative Poll: Briefing Materials**

Carefully balanced briefing materials that were developed by the advisory group and a working group were made available to the participants. In addition, a fifteen-minute video was prepared by Mass Communication Graphics in Lilongwe. The video was based on the balanced briefing materials and addressed topic of the DP, the recurrent flooding and how the communities are affected. It also presented some of the policy issues that the government had proposed earlier, like denying the communities with social services. The video also explained aim of the deliberations which was to provide a face to face conversation between the participants, and through them, the two the communities, as well as providing the government with their informed opinions on these issues. The video was shown to participants upon arrival at the DP event, and, at the request of the participants, it was shown again the second day (see Figure 7). Participants were also provided with the written version of the briefing materials, which served as a guide to the issues for moderators. All discussions were held in the local language.



**Figure 7: DP Participants Watch a Briefing Video Prior to the DP Event**

## **2.8 At the Deliberative Poll: Small Group Sessions**

Registration of participants began at 07:00hrs and was followed by multiple screenings of the briefing video described above. In order to ensure that participants selected in the sample attended the event, they were required to provide their identification number card that was given to them at the time of the first survey. Upon confirming their identify, the participants were then issued a name tag and their small group number assignment.

As previously mentioned, the participants were randomly assigned to the small groups. There were twenty-four small groups, each with approximately 20 participants per group, led by a trained moderator. Over the course of the weekend, the participants deliberated on each of the three topics in small groups that were comprised of participants from both TA Ndamera and TA Nyachilenda. All of the small groups were recorded as one way of collecting qualitative data (see Figure 8). By the end of each small group session, the participants had come up with questions that they then presented to experts during plenary sessions. This process of small group session, followed by a larger plenary session with the entire sample was repeated over the two days for each of the three topics. After the deliberations, the sample was again asked the original questions in a confidential questionnaire administered by the research assistants. The research team ensured that participants were not

interviewed by their small group moderators to ensure confidentiality. The resulting changes in opinion represents the conclusions the public had reached after having an opportunity to deliberate on the important issues facing their community. They engaged in discussions with people who held alternative points of view and became more informed.



**Figure 8: Participants to Small Group Sessions**

## **2.9 At the Deliberative Poll: Post DP-Survey**

The Post-DP survey consisted of the same questionnaire that was used during the Pre-DP survey. The idea is to gauge whether or not the participants had changed their opinions after the group discussions and the plenary sessions. The Post-DP survey took place over two days from 4-5 June 2017. Since the sample of 480 participants was so large, and the questionnaire had to be administered orally, the process took longer than for other DPs. Additionally, given the time it takes to travel from TA Nyachikadza to the DP venue, those participants were interviewed on 4 June 2017 while those from TA Ndamera were interviewed on 5 June 2017.

## **2.10 Data Analysis**

The pre- and post-deliberation surveys were matched for each participant. The analyses examined the pre- and post-deliberation data using paired samples *t* tests. The paired comparison tests excluded “don’t know” and missing data. Questions were rescaled onto a 0 to 1 scale to facilitate subsequent regression analyses to allow better understanding of regression coefficients.

# **3. STUDY FINDINGS**

## **3.1 Introduction**

This section presents the findings from the Malawi DP. The results are presented according to the three themes that were under consideration during this study: (i) Relocation and resettlement of the Nyachikadza community; (ii) Reduced vulnerability in Nyachikadza; (iii) Population pressure, gender

and access to social services. Under each theme, the results show the various policy options that community members deliberated on and how their opinions changed from the pre-DP survey and the post-DP survey, after deliberations.

## 3.2 Relocation and Resettlement Proposals

There were nine questions about permanent relocation and resettlement. It is striking that only one of these found support in the sample overall after deliberation and none of them had support after deliberation from TA Nyachikadza (the community that would have to relocate). However, several showed significant increases in support, even in Nyachikadza, but from a very low base. Table 1 in the Appendix shows the opinion changes on all the questions both for the overall sample and for the two communities for each question.

Below is one of the policy proposals regarding relocation: *‘to facilitate the relocation of TA Nyachikadza community to suitable high land within the same district’*. The results of the change in participants’ opinions regarding this proposal are shown in table below:

a. Facilitate the relocation of TA Nyachikadza community to suitable land in the high land area <b>within the same district</b>	Pre	Post	Post-Pre	Sig
ALL	4.06	4.35	0.29	0.194
TA Nyachikadza Only	1.35	2.32	0.97	0.001***
TA Ndamera Only	7.11	6.64	-0.47	0.202

\*\*\*significant change over .00 level

While the overall change is not statistically significant, the results from the community that would have to undertake the relocation (Nyachikadza), registered a highly statistically significant change between the pre-DP and post-DP surveys. During the small group discussions, there were many arguments that supported these results. However, it was clear from most of the small group discussions that arguments in favour of relocation were put forward more by people from the upland (TA Ndamera) than the members from Nyachikadza themselves. For instance, in one of the groups a participant argued:

*“I agree with that idea people from Nyachikadza should relocate to the upland, because in the time of floods they suffer, children die, elders and most people lose their lives. So, I am asking government to help them come in the upland.”* (Participant, Group 2).

Another participant from a different group supported the relocation, arguing that:

*“It’s a welcome idea because every year they are affected by floods which leave them with nothing so we really want them to relocate and come here to the upland so that we can live together.”* (Participant, Group 3).



The discussions also showed that those who supported relocation based their arguments on the possibility of the community members still being able to use their existing land for crop production since the land is very fertile. For example, one participant argued:

*“It’s a good suggestion; the government should assist in constructing houses for these people but also give them the permission to construct temporary shelter in Nyachikadza to cultivate because Nyachikadza provides abundant food.”* (Participant, Group 23).

Another participant from a different group had this to say:

*“I think the people from Nyachikadza can move to places that are near rather than moving them far away. When they move in places that are near it will be better because they will still be able to cultivate in their farms. If they are moved far away then it will be hard for them to go back and cultivate. If they go far the farms will be very far away from them and this will not be good for them.”* (Participant, Group 18).

The majority of participants from TA Nyachikadza strongly opposed any form of relocation, including the relocation to suitable land within the same district. The quotes below highlight some of the arguments that were raised during the small group sessions:

*“The biggest issue here is that we disagree with the idea of relocating because in the upland where we are told to relocate to, people there also rely on Nyachikadza’s fertile land for farming. So why are they telling us to go there? ... If Nyachikadza is poor let us remain that way, we will not relocate. Should there be any assistance let it find us there.”* (Participant, Group 3).

*“I don’t agree with the idea that the people from Nyachikadza should relocate to a high land within the same district, because I believe that the people in the upland with ask us to give up our agricultural land in the marshes in return for the land that we will use in the upland for accommodation.”* (Participant, Group 17).

A clue to the adamant resistance to every form of permanent relocation can be found, even after deliberation, in the question asking about agreement or disagreement with the statement: *“staying on one’s traditional/ancestral land is worth the risk of being caught in a flood.”* Overall the sample rated this at 5.79 on the 0 to 10 scale. However, the residents of TA Nyachikadza agreed strongly at 7.02 on the 0 to 10 scale (as compared to the minority support for this in TA Ndamera at 4.42). They did not want to permanently move from their ancestral lands.

A proposal to provide legal title to land for community members in TA Nyachikadza prior to relocation was another proposal that registered significant positive change for community members in the lowland (Nyachikadza), as the table below shows.

d. Provide legal title to land for TA Nyachikadza community members before relocation	<b>Pre</b>	<b>Post</b>	<b>Post-Pre</b>	<b>Sig</b>
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ALL	4.29	4.60	0.31	0.178
TA Nyachikadza Only	1.83	3.06	1.23	0.000***
TA Ndamera Only	7.02	6.31	-0.71	0.029**

\*\*\*significant change over .00 level, \*\*significant change over .05 level

This policy proposal was included in the discussions because results from initial consultations in the lowland (Nyachikadza) showed that the majority of the community members were of the opinion that government's stand on relocation is not in good faith. They felt that government insistence that they should relocate is aimed at paving the way to have their land sold to Illovo Sugar (Malawi) Limited<sup>4</sup>. With the new land bill that has just been introduced in Malawi in 2016, the community members reported that they would like to have all their land in Nyachikadza leased so that they have title to that land. This way, there would be no way that they would lose their land. It was on this basis that this policy proposal was included.

The quantitative data demonstrated that there was significant increase in support for this proposal among the participants from Nyachikadza (see Table 2 above). The qualitative data from the small group sessions showed the arguments in support of this proposal. For instance, one participant argued:

*"The legal title is a brilliant idea because community members will easily relocate and still know they own the land."* (Participant, Group 19)

However, there were also several arguments against the proposal that came from the small group sessions. For example, one participant had this to say about the legal title to land:

*"It's a good idea but might not work because government is not trustworthy. It might later use force e.g. bring the army and take possession of our land."* (Participant, Group 14)

For some of the participants, they were not convinced that the legal title to land would provide a good basis for them to relocate, as the quote below illustrates:

*"Yes, the legal title will show the ownership of the land but that land was given to us by our ancestors. So with, or without, the legal document, we are not moving anywhere."* (Participant, Group 16)

In their responses to all nine proposals under relocation, TA Nyachikadza residents made it clear that they were not interested in permanent relocation. The one proposal for relocation that had overall support after deliberation was: "facilitate a complete relocation but allow communities to continue using their land for crop cultivation." The table below shows the pre- and post-DP data results on this policy option.

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<sup>4</sup>Illovo Sugar is a South African sugar company. It already has 20,920 Ha of land where it grows sugar in its Nchalo Estate, along the Shire River in the neighbouring district of Chikwawa. Apart from the Nchalo Estate, Illovo Malawi has 13,300 Ha of land in Dwangwa (which is in the central region district of Nkhotakota).



Facilitate a complete relocation but allow communities to continue using their land for crop cultivation	Pre	Post	Pre-post	Sig.
ALL	5.04	5.72	0.68	0.003***
TA Nyachikadza Only	2.36	3.93	1.57	0.000***
TA Ndamera Only	8.01	7.71	-0.30	0.330

\*\*\*significant change over .00 level

The table above shows that there was an overall significant change in support of the policy option (increasing from a mean of 5.04 to 5.72 post-deliberation.) However, results for TA Nyachikadza only increased to 3.93 which is still below the mean (5 is the mean on the 0 to 10 scale). Though not significant there was a negative change between the pre- and post-DP from the people from Ndamera. Land for cultivation remains a big issue and the core reason as to why residents from Nyachikadza remain adamant on relocation. This policy option was at least favourable to the people from Nyachikadza because it granted them access to their land.

The group discussions gave people a forum to express their views pertaining this issue. One participant from Ndamera who was in support of this policy option argued that:

*"I think moving the people from Nyachikadza to the upper lands is better. These people would have houses in the upper land but still cultivate in Nyachikadza considering the fact that the land in Nyachikadza is fertile and it feeds both Chikwawa and most parts of Nsanje. This would be so much better because a lot of lives would be saved than if they stay in Nyachikadza but at the same time giving them a chance to cultivate on their land, which is what they want."* (Participant, group 18)

*"It is a good policy for the Government to allow them to cultivate in the lowland and come in the uplands after harvesting, this will ensure safety and protection of our lives and property."* (Participant, Group 9)

A participant from Ndamera gave a practical example of the possibility and advantage of this policy option:

*"I think people don't understand what the Government is saying. For example, TA Nyachikadza himself stays in the upland but only goes in Nyachikadza for cultivation because he knows an understand what the government is saying. There is lack of understanding. It is better if the Government elaborates better on what it means otherwise here will be quarrels."* (Participant, Group 6)

In as much as this policy option gives the residents from Nyachikadza an allowance to relocate, but still have access to land, there were some participants who were against this policy action. Participants argued against this policy option considering the location, distance and other transportation challenges they face.

*“The problem is that the nearest communities where we can relocate, e.g. Mkupila, are very far from our land. For this reason, we cannot effectively cultivate our crops if we are to come from the upland. We have to pay K3,000 to travel from Nyachikadza to Mkupila which is very expensive for someone to be traveling every day. I think every person knows the danger of floods, so let it be a personal decision for someone to relocate.”* (Participant, Group 11)

Further, there seems to be lack of trust towards the government in the implementation of this policy. In addition, participants argued that the Shire river provides alluvial soils to the area of Nyachikadza. This enables them to cultivate their crops throughout the year and this is why complete relocation is not favorable:

*“Government will lure us with the policy but then turn its back on us. Later on, it will say stop cultivating in the lowlands. And, as I earlier said, we cultivate crops throughout the year so we need to stay there. It is for this reason why we can’t permanently move to Ndamera and only go back to Nyachikadza to cultivate.”* (Participant, Group 9)

Some participants admitted to having permanently relocated from Nyachikadza to Ndamera, and only go back to Nyachikadza for some months a year in order to cultivate their crops. However, there is a challenge with this arrangement because most of the residents are poor and cannot afford to have two houses. In support of this argument a participant reported:

*“I think this proposition is a good one because what you have mentioned is indeed happening. Despite the fact that people are still saying we don’t want relocate, some people amongst us already have houses that they are renting in the upland because they have the money. While those without money are the ones with the problem because they calculate the cost of renting a house upland and realize that it would not work to spend so much money on rent. But for a person with a lot of money they can afford renting a house, and also if the money is enough they can afford to construct a house to live in with their children and then go to the lowlands just from farming purposes. So, my point is that the proposition that we should be able to have land in the uplands and lowland as well is a very good one even though this may not work for the poor.”* (Participant, Group 8)

### **3.2.1 Key Findings under the Relocation and Resettlement Proposals**

The study unveiled many reasons as to why the relocation policy option did not receive a lot of support from the people of Nyachikadza. These include:

- i. Participants argued that Nyachikadza has very fertile soils as compared to any other area in Nsanje district hence it is not possible for them to leave their rich soils to settle in an area where the soils are poor. It was reported that crop cultivation in TA Nyachikadza does not require any inorganic fertilizers or compost manure because the land is very fertile.

- ii. There isn't enough land in Ndamera and surrounding areas to accommodate residents from Nyachikadza.
- iii. The land from Nyachikadza is their ancestral land and they therefore cannot desert it at any cost.
- iv. There is a lack of trust between the government and people from Nyachikadza, i.e., the residents think government has other reasons for relocating them apart from ensuring their safety. The community members feel that government insistence that they should relocate is aimed at paving way to have their land sold to Illovo Sugar (Malawi) Limited<sup>5</sup>.
- v. The residents from both Nyachikadza and Ndamera are aware of the population pressures on land and they argued that relocation of the people from Nyachikadza to upland areas would worsen the problem of inadequate land. One participant argued that:

*“Even though you are bringing this policy option, the residents from Ndamera already say that there is not enough land for the both of us. So if the owners of the land say there is no land for the both of us, where do we stay? That's why we would rather stay in Nyachikadza. The government must do something to help us. We are also humans and they will need us someday. When you have two children you cannot choose one and deny the other. The government must construct a dyke because it will not be possible for us to relocate.” (Participant, Group 16)*

### 3.3 Proposals on Reducing Vulnerabilities in the Existing Communities

While the residents of TA Nyachikadza were adamant in opposing all proposals for permanent relocation, they were far more willing to consider some proposals that would lessen the difficulties of temporary relocation. There were nine such proposals and both communities supported all nine to varying degrees after deliberation. Four of the nine proposals are particularly notable because support for them increased significantly in both communities and in the sample overall, with deliberations having the greatest influence on the support for having temporary relocation uplands, as shown by the response to this question having the biggest (>20% increase) change in scores. These four proposals were:

1. Allow TA Nyachikadza communities to 'access' land upland to temporarily relocate during floods and return afterwards.	Pre	Post	Post-Pre	Sig
ALL	6.16	7.52	1.36	0.000***
TA Nyachikadza Only	6.51	7.64	1.13	0.000***

<sup>5</sup> Illovo Sugar is a South African sugar company. It already has 20,920 Ha of land where it grows sugar in its Nchalo Estate, along the Shire River in the neighbouring district of Chikwawa. Apart from the Nchalo Estate, Illovo Malawi has 13,300 Ha of land in Dwangwa (which is in the central region district of Nkhotakota).

TA Ndamera Only	5.77	7.38	1.61	0.000***
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\*\*\*significant change over .00 level

*Allow TA Nyachikadza communities to “access” land uplands to temporarily relocate during floods and return afterwards*” showed an overall significant increase from 6.16 to 7.52 on the 0 to 10 scale. This policy option was highly favoured by both communities. The deliberations only re-enforced this result. In addition, the participants reported that this is already existing and being practiced in their communities.

It was made clear from the beginning that the residents from Nyachikadza are not willing to relocate on a permanent basis. The Deliberative Poll further proved that the residents of Nyachikadza are rather comfortable with temporarily relocating to the uplands areas only when floods occur and return afterwards. In favour of this policy option, a male participant argued that:

*“I think this is good since what we don’t want is permanent relocation so this might be the best policy option. People should be allowed to move only when floods have occurred. There is not enough land in Ndamera and so it’s good that we temporarily relocate there and return afterwards. Even the people of Ndamera are dependent on the farms in Nyachikadza and so we should be given this chance to go back to our land.”* (Participant, Group 18)

*“It’s a good proposal because in a year we only spend 2 to 3 months in the upland as this is the only time that floods occur. Then we return back to our land for farming. Even our friends in the upland respect us because they know we are relocating temporarily.”* (Participant, Group 14)

Despite the flexibility of this policy in allowing the residents to go back to their land after temporarily relocating to the upland areas, some participants were not in favour of this policy option. They highlighted the challenges they face with this arrangement and preferred permanent measures of protecting the community, which they argued to be the construction of a dyke:

*“This issue is not new. This however is not the best policy option considering the transport and distance challenges when we are doing this. That is why we need help mostly on construction of a dyke so that we permanently settle in Nyachikadza”* (Male Participant, Group 8,)

*“The arrangement of evacuating us when the floods are severe and returning us when the situation normalizes is not a good idea. The government spends a lot of money. Let the government bring a long-lasting solution which as the construction of the dyke.”* (Participant, group 21)

*“The frequent relocations are not good because when you relocate, you are susceptible to diseases such as cholera and AIDS. It is not good to have multiple location places. It is better to have one home where your farm is.”* (Participant, Group 18)

2. Allow communities to remain but develop an effective flood-early warning system.	Pre	Post	Pre-post	Sig
ALL	7.16	8.00	0.84	0.000***
TA Nyachikadza Only	8.4	8.78	0.38	0.067*
TA Ndamera Only	5.79	7.14	1.35	0.000***

\*\*\*significant change over .00 level, \*significant change over .10 level

In response to the vulnerability of the Nyachikadza community, and other surrounding areas to floods, NGOs introduced and trained people on flood early warning systems. As the name suggests, these are mechanisms that help warn people about the occurrence of floods prior to, or during, the floods. As a policy option, it had a significant increase from 7.16 to 8.0 on the 0 to 10-point scale. The results show that this policy issue was favoured by residents of both Nyachikadza and Ndamera, as there was an increase in the pre- and post- DP survey outcomes for both areas. Participants who supported this policy option argued that:

*“It is a very good thing for government to develop and sensitize people in Nyachikadza on flood early warning systems. In that way it will help people to get to safety before the actual incidence of flooding. This should be done by group village headmen and the VCPC, ACPC and DCPC as it will ensure people take heed to early warning systems. People may ignore the radio but when the committees are also empowered to be a means of early warning systems maybe people would take heed to the warnings.”* (Participant, Group 19)

*“Indeed, it is true that the dyke construction may take long. So, as a short-term solution, these other temporary solutions such as the early warning systems can still be put in place.”*  
(Participant, Group 7)

From the group discussions, it was clear the early warning systems that are in place are being implemented and used. However, some of the participants argued that these are not adequate to protect the people from floods. Further, they argued that in the face of climate variability, the early warning systems may not be effective. They pointed to the need to integrate modern early warning systems with their indigenous knowledge on flooding. For example, they reported that in a year when hippos move out of the river and are often found on the dry land (close to the river), it is a sign that there will be flooding that year. The quote below illustrates this point:

*“People in Nyachikadza communities are aware of when floods are bound to happen, there are specific months which they know flooding occurs. There are also some indicators like the presence of a lot of ants in the houses, etc. When we also see some ants called linthumbwi and some worms crawl out of the river and come upland this is also the indigenous knowledge we have as early warning systems. When hippos frequently move out of the rivers into the dry land, we know that there will be flooding that year.”* (Participant, Group 19)

The following are some of the arguments that the participants who opposed this policy option presented:

*"It is a good idea to have early warning signs system in place. But sometimes the Metrological Department does not give us accurate information. An example of last year, 2016, where we warned that we would have heavy rains and heavy floods superseding the 2015 floods, we moved to the uplands and yet the floods never occurred."* (Participant, Group 1)

*"Warning systems are important but climate change leads to unpredictable floods hence people can still be vulnerable."* (Participant, Group 12).

*"They do warn us every year but we still get affected, they are not effective. The best way is to construct a dyke. That's a lasting solution."* (Participant, Group 8)

3. Sensitize TA Nyachikadza communities on flood early warning.	Pre	Post	Pre-post	Sig
ALL	8.03	8.64	0.61	0.000***
TA Nyachikadza Only	8.51	9.07	0.56	0.003***
TA Ndamera Only	7.49	8.15	0.66	0.013**

\*\*\*significant change over .00 level, \*\*significant change over .05 level

*"Sensitize TA Nyachikadza communities on flood early warning"* had a significant increase from 8.03 to 8.64 on the 0 to 10-point scale. The idea of developing and having flood early warning systems was already favourable in both Ndamera and Nyachikadza. The deliberation only re-enforced this policy issue. Like the other policy issues that have been discussed, this policy option also had participants who were for and against it. In support of this policy option, one participant argued:

*"It is very important to be sensitized on flood early warning, we will be empowered. We will not be cheated by other people who may give us false information like what happens sometimes."* (Participant, Group 7)

Contrary to this view, however, other participants argued against this policy option and highlighted the ineffectiveness of the early warning systems considering that they already exist in the communities. Some participants went further to report that the people of Nyachikadza are adamant to go to the upland areas even when they have been sensitized and warned about the occurrence of the flood:

*"We have a lot of early flooding warning systems, we hear these from the radio, phones, and other natural observations, but the people from Nyachikadza do nothing about it. They usually start preparing for escape or coming to the upland areas only when the floods have started to occur and affected some of the households. They pay a deaf ear to any warnings that come. This initiative is ineffective."* (Participant, Group 10).



*“In 2015, Goal Malawi went to Nyachikadza to warn the community about the floods. That was before the floods occurred. But these people did not adhere to the warning. Yes, we need the government intervention, but are we committed to the proposal? Government has been warning and sensitizing the community about the floods. It’s not a new thing here.”* (Participant, Group 17).

To further demonstrate the ineffectiveness of the early warning systems, a participant argued:

*“I would like to believe that in the past people were relying on the early warning systems to predict the floods. But in 2015 the floods that came were different from the rest, even the early systems were not able to predict it. The water was just too much and so the early warning systems could not work.”* (Participant, Group 4)

4. Put in place effective life-saving measures (such as petrol boats, life jackets, etc.) in all strategic places to be used to rescue people during floods	Pre	Post	Pre-post	Sig
ALL	8.14	8.61	0.47	0.006***
TA Nyachikadza Only	8.33	8.84	0.51	0.013**
TA Ndamera Only	7.93	8.37	0.44	0.119

\*\*\*significant change over .00 level, \*\*significant change over .05 level

*“Put in place effective life-saving measures such as petrol boats, life jackets, etc., in all strategic places used to rescue people during floods”* had a significant increase from 8.14 to 8.61 on the 0 to 10-point scale. Like many other policy options under the reduced vulnerability proposal, this policy option was highly favoured by people from both Ndamera and Nyachikadza. This can be seen from the positive change in the pre- and post-DP surveys for both areas. It should also be noted that when floods occur, the government and other interested parties, such as GOAL Malawi, provide assistance to the people of Nyachikadza through humanitarian aid including boats, life jackets, etc. In support to this policy option, some of the participants argued:

*“I think it’s a good idea, these boats will help save a lot of lives on time. We should have such things to make sure the response to the floods is at our best level.”* (Participant, Group 20)

In opposition to this policy option, some of the participants questioned the practicality of this policy considering that Nyachikadza is a large area with a lot of people and usually the boats are inadequate to carry all of them. A participant argued against this policy option to say:

*“We have a very good experience of how floods occur, it is impossible to even wear the life jackets. In 2015, the floods came at night, we waited for 3 days for the government to bring at least a boat to save us, we spent the three days in trees waiting. So what will be the special thing now? It is difficult to control these emergencies.”* (Participant, Group 7)

There were other proposals that rated high but did not have significant increases from both communities, as well as from the sample overall. These include having: *“The Area Civil Protection Committees (ACPCs) and the Village Civil Protection Committees (VCPCs) form an alliance to share information about flood early warning”* (rated overall at 8.40 after deliberation); and *“Construct a dyke along the Shire river from Nsanje District Centre to TA Nyachikadza.”* Support for the latter significantly increased for TA Nyachikadza (from 7.87 to 9.12) but significantly decreased for TA Ndamera (6.38 to 5.21) with the overall sample supporting it at 7.27.

Here are some excerpts from the transcripts noting support of top priorities for TA Nyachikadza. For example, for construction of the dyke along the Shire river to reduce vulnerability:

*“It is not good for government to relocate people from Nyachikadza. What government should do is to construct a dyke along the Shire river because back then our forefathers used to farm different crops such as maize, beans and that cars used to go to Nyachikadza.”* (Participant, Group 3)

*“I support this proposal too, but then the best thing the government should do is construct a dyke for us, because we spend much of our time in the field and because of the distance between Ndamera and Nyachikadza is very long so we cannot manage to travel all the time..”* (Participant, Group 17)

The results from the quantitative data show that the dyke proposal became less favourable for the upland community (TA Ndamera) after the deliberations. This could mean that these community members became more realistic with the feasibility and the challenges associated with the construction of the dyke. Several arguments against the dyke proposal were put forward during the small group sessions, including the two quotes below:

*“It is a good idea to build the dyke but I am worried because we have some small rivers which are helpful to the community and are quite reliable for the community since we use them for irrigation farming. Our worry is: won’t the dyke affect such rivers? In our community we don’t rely on rain fed crops. There are cases where the rains would just stop when we least expect and when our crops need the water to mature, this is what leads us into irrigation farming. So will these small rivers escape the negative consequences of the dyke?”* (Participant, Group 1).

*“I disagree with the others. Shire River is a big river and it receives a lot of water from different rivers. If the dyke is constructed the water will still come with a lot of force as always, and so whatever the case, the dyke will be destroyed. Shire River has been disturbed at the outlet because there is a lot of siltation, and so I think the sand should be removed to enable the water to move freely to Zambezi River, rather than constructing a dyke.”* (Participant, Group 4).

There was support for all the methods of communication for early warning, but telephone (voice) and telephone (sms) were by far the two highest rated methods at the end (8.21 and 7.19 respectively). These were preferred to beating drums, whistles and other indigenous methods.

### 3.4 Gender and Population Pressure

There were 14 proposals dealing with gender and population pressure. Eleven changed significantly for the overall sample. Four increased significantly both in the overall sample and in each of the two communities. Two of these, which are related to promoting family planning, had high scores at baseline and even increased further after deliberations, thus confirming how important these issues are to the community. The largest significant change (~10%) was related to the support for constructing a health centre in TA Nyachikadza so long as people live there.

1. Provide wide access to free family planning services.	Pre	Post	Post-Pre	Sig
ALL	8.48	9.17	0.69	0.000***
TA Nyachikadza Only	8.45	9.00	0.55	0.003***
TA Ndamera Only	8.52	9.35	0.83	0.000***

\*\*\*significant change over .00 level

*“Provide wide access to free family planning services”* started at 8.48 and increasing significantly to 9.17 on the 0 to 10 scale. This policy option was favourable both in the pre- and post-DP survey for people from both Ndamera and Nyachikadza. Culture, however, plays a very big role in these communities as they prefer having a lot of children for they are a source of both prestige and labour. Most participants said that having five children should be the minimum number of children. However, the people are gradually understanding and embracing family planning. During the deliberations, it was quite clear that women are more active with regards to issues concerning family planning. The participants further appreciated the role family planning services will play in controlling population growth and other complications women face during birth due to improper child spacing. In support of this proposal, participants from group 1 and 3 argue:

*“I agree and appreciate the family planning services. It happened to me with the baby who is on my back I got pregnant when the other child was 1 year old so when I was delivering, I lost a lot of blood so much I was given some drips of water while the doctor was pulling the baby out. I fainted in this process. It is a very good policy option if the government intends to promote family planning, women will be very happy. I almost died because of poor child spacing and planning.”* (Participant, Group 1)

*“Family planning is good because if you have a small family, you are able to take care of the family easily in terms of school, clothes and food. If you have a large family you are unable to provide for the family and the end result is that children tend to look orphaned because you cannot buy clothes, pay school fees and buy them food.”* (Participant, Group 3).

As reported above, culture plays a very big role in the number of children each household has. The culture in the Nsanje district promotes the idea that parents should look at children as a source of family labour to assist in their farms. In opposition to the proposal on the provision of free family planning services, some of the participant argued:

*"I don't agree with this because God said multiply like sand, so it's a personal decision that one can make to have as many children as he/she wants. No one can determine that number for you, unless you want to compete with God." (Participant, Group 2)*

*"Family planning services such as loop make men cheat on us because they say we don't want to bear children so they go and look for other ladies who are willing to conceive." (Participant, Group 20)*

**[Question for Plenary Session], asked by a Participant from Group 11:**

*"Most women are willing to go to hospitals to take contraceptives but men, who are their spouses, deny them this, how can the government help these women?"*

2. Construct a health centre in TA Nyachikadza so long as people live there	Pre	Post	Post-Pre	Sig
ALL	7.32	8.16	0.84	0.000***
TA Nyachikadza Only	9.34	9.58	0.24	0.077****
TA Ndamera Only	5.07	6.59	1.52	0.000

\*\*\*significant change over .00 level, \*significant change over .10 level

This proposal was very common especially to people from Nyachikadza. The group discussion was a platform where people from Nyachikadza were able to share their personal stories as to the problems they encounter. This might have caused the positive significant change between the pre- and post-DP survey. The policy option: *"Construction of a health centre in TA Nyachikadza so long as people live there* showed a positive increase from 7.32 to 8.16 on the 0 to 10 scale). The following are some of the arguments the participants presented in support of the policy option:

*"That is a very good idea because there are people in Nyachikadza and it is no doubt people get sick sometimes hence need medicine. In addition, we travel long distances from Nyachikadza to the other health centre so much that many people lose their lives on the way to the hospital, so I support the idea of constructing a health centre in Nyachikadza." (Participant, Group 2.)*

*"It is very important that Nyachikadza should also have a health centre. It is true that we experience floods but this doesn't happen throughout the year. We spend most of our time in Nyachikadza and so one may fall while we are there and might need medical help. In addition, when the floods have occurred, there are a lot of water-borne diseases like cholera which do need medical attention. So building a hospital will help save a lot of lives for the people from Nyachikadza." (Participant, Group 4)*

A participant who was not in favour of this policy option questioned its sustainability:

*"It would be a waste of resources because it is a flood prone area meaning it can be washed away. Therefore it is better to construct it upland."* (Participant, Group 7).

Another proposal that was discussed was on whether families should consider their land resources when deciding on the number of children they would like to have. The results for this proposal are presented in the table below:

3. Have families consider their land resources in deciding how many children to have	Pre	Post	Post-Pre	Sig
ALL	6.98	7.64	0.66	0.001***
TA Nyachikadza Only	6.97	7.59	0.62	0.036**
TA Ndamera Only	6.99	7.68	0.69	0.012**

\*\*\*significant change over .00 level, \*\*significant change over .05 level

*"Have families consider their land resources in deciding how many children to have"* started at 6.98 and increased significantly to 7.64 after deliberation. Despite the 'prestige' associated with having a large number of children in the local culture, it is quite clear that the people are gradually appreciating the importance of having fewer children in their families. Furthermore, the participants are aware of the implications that a lot of children can have on the distribution of land.

In support of this policy option, some participants argued that:

*"It would help reduce conflict among children when they grow up in future because if you have few children it is easy to distribute land and avoid conflicts."* (Participant, Group12)

*"These days the harvest yields are low, therefore having a large family only leads to challenges. When you have a small family, you can educate them all. It is better to have 3 or 4 children."* (Participant, Group 21)

*"It is true, we must have children in relation to the land that we have because you can then be able to provide food for all of them. Children that are well fed are peaceful children."* (Participant, Group 4)

Like the previous policy option, culture and religion still stand out as a reason why some participants oppose this policy option. Some of the participants argued that:

*"It is not important because it is better to fulfil God's will which is that people should multiply therefore this is not necessary."* (Participant, Group 12)

*"This would not be good because to some of us; children are our wealth. Children are seeds that parent plants, and there is need for a lot of seeds to be planted."* (Participant, Group5)

*"I am from Ndamera, I think it can be difficult for us to follow this idea of considering land resources to determine the number of children we should have. Just like other tribes e.g. Yao, Tumbuka, Lomwe and others, they have their beliefs and for us the Sena, we believe in having more children and not less than 3, we believe that other children can die before they grow up."* (Participant, Group 10)

4. Use community by-laws to restrict child marriages	Pre	Post	Post-Pre	Sig
ALL	8.73	9.29	0.56	0.000***
TA Nyachikadza Only	8.76	9.24	0.48	0.006***
TA Ndamera Only	8.70	9.35	0.65	0.000***

\*\*\*significant change over .00 level

Though ineffective, these by-laws already exist in their communities and parents are fined if their child is found to be in marriage at a tender age. Participants argued that sometimes it is the children who insist on getting married, parents have little control. In such cases, the by-laws must target the children and not necessarily the parents. In addition, it was reported that most child marriages and pregnancies arise from school. These by-laws should also be at school level to avoid such bad cases. Those who were in favour of this policy option argued:

*"This is an important law. I will use my own example. My child wanted to get marriage when she was in standard 8 and by then she was 11 years old. When she went to secondary school in form 1, she still insisted on getting married but I knew this was a bad idea. Now she is 16 and is in form 3. So, I tried working on it, what I did was I went to the police together with my child and the person she wanted to get married to and they were locked up in jail for 3 days. I did this to try and protect her and make sure that she still goes to school. My wife and I were not in good terms because of what I did but now she is still in school. I told the boy who wanted to marry my daughter to never bother her again. My daughter is now in form 3 and is doing good. This is what should be done. Am asking you my friends that in this room to please let your children go to school first. As much as we all want an in-law who can help us out at our homes but our children's school needs must come first. Our children should be independent in the future. A nurse has promised me that they will help me to make sure she goes to school. Women want their children to rush into marriages."* (Participant, Group 4).

Those who were not in favour of this policy option argued in line with the ineffectiveness of the current by laws. They argued that:

*"Some children are unruly and don't listen to their parents and so some parents would rather just make the child get married."* (Participant, Group 4)

*"I am surprised that parents are the ones who are fined and not the children because it is that children who indulge themselves in the unruly behaviours. The punishment should be on the child so that peers learn a lesson from each other."* (Participant, Group 9)



One proposal dropped significantly, not only in the sample overall, but also in TA Nyachikadza: “Establish collective storage facilities for food in the uplands by the people in the lowlands.” Support for this option decreased significantly from 5.94 to 5.01. As one question in the plenary sessions asked: “Who would keep the key?” This question indicates some distrust regarding the fate of the food supply.

### 3.5 Top Policy Priorities

There are two ways of looking at the results of a Deliberative Poll—which proposals produced significant change focusing on those that went above midpoint 5; and, which were the highest rated proposals after deliberation? All the proposals were evaluated on the same 0 to 10 scale, so we can see the ones with the highest ratings at the end, after all the arguments have been considered for and against. The top-rated proposals are the ones that have best survived all the counter-arguments and have come out on top. Because these proposals end up with the highest ratings, they can be considered the most important priorities for the communities.

The top six proposals for the overall sample all concern gender and population pressures. We believe this is a notable statement about the shared policy priority in the two communities:

<i>Use community by-laws to restrict child marriages.</i>
<i>Promote village savings and loans to provide alternative income sources for women.</i>
<i>Provide wide access to free family planning services.</i>
<i>Provide adequate security in evacuation centres to ensure that women and girls are protected from abuse and rape.</i>
<i>Poor families with children of school-going age should only receive a cash transfer if they enroll their children to school.</i>
<i>Ensure a woman should not lose the family land if her husband dies.</i>

Further, Appendix Table 3 shows the highest rated proposals after deliberation for the sample overall and also for the two communities.

Here is a transcript excerpt regarding the highest rated proposal, “the government should provide wide access to free family planning services”:

*“I would like to agree with my fellow women, family planning is very important. When we go to the hospital we are advised to observe child spacing, otherwise we face difficulties during child bearing. You may die young if you can be bearing children every year. We need to take heed of the advice from the hospital. Other men are abusive, they do not accept this issue of family planning but others are good they provide enough support to a woman on these issues.”*  
(Participant, Group 11)

Although this proposal is not directly linked to reducing vulnerability at time of flooding, it is a proposal that deliberators ranked highly. Perhaps it does talk to outcome of good health which can be considered a resilience outcome as opposed to specific vulnerability of flooding.

### 3.6 Evaluation

At the end of the weekend the respondents were asked about each component of the process. On a 0 to 10 scale ranging from 0 (a waste of time) to 10 extremely valuable, they were asked about the small group discussions (9.63), the briefing materials (a video, 9.40), the plenary sessions (9.38) and the event as a whole (9.63). These ratings are all among the highest received anywhere for the components of the DP process.

In addition, they were asked whether they agreed or disagreed, on a 1 to 5 scale, with 5 being the highest possible with statements such as:

<i>"My group moderator provided the opportunity for everyone to participate in the discussion"</i> (4.94 out of a possible 5)
<i>"The members of my group participated relatively equally in the discussions"</i> 4.86 out of a possible 5)
<i>"My group moderator sometimes tried to influence the group with his or her own views"</i> (1.15 with 1 being the lowest possible)
<i>"My group moderator tried to make sure that opposing arguments were considered"</i> (4.9 out of a possible 5)
<i>"The important aspects of the issues were covered in the group discussions"</i> (4.94 out of possible 5)

These are nearly perfect evaluations for every component of the process. In addition, people agreed: "I learned a lot about people very different from me - about what they and their lives are like" (4.83 out of a possible 5).

### 3.7 Communities' Expectations for the Results

There were three questions about how the government and the community can be expected to react to this event and its results. In all three cases, the sample in each community and the sample overall significantly increased their expectations. They thought the government would take their views into account (at 7.53) the government will use the results (at 7.47) and the community will use the results (at 7.75). In all cases the results for each community were similarly high. These results are shown in Appendix Table 1.

## 4. KEY POLICY IMPLICATIONS

The Deliberative Poll produced many changes of opinion. For the sample as a whole, 17 policy options out of 32 changed significantly with deliberation. The two sub-samples are large enough for separate analysis and we can see that for TA Nyachikadza, 17 policy options changed significantly while for TA Ndamera 15 policy options did so. In addition to the opinion changes, we can look at the top-rated proposals at the end of the deliberation. Those indicate policy priorities. We have provided transcript excerpts to try and indicate the reasoning in support of the proposals. While it is obvious from the

results on some of the resettlement proposals that the TA Nyachikadza residents are not prepared to engage in community resettlement, there are many practical areas of agreement on what should be done. Hence, we think the proposals that really stand out are the proposals that garnered strong support from both communities after they considered all the arguments on either side. We list those proposals here in the hope that they will all be given detailed consideration by the policymakers as well as other key stakeholders.

**1. Government should NOT prohibit provision of any social service (hospitals, schools, etc.) in TA Nyachikadza as a way of ‘forcing’ people to relocate.**

This proposal requires the buy-in of the key policymakers to change the policy directive on social services in Nyachikadza. It is obvious that the directive has not been effective in forcing people to relocate. Instead, it has only infringed on Nyachikadza community members’ rights to good health, education, etc.

**2. Government to allow TA Nyachikadza communities to ‘access’ land upland to temporarily relocate during floods and return afterwards**

This proposal is close to current unofficial practice. It offers a partial, practical solution that could be facilitated further, especially during emergencies. It appears to represent the consensus from both communities on how to deal with this difficult issue. In fact, there was a much significant increase support for this policy option from the host community - TA Ndamara, after deliberation.

**3. Government should promote increased use of temporary shelters for evacuation instead of classrooms.**

This proposal was supported by both community groups. If, well implemented, it has significant long-term positive impact on school-going children (especially from TA Ndamara) whose education gets disrupted every time their classrooms are used as evacuation centres.

**4. Government should provide wide access to free family planning services.**

This proposal aims at addressing the problem of rapid population growth in Nsanje District. Addressing the problem has long-term positive effects on access to essential social services, equitable use of land, reduced gender disparities, etc. It can also help relieve population pressures on the land.

**5. Community by-laws should be used to restrict child marriages.**

This proposal was highly favoured by the community members who participated in the DP. In many parts of Malawi, especially the northern region, community-by laws to address child marriages are working very well, spearheaded by child-centred NGOs, such as World Vision, Plan International, etc. This proposal requires the buy-in of traditional leaders.

**6. A woman should not lose the family land if her husband dies.**

In an agricultural setting (including Nsanje District), land is the most valuable asset for a household. Proposals to ensure that women do not lose their family land when a husband dies would ensure that

women and children are not victimized and do not lose their main sources of livelihood (agriculture) when the husband dies.

The opinion changes and high ratings for all these proposals in the two communities are listed in Appendix Table 1. They represent areas of agreement that could be practical for implementation in a context where also see sharp divisions, particularly on the resettlement issues.

## APPENDIX 1: DETAILED RESULTS

Note: In the tables that follow, significance levels are indicated with asterisks, where \*\*\* is significant change over .00 level, \*\*significant change over .05 level, and \*significant change over .10 level.

**Table 1: Opinion Changes, Combined Results**

Question	Pre	Post	Post-Pre	Sig.
Q1: To begin with, all in all, on a 0 to 10 scale, where 0 is no value at all, 10 is as much value as can be, and 5 is exactly in the middle, how much economic value does the Shire river provide you?				
ALL	7.09	8.37	1.28	0.000***
TA Nyachikadza Only	7.80	8.35	0.55	0.015**
TA Ndamera Only	6.31	8.40	2.09	0.000***
Q2: And, on a 0 to 10 scale, where 0 is extremely risky, 10 is extremely safe, how much risk does the Shire river pose to you?				
ALL	6.88	6.61	-0.27	0.192
TA Nyachikadza Only	7.00	6.86	-0.14	0.614
TA Ndamera Only	6.74	6.33	-0.41	0.174
Q3: On a scale from 0 to 10 where 0 is extremely unimportant, 10 is extremely important and 5 is exactly in the middle, how important or unimportant are the following for the <b>government to do</b> ?				
a. Facilitate the relocation of TA Nyachikadza community to suitable land in the high land area <b>within the same district</b>				
ALL	4.06	4.35	0.29	0.194
TA Nyachikadza Only	1.35	2.32	0.97	0.001***
TA Ndamera Only	7.11	6.64	-0.47	0.202
b. Facilitate the relocation of TA Nyachikadza community to the best suitable land <b>anywhere in Malawi</b>				
ALL	2.00	2.68	0.68	0.001***
TA Nyachikadza Only	0.35	0.79	0.44	0.008***
TA Ndamera Only	3.84	4.77	0.93	0.012**
c. Should only proceed with resettlement after it has developed a plan that is approved by the TA Nyachikadza community				
ALL	4.64	4.92	0.28	0.237
TA Nyachikadza Only	2.54	3.11	0.57	0.093*
TA Ndamera Only	6.97	6.93	-0.04	0.901



d. Provide legal title to land for TA Nyachikadza community members before relocation				
ALL	4.29	4.60	0.31	0.178
TA Nyachikadza Only	1.83	3.06	1.23	0.000***
TA Ndamera Only	7.02	6.31	-0.71	0.029**
e. Facilitate a complete relocation but allow communities to continue using their land for crop cultivation				
ALL	5.04	5.72	0.68	0.003***
TA Nyachikadza Only	2.36	3.93	1.57	0.000***
TA Ndamera Only	8.01	7.71	-0.30	0.330
f. Prohibit provision of any social service (hospitals, schools, etc.) in TA Nyachikadza as a way of 'forcing' people to relocate				
ALL	2.55	2.82	0.27	0.202
TA Nyachikadza Only	0.86	1.20	0.34	0.109
TA Ndamera Only	4.43	4.61	0.18	0.626
g. Provide increased social services (e.g. schools, health centres) in TA Ndamera if people are relocated there				
ALL	4.63	4.59	-0.04	0.841
TA Nyachikadza Only	1.60	2.02	0.42	0.131
TA Ndamera Only	7.99	7.43	-0.56	0.086*
h. Facilitate TA Ndamera's access to the low land for crop cultivation in exchange for hosting TA Nyachikadza's residence in the upland (TA Ndamera)				
ALL	3.40	3.44	0.04	0.849
TA Nyachikadza Only	0.95	1.05	0.10	0.593
TA Ndamera Only	6.12	6.08	-0.04	0.904
i. Facilitate increased agricultural production in TA Ndamera				
ALL	3.93	4.42	0.49	0.016***
TA Nyachikadza Only	1.24	1.82	0.58	0.016***
TA Ndamera Only	6.92	7.32	0.40	0.241
Q4: How important or unimportant would you rate the following factors in considering whether you will be willing to relocate?				
a. Quality of land where I would be relocated				
ALL	3.87	4.95	1.08	0.000***
TA Nyachikadza Only	2.00	3.53	1.53	0.000***
TA Ndamera Only	5.96	6.53	0.57	0.054**
b. Leadership legitimacy in the new TA				
ALL	3.89	4.96	1.07	0.000***
TA Nyachikadza Only	1.99	3.76	1.77	0.000***

TA Ndamera Only	6.00	6.31	0.31	0.360
c. Access to social services like health and education				
ALL	4.39	5.32	0.93	0.000***
TA Nyachikadza Only	2.28	3.90	1.62	0.000***
TA Ndamera Only	6.76	6.92	0.16	0.580
d. Available livelihood sources				
ALL	4.17	4.99	0.82	0.000***
TA Nyachikadza Only	2.28	3.72	1.44	0.000***
TA Ndamera Only	6.32	6.43	0.11	0.724
e. Whether or not the whole community move together to the new place				
ALL	3.88	4.72	0.84	0.000***
TA Nyachikadza Only	1.76	3.32	1.56	0.000***
TA Ndamera Only	6.26	6.29	0.03	0.918
f. Whether or not I will still have access to current ancestral land				
ALL	4.44	5.40	0.96	0.000***
TA Nyachikadza Only	2.59	4.36	1.77	0.000***
TA Ndamera Only	6.50	6.55	0.05	0.857
g. Potential for conflict with people in the new area of relocation				
ALL	4.32	4.89	0.57	0.021**
TA Nyachikadza Only	3.92	4.50	0.58	0.109
TA Ndamera Only	4.77	5.33	0.56	0.092*
Q5: And, on the same scale, the following are some questions about what the government should do regarding reducing vulnerability in the existing communities.				
a. Construct a dyke along the Shire River from Nsanje District Centre to TA Nyachikadza (a distance of around 40 Km)				
ALL	7.16	7.27	0.11	0.629
TA Nyachikadza Only	7.87	9.12	1.25	0.000***
TA Ndamera Only	6.38	5.21	-1.17	0.001***
b. Construct a dyke along the Shire River from Nsanje District Centre to TA Nyachikadza <b>with labour from the communities</b> coordinated by the District Council as part of the Public Works Programme				
ALL	7.32	7.05	-0.27	0.224
TA Nyachikadza Only	7.9	8.82	0.92	0.000***
TA Ndamera Only	6.67	5.09	-1.58	0.000***

c. Allow TA Nyachikadza communities to 'access' land upland to temporarily relocate during floods and return afterwards.				
ALL	6.16	7.52	1.36	0.000***
TA Nyachikadza Only	6.51	7.64	1.13	0.000***
TA Ndamera Only	5.77	7.38	1.61	0.000***
d. Allow communities to remain but develop an effective flood-early warning system.				
ALL	7.16	8.00	0.84	0.000***
TA Nyachikadza Only	8.40	8.78	0.38	0.067*
TA Ndamera Only	5.79	7.14	1.35	0.000***
e. Sensitize TA Nyachikadza communities on flood early warning.				
ALL	8.03	8.64	0.61	0.000***
TA Nyachikadza Only	8.51	9.07	0.56	0.003***
TA Ndamera Only	7.49	8.15	0.66	0.013**
f. Develop places of safety for children and vulnerable groups (elderly, sick) when flood warnings are administered.				
ALL	8.18	8.20	0.02	0.928
TA Nyachikadza Only	7.97	7.79	-0.18	0.470
TA Ndamera Only	8.42	8.65	0.23	0.281
g. Put in place effective life-saving measures (such as petrol boats, life jackets, etc.) in all strategic places to be used to rescue people during floods				
ALL	8.14	8.61	0.47	0.006***
TA Nyachikadza Only	8.33	8.84	0.51	0.013**
TA Ndamera Only	7.93	8.37	0.44	0.119
h. Have the VCPC, ACPC and DCPC consider indigenous knowledge systems (IKS) in flood early warning.				
ALL	7.56	7.13	-0.43	0.019**
TA Nyachikadza Only	7.61	7.16	-0.45	0.078*
TA Ndamera Only	7.49	7.09	-0.40	0.123
i. Have all the Area Civil Protection Committees (ACPCs) and Village Civil Protection Committees (VCPCs) along the Shire River form an alliance to share information about flood early warning.				
ALL	8.25	8.40	0.15	0.302
TA Nyachikadza Only	8.27	8.31	0.04	0.854
TA Ndamera Only	8.23	8.50	0.27	0.168

Q6: How important or unimportant would you rate the effectiveness of the following methods of communications for early warning flood information?				
a. Telephone voice				
ALL	8.49	8.21	-0.28	0.083*
TA Nyachikadza Only	8.44	8.48	0.04	0.851
TA Ndamera Only	8.55	7.90	-0.65	0.009***
b. Telephone SMS				
ALL	6.75	7.19	0.44	0.020**
TA Nyachikadza Only	6.66	7.25	0.59	0.028**
TA Ndamera Only	6.86	7.11	0.25	0.319
c. Beating drums				
ALL	6.32	5.86	-0.46	0.020**
TA Nyachikadza Only	6.27	5.87	-0.40	0.156
TA Ndamera Only	6.38	5.85	-0.53	0.058*
d. Whistles				
ALL	5.82	5.79	-0.03	0.890
TA Nyachikadza Only	5.81	5.72	-0.09	0.756
TA Ndamera Only	5.84	5.88	0.04	0.885
e. Other Indigenous methods (e.g. animal migration)				
ALL	5.23	5.06	-0.17	0.458
TA Nyachikadza Only	5.13	5.22	0.09	0.757
TA Ndamera Only	5.34	4.87	-0.47	0.159
Q7: On the same scale, the following are some questions about what the government should do regarding population pressure, gender and social services.				
a. Provide wide access to free family planning services				
ALL	8.48	9.17	0.69	0.000***
TA Nyachikadza Only	8.45	9.00	0.55	0.003***
TA Ndamera Only	8.52	9.35	0.83	0.000***
b. Construct a health centre in TA Nyachikadza so long as people live there				
ALL	7.32	8.16	0.84	0.000***
TA Nyachikadza Only	9.34	9.58	0.24	0.077*
TA Ndamera Only	5.07	6.59	1.52	0.000***
c. Have families consider their land resources in deciding how many children to have				
ALL	6.98	7.64	0.66	0.001***
TA Nyachikadza Only	6.97	7.59	0.62	0.036**
TA Ndamera Only	6.99	7.68	0.69	0.012**

d. Increase the use of temporary shelters for evacuation instead of classrooms				
ALL	8.78	8.68	-0.10	0.464
TA Nyachikadza Only	8.80	8.50	-0.30	0.145
TA Ndamera Only	8.88	8.89	0.01	0.518
e. Use community by-laws to restrict child marriages				
ALL	8.73	9.29	0.56	0.000***
TA Nyachikadza Only	8.76	9.24	0.48	0.006***
TA Ndamera Only	8.70	9.35	0.65	0.000***
f. poor families with children of school-going age should only receive a cash transfer if they enroll their children to school				
ALL	8.83	9.08	0.25	0.042**
TA Nyachikadza Only	8.84	9.02	0.18	0.312
TA Ndamera Only	8.82	9.16	0.34	0.054**
g. adults with children of school-going age should only participate in the Public Works Program if they enroll their children in school				
ALL	8.07	8.56	0.49	0.003***
TA Nyachikadza Only	8.14	8.45	0.31	0.173
TA Ndamera Only	7.99	8.67	0.68	0.003***
h. Establish collective storage facilities for food in the uplands (by the people from the lowlands)				
ALL	5.94	5.01	-0.93	0.000***
TA Nyachikadza Only	5.19	3.87	-1.32	0.000***
TA Ndamera Only	6.78	6.28	-0.50	0.137
i. Provide adequate security in evacuation centres to ensure that women and girls are protected from abuse and rape				
ALL	9.08	9.10	0.02	0.874
TA Nyachikadza Only	9.01	8.99	-0.02	0.921
TA Ndamera Only	9.16	9.21	0.05	0.696
j. Allow families to be able to stay together during flood evacuations				
ALL	7.41	7.89	0.48	0.025**
TA Nyachikadza Only	7.65	7.62	-0.03	0.912
TA Ndamera Only	7.14	8.20	1.06	0.001***
k. Allow households with persons who are vulnerable and sick be prioritized during flood evacuations				
ALL	8.44	8.78	0.34	0.012**
TA Nyachikadza Only	8.57	8.69	0.12	0.492
TA Ndamera Only	8.30	8.88	0.58	0.005***

l. Promote the capacity building of the VCPCs to know how to respond to emergencies				
ALL	8.68	8.61	-0.07	0.570
TA Nyachikadza Only	8.80	8.68	-0.12	0.443
TA Ndamera Only	8.54	8.53	-0.01	0.979
m. Promote village savings and loans to provide alternative income sources for women				
ALL	8.93	9.18	0.25	0.032**
TA Nyachikadza Only	9.08	9.03	-0.05	0.761
TA Ndamera Only	8.76	9.33	0.57	0.000***
n. Ensure a woman should not lose the family land if her husband dies				
ALL	9.31	8.87	-0.44	0.000***
TA Nyachikadza Only	9.31	8.61	-0.70	0.000***
TA Ndamera Only	9.32	9.16	-0.16	0.260
Q8: On another 0 to 10 scale, where 0 strongly disagree and 10 is strongly agree, is <b>how strongly would you disagree or agree with the following statements?</b>				
a. Relocation is necessary for basic livelihood				
ALL	4.15	4.34	0.19	0.350
TA Nyachikadza Only	1.95	2.50	0.55	0.050**
TA Ndamera Only	6.59	6.38	-0.21	0.477
b. Current early warning notifications are ineffective				
ALL	5.10	5.43	0.33	0.134
TA Nyachikadza Only	4.91	5.18	0.27	0.389
TA Ndamera Only	5.31	5.71	0.40	0.200
c. Staying on one's traditional/ancestral land is worth the risk of being caught in a flood				
ALL	5.21	5.79	0.58	0.011***
TA Nyachikadza Only	7.18	7.02	-0.16	0.623
TA Ndamera Only	3.04	4.42	1.38	0.000***
d. Majority of people in our village do not want to relocate				
ALL	7.40	8.27	0.87	0.000***
TA Nyachikadza Only	8.85	8.90	0.05	0.815
TA Ndamera Only	5.78	7.57	1.79	0.000***
e. I find it easy to move my family out to uplands even when the floods have started.				
ALL	4.43	5.39	0.96	0.000***
TA Nyachikadza Only	5.67	6.22	0.55	0.058*
TA Ndamera Only	3.01	4.43	1.42	0.000***
f. In the event of a flood, I find government response is adequate.				



ALL	4.87	5.74	0.87	0.000***
TA Nyachikadza Only	4.07	5.27	1.20	0.000***
TA Ndamera Only	5.78	6.27	0.49	0.118
Q9: How serious or not do you think the <b>government will take into account your views</b> and suggestions provided in this event?				
ALL	6.51	7.53	1.02	0.000***
TA Nyachikadza Only	6.08	7.25	1.17	0.000***
TA Ndamera Only	6.97	7.82	0.85	0.001***
Q10: And, where 0 is not at all confident, 10 is completely confident, and 5 is exactly in the middle, how confident are you <b>the government will use the results</b> from this event?				
ALL	6.68	7.47	0.79	0.000***
TA Nyachikadza Only	6.32	7.30	0.98	0.000***
TA Ndamera Only	7.06	7.66	0.60	0.019**
Q11: And, where 0 is not at all confident, 10 is completely confident, and 5 is exactly in the middle, how confident are you <b>the community will use the results</b> from this event?				
ALL	6.93	7.75	0.82	0.000***
TA Nyachikadza Only	6.86	7.65	0.79	0.002***
TA Ndamera Only	7.00	7.85	0.85	0.001***
Q12: And, how strongly would you agree or disagree with the following statements. Where 0 is strongly disagree, 10 is strongly agree and 5 is exactly in the middle.				
a. People with different views from mine often have very good reasons for their opinions				
ALL	6.39	6.72	0.33	0.095*
TA Nyachikadza Only	6.38	6.63	0.25	0.372
TA Ndamera Only	6.40	6.82	0.42	0.133
b. I consider myself capable of participating in politics				
ALL	4.82	4.33	-0.49	0.027**
TA Nyachikadza Only	4.79	4.33	-0.46	0.155
TA Ndamera Only	4.86	4.32	-0.54	0.083*
c. Public officials care a lot about what people like me think				
ALL	4.51	5.41	0.90	0.000***
TA Nyachikadza Only	4.13	5.10	0.97	0.001***
TA Ndamera Only	4.92	5.76	0.84	0.011***
d. Most public policy issues are so complicated that a person like me can't really understand what's going on				
ALL	6.25	6.23	-0.02	0.912
TA Nyachikadza Only	6.44	6.13	-0.31	0.262
TA Ndamera Only	6.04	6.34	0.30	0.282

e. People like me don't have any say about what the government does				
ALL	6.40	6.30	-0.10	0.610
TA Nyachikadza Only	6.71	6.25	-0.46	0.084*
TA Ndamera Only	6.05	6.35	0.30	0.336
Q18: Now, there are some things that people find more or less important for themselves or society to have. On a 0 to 10 scale, where 0 is extremely unimportant, 10 is extremely important and 5 is exactly in the middle, how important or unimportant would you say each of the following is to you?				
a. Making one's own choices				
ALL	7.96	7.97	0.01	0.947
TA Nyachikadza Only	8.21	7.87	-0.34	0.132
TA Ndamera Only	7.69	8.09	0.40	0.091*
b. Not having to worry about food or shelter				
ALL	6.74	6.91	0.17	0.456
TA Nyachikadza Only	7.00	6.95	-0.05	0.886
TA Ndamera Only	6.45	6.86	0.41	0.230
c. Having a safe community				
ALL	9.36	8.98	-0.38	0.000***
TA Nyachikadza Only	9.33	8.81	-0.52	0.000***
TA Ndamera Only	9.41	9.17	-0.24	0.065*
d. Making sure everybody has clean air and water				
ALL	9.46	9.25	-0.21	0.017**
TA Nyachikadza Only	9.42	9.25	-0.17	0.174
TA Ndamera Only	9.52	9.26	-0.26	0.041**
e. Earn as much money as possible				
ALL	8.76	8.95	0.19	0.133
TA Nyachikadza Only	8.93	8.68	-0.25	0.184
TA Ndamera Only	8.56	9.24	0.68	0.000***
f. Making sure that government does what the people want				
ALL	9.02	9.02	0.00	0.957
TA Nyachikadza Only	9.24	8.96	-0.28	0.089*
TA Ndamera Only	8.77	9.10	0.33	0.055*
g. Promoting economic growth				
ALL	9.14	9.09	-0.05	0.632
TA Nyachikadza Only	9.19	8.91	-0.28	0.073*
TA Ndamera Only	9.10	9.30	0.20	0.162
h. Having a well-educated society				
ALL	9.45	9.27	-0.18	0.043**
TA Nyachikadza Only	9.59	9.04	-0.55	0.000***

TA Ndamera Only	9.29	9.53	0.24	0.037**
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**Table 2: Evaluation Questions, Combined Results**

Questions	Post
On a scale of 0 to 10, where 0 is "a waste of time", 10 is "extremely valuable" and 5 is exactly in the middle, how valuable was each of the following in helping you clarify your positions on the issues?	
The small group discussions	
ALL	9.63
TA Nyachikadza Only	9.59
TA Ndamera Only	9.68
The briefing materials	
ALL	9.40
TA Nyachikadza Only	9.13
TA Ndamera Only	9.71
The plenary session	
ALL	9.38
TA Nyachikadza Only	9.20
TA Ndamera Only	9.58
The event as a whole	
ALL	9.63
TA Nyachikadza Only	9.46
TA Ndamera Only	9.83
And how strongly would you agree or disagree with each of the following statements? (higher number = agree, with 5 the highest on a 1 to 5 scale)	
My group moderator provided the opportunity for everyone to participate in the discussion	
ALL	4.94
TA Nyachikadza Only	4.94
TA Ndamera Only	4.95
The members of my group participated relatively equally in the discussions	
ALL	4.86
TA Nyachikadza Only	4.87
TA Ndamera Only	4.86
My group moderator sometimes tried to influence the group with his or her own views	
ALL	1.15
TA Nyachikadza Only	1.25
TA Ndamera Only	1.04
My group moderator tried to make sure that opposing arguments were considered	
ALL	4.90

TA Nyachikadza Only	4.83
TA Ndamera Only	4.98
The important aspects of the issues were covered in the group discussions	
ALL	4.94
TA Nyachikadza Only	4.95
TA Ndamera Only	4.93
I learned a lot about people very different from me - about what they and their lives are like	
ALL	4.83
TA Nyachikadza Only	4.81
TA Ndamera Only	4.85

**Table 3: Top 15 proposals, Post-Deliberation – All participants, Combined Results, Including Rankings**

Question	Pre	Post	Post-Pre	Sig.	Rank Post-DP
7e. Use community by-laws to restrict child marriages.					
ALL	8.73	9.29	0.56	0.000***	1
TA Nyachikadza Only	8.76	9.24	0.48	0.006***	2
TA Ndamera Only	8.70	9.35	0.65	0.000***	1
7m. Promote village savings and loans to provide alternative income sources for women.					
ALL	8.93	9.18	0.25	0.032**	2
TA Nyachikadza Only	9.08	9.03	-0.05	0.761	5
TA Ndamera Only	8.76	9.33	0.57	0.000***	3
7a. Provide wide access to free family planning services.					
ALL	8.48	9.17	0.69	0.000***	3
TA Nyachikadza Only	8.45	9.00	0.55	0.003***	7
TA Ndamera Only	8.52	9.35	0.83	0.000***	2
7i. Provide adequate security in evacuation centres to ensure that women and girls are protected from abuse and rape.					
ALL	9.08	9.10	0.02	0.874	4
TA Nyachikadza Only	9.01	8.99	-0.02	0.921	8
TA Ndamera Only	9.16	9.21	0.05	0.696	4

7f. poor families with children of school-going age should only receive a cash transfer if they enroll their children to school.					
ALL	8.83	9.08	0.25	0.042**	5
TA Nyachikadza Only	8.84	9.02	0.18	0.312	6
TA Ndamera Only	8.82	9.16	0.34	0.054**	6
7n. Ensure a woman should not lose the family land if her husband dies.					
ALL	9.31	8.87	-0.44	0.000***	6
TA Nyachikadza Only	9.31	8.61	-0.70	0.000***	14
TA Ndamera Only	9.32	9.16	-0.16	0.260	5
7k. Allow households with persons who are vulnerable and sick be prioritized during flood evacuations.					
ALL	8.44	8.78	0.34	0.012**	7
TA Nyachikadza Only	8.57	8.69	0.12	0.492	12
TA Ndamera Only	8.30	8.88	0.58	0.005***	8
7d. Increase the use of temporary shelters for evacuation instead of classrooms.					
ALL	8.78	8.68	-0.10	0.464	8
TA Nyachikadza Only	8.80	8.50	-0.3	0.145	15
TA Ndamera Only	8.88	8.89	0.01	0.518	7
5e. Sensitize TA Nyachikadza communities on flood early warning.					
ALL	8.03	8.64	0.61	0.000***	9
TA Nyachikadza Only	8.51	9.07	0.56	0.003***	4
TA Ndamera Only	7.49	8.15	0.66	0.013**	15
5g. Put in place effective life-saving measures (such as petrol boats, life jackets, etc.) in all strategic places to be used to rescue people during floods.					
ALL	8.14	8.61	0.47	0.006***	10
TA Nyachikadza Only	8.33	8.84	0.51	0.013**	13
TA Ndamera Only	7.93	8.37	0.44	0.119	11
7l. Promote the capacity building of the VCPCs to know how to respond to emergencies.					
ALL	8.68	8.61	-0.07	0.570	11
TA Nyachikadza Only	8.80	8.68	-0.12	0.443	9
TA Ndamera Only	8.54	8.53	-0.01	0.979	13

7g. adults with children of school-going age should only participate in the Public Works Program if they enroll their children in school.					
ALL	8.07	8.56	0.49	0.003***	12
TA Nyachikadza Only	8.14	8.45	0.31	0.173	16
TA Ndamera Only	7.99	8.67	0.68	0.003***	9
5i. Have all the Area Civil Protection Committees (ACPCs) and Village Civil Protection Committees (VCPCs) along the Shire River form an alliance to share information about flood early warning.					
ALL	8.25	8.40	0.15	0.302	13
TA Nyachikadza Only	8.27	8.31	0.04	0.854	17
TA Ndamera Only	8.23	8.50	0.27	0.168	12
5f. Develop places of safety for children and vulnerable groups (elderly, sick) when flood warnings are administered.					
ALL	8.18	8.20	0.02	0.928	14
TA Nyachikadza Only	7.97	7.79	-0.18	0.470	18
TA Ndamera Only	8.42	8.65	0.23	0.281	10
7b. Construct a health centre in TA Nyachikadza so long as people live there.					
ALL	7.32	8.16	0.84	0.000***	15
TA Nyachikadza Only	9.34	9.58	0.24	0.077*	1
TA Ndamera Only	5.07	7.38	1.61	0.000***	25

**Table 4: Post Deliberation Priorities - Relocation and Resettlement - All participants, Combined Results, Including Rankings**

Question	Pre	Post	Post-Pre	Sig.	Rank - ALL	Rank - TA Ndamera Only	Rank - TA Nyachikadz a Only
3e. Facilitate a complete relocation but allow communities to continue using their land for crop cultivation	5.04	5.72	0.68	0.003***	23	6	6



3c. Should only proceed with resettlement after it has developed a plan that is approved by the TA Nyachikadza community	4.64	4.92	0.28	0.237	25	2	7
3d. Provide legal title to land for TA Nyachikadza community members before relocation	4.29	4.60	0.31	0.178	26	4	8
3g. Provide increased social services (e.g. schools, health centres) in TA Ndamera if people are relocated there	4.63	4.59	-0.04	0.841	27	8	12
3i. Facilitate increased agricultural production in TA Ndamera	3.93	4.42	0.49	0.016***	28	15	4
3a. Facilitate the relocation of TA Nyachikadza community to suitable land in the high land area <b>within the same district</b>	4.06	4.35	0.29	0.194	29	1	2
3h. Facilitate TA Ndamera's access to the low land for crop cultivation in exchange for hosting TA Nyachikadza's residence in the upland (TA Ndamera)	3.40	3.44	0.04	0.849	30	7	15
3f. Prohibit provision of any social service (hospitals, schools, etc.) in TA Nyachikadza as a way of 'forcing' people to relocate	2.55	2.82	0.27	0.202	31	5	14
3b. Facilitate the relocation of TA Nyachikadza community to the best suitable land <b>anywhere in Malawi</b>	2.00	2.68	0.68	0.001***	32	3	5

**Table 5: Post Deliberation Priorities - Reducing Vulnerabilities in the Existing Communities - All participants, Combined Results, Including Rankings**

<b>Question</b>	<b>Pre</b>	<b>Post</b>	<b>Post-Pre</b>	<b>Sig.</b>	<b>Rank - ALL</b>	<b>Rank - TA Ndamera Only</b>	<b>Rank - TA Nyachikadza Only</b>
5e. Sensitize TA Nyachikadza communities on flood early warning.	8.03	8.64	0.61	0.000***	9	10	18
5g. Put in place effective life-saving measures (such as petrol boats, life jackets, etc.) in all strategic places to be used to rescue people during floods	8.14	8.61	0.47	0.006***	10	21	11
5i. Have all the Area Civil Protection Committees (ACPCs) and Village Civil Protection Committees (VCPCs) along the Shire River form an alliance to share information about flood early warning.	8.25	8.40	0.15	0.302	13	17	21
5f. Develop places of safety for children and vulnerable groups (elderly, sick) when flood warnings are administered.	8.18	8.20	0.02	0.928	14	25	1
5d. Allow communities to remain but develop an effective flood-early warning system.	7.16	8.00	0.84	0.000***	16	12	17
5c. Allow TA Nyachikadza communities to 'access' land upland to temporarily relocate during floods and return afterwards.	6.16	7.52	1.36	0.000***	19	9	16
5a. Construct a dyke along the Shire River from Nsanje District Centre to TA Nyachikadza (a distance of around 40 Km)	7.16	7.27	0.11	0.629	20	11	13

5h. Have the VCPC, ACPC and DCPC consider indigenous knowledge systems (IKS) in flood early warning.	7.56	7.13	-0.43	0.019**	21	14	20
5b. Construct a dyke along the Shire River from Nsanje District Centre to TA Nyachikadza <b>with labour from the communities</b> coordinated by the District Council as part of the Public Works Programme	7.32	7.05	-0.27	0.224	22	13	9

**Table 6: Post Deliberation Priorities - Population Pressure, Gender and Access to Social -All participants, Combined Results, Including Rankings**

<b>Question</b>	<b>Pre</b>	<b>Post</b>	<b>Post-Pre</b>	<b>Sig.</b>	<b>Rank - ALL</b>	<b>Rank - TA Ndamera Only</b>	<b>Rank - TA Nyachikadza Only</b>
7e. Use community by-laws to restrict child marriages	8.73	9.29	0.56	0.000***	1	16	23
7m. Promote village savings and loans to provide alternative income sources for women	8.93	9.18	0.25	0.032**	2	32	30
7a. Provide wide access to free family planning services	8.48	9.17	0.69	0.000***	3	19	19
7i. Provide adequate security in evacuation centres to ensure that women and girls are protected from abuse and rape	9.08	9.10	0.02	0.874	4	18	28

7f. poor families with children of school-going age should only receive a cash transfer if they enroll their children to school	8.83	9.08	0.25	0.042**	5	27	24
7n. Ensure a woman should not lose the family land if her husband dies	9.31	8.87	-0.44	0.000***	6	31	32
7k. Allow households with persons who are vulnerable and sick be prioritized during flood evacuations	8.44	8.78	0.34	0.012**	7	24	27
7d. Increase the use of temporary shelters for evacuation instead of classrooms	8.78	8.68	-0.1	0.464	8	30	10
7l. Promote the capacity building of the VCPCs to know how to respond to emergencies	8.68	8.61	-0.07	0.570	11	28	31
7g. adults with children of school-going age should only participate in the Public Works Program if they enroll their children in school	8.07	8.56	0.49	0.003***	12	23	25
7b. Construct a health centre in TA Nyachikadza so long as people live there	7.32	8.16	0.84	0.000***	15	29	3
7j. Allow families to be able to stay together during flood evacuations	7.41	7.89	0.48	0.025**	17	20	29
7c. Have families consider their land resources in deciding how many children to have	6.98	7.64	0.66	0.001***	18	22	22

7h. Establish collective storage facilities for food in the uplands (by the people from the lowlands)	5.94	5.01	-0.93	0.000***	24	26	26
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## APPENDIX 2: MALAWI DP ADVISORY GROUP

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