

GAMES FOR THE SDGs NAMIBIA

A SECOND YEAR OF LEARNING (2018)



Progress
Namibia
Innovate and
Inspire Growth



NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY



ACKNOWLEDGEMENTS

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We also thank the following institutions and book authors for the use of games:

Climate Interactive (<https://www.climateinteractive.org/>)

Games for Sustainability (<https://games4sustainability.org/>)

Meadows D, Booth Sweeney L and Martin Mehers G. 2016. The Climate Change Playbook: 22 System Thinking Games for More Effective Communication about Climate Change. Chelsea Green Publishing, White River Junction, Vermont, USA.

BACKGROUND

In November 2016, the very first game called World Climate Simulation was piloted. It was hosted ahead of the Conference of Parties that took in Marrakesh, Morocco. It is a simulation game of UN climate negotiations that successfully managed to put young Namibians in the shoes of world leaders at the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP22). Young people were exposed to climate science and tested their ambitions against a climate model used worldwide which enabled them see the effect of their decisions on the world climate.

The success of the game led to the series of games called Games for the SDGs. These games were hosted by Progress Namibia in conjunction with the Hanns Seidel Foundation, the National Youth Coalition on Climate Change, the National Youth council, as well as AISEC Namibia. The games aimed to provide Namibian citizens, particularly young people, with a platform which enables them to freely and openly discuss about the Sustainable Development Goals and their involvement in supporting them. These are the blue print for making a world a better place and every individual has therefore a role to play. The Games use simulation, gaming and other interactive tools to run and in 2017, eight games have been successfully run and have led to a growing demand ever since.

INTRODUCTION

Why games for the SDGs?

The Sustainable Development Goals, through the 2030 Agenda for Sustainable Development, which Namibia has committed to, are complex and interlinked, and require systems and critical thinking to fully understand and act upon. Around the world, simulation gaming as tools for interactive and complex problem solving tools is slowly gaining momentum. Many training workshops and seminars are using gaming as a tool for promoting inclusivity amongst participants from different backgrounds. Some of the games specifically provide an interdisciplinary understanding to complex global problems that can only be tackled with well informed and integrated decisions through changes in perception and culture. These games are an important tool for learning because they equip participants with a lens through which they are able to identify solutions to complex problems. The games also have the potential to amplify behavioural change. Through experiencing simulations of real life complex problems, the games can enhance empathy in participants, sensitise and empower them and allow them to take responsibility in shifting their own behaviours. Overall, the games aim to promote the following ways of thinking:

1. “See the whole picture
2. Change perspectives to see new leverage points in complex systems
3. Look for interdependencies
4. Consider how mental models (a person's beliefs, ideas, assumptions about the world) create our futures
5. Pay attention to and give voice to the long term
6. Use peripheral vision to see complex cause-and-effect relationships
7. Find where unanticipated consequences emerge
8. Focus on structure (the interrelationships within a system)
9. Hold the question of paradox and controversy without trying to resolve it quickly
10. Watch for win/lose mindsets, knowing they usually make matters worse in situations of high interdependence
11. See themselves as part of the system”

¹ The world Climate Game was developed by Climate Interactive in partnership with MIT. The Game is unique in that it uses an interactive computer model to rapidly analyze the results of the mock-negotiations

² Report on lessons from 2017: <https://cms.my.na/assets/documents/p1c1cv42qm1va1v5pnpte09b9t4.pdf>

³ <https://games4sustainability.org/2015/10/28/the-power-of-games-will-games-change-the-world/>

HOW FAR THE GAMES HAVE COME AND HOW THEY HAVE BEEN RUN

This year (2018), ten games have been successfully run ranging from 8 to 50 participants per game. The games focused on a different set of goals each time, although the Goals are interdependent which the games highlight. The entire series of games were conducted once per month.

At the beginning of each game, a short introduction on the SDGs is usually provided to participants, to familiarise them with the goals. Usually, the SDGs do not really trickle down to all grassroots and as a result, young people particularly see them as something too complex to understand which is meant for high level decision making in our governments. An introduction to the SDGs helps young people to understand how simple they are and show them that they too have a role to play when it comes to achieving them.

The facilitation of the game is usually for small groups (anything between 10 and 40 people, depending on the specific game). This type of facilitation promotes a safe and intimate space which allows time for deep dialogue, which is the most essential part of the game. This takes place after the game and steers deep reflection and enables the facilitator to unpack complexities felt by participants. In order to ensure that the feedback and voices of every participant is heard, the dialogue requires the group to sit in a circle, creating a safe space to speak freely. When participants feel free and safe, they are more likely to open up to conversations and unpack powerful lessons provided by the game. The following session provides a detailed session of each game ran throughout the year:

⁴ These were taken from Meadows D, Booth Sweeney L and Martin Mehers G. 2016. The Climate Change Playbook: 22 System Thinking Games for More Effective Communication about Climate Change. Chelsea Green Publishing, White River Junction, Vermont, USA.

1. DISASTER RISK ZONE

About	The Disaster Risk Zone game allows participants to take up the role of families living in disaster prone areas. Families are affected by these natural disasters and as a result, they move to refugee camps while in the process they lose a lot of their belongings.
Which SDGs	Goal 13 (Take urgent action to combat climate change and its implications) & Goal 11 (Make cities inclusive, safe, resilient and sustainable)
Benefits	Participants understand the impacts of the natural disasters and share empathy for victims affected by natural disasters
Created by	Christian aid
Type	Role-playing simulation game
Space	Best to be played indoors, were there is enough space for various groups
Materials needed	Pens and paper
Basic Instructions	<ul style="list-style-type: none"> ● Participants are divided into different groups representing families affected by a flood in a small settlement called Kalembesa close to the banks of the Zambezi River ● Each participant is given a pen and a piece of paper ● Families needed respond to the flood with the assistant of the government (By following the facilitator's instructions and amending their list accordingly) ● After the game, facilitator led participants into an in-depth- debriefing session to reflect on the game
Open Source?	Yes, a complete set of facilitation and game materials can be found here.
Date Played?	23 February 2018
Key Lessons	<ul style="list-style-type: none"> ● The game requires a lot of paper and pens ● The facilitator needs to be well trained to steer an in-depth dialogue and unpack important reflections ● The game ideal for rainfall periods when there are situations of flooding occurring



2. THE HARVEST GAME

About	Harvest allows participants to see the long-term consequences of using a limited common resource (like fish) to maximise their own short-term benefits
Which SDGs	Goal 14 (Life below water)
Benefits	Participants understand the importance of managing human use of a common resource in a sustainable way
Created by	Dennis Meadows, Linda Booth-Sweeney and Gillian Martin-Mehers
Type	Group role-play and simulation
Space	Best to be played indoors, where there is enough space for various groups
Materials needed	Large container to represent the ocean 300 coins or bottle tops One small container per team to represent the fishing vessel
Basic Instructions	<ul style="list-style-type: none"> ● Each team has the role of a fishing company ● Each team's goal is to maximise the number of fish for itself ● The ocean can support a maximum of fifty fish
Open Source?	No. The game, along with a series of great systems-thinking games can be found in the book 'The Climate Change Playbook: 22 systems thinking games for more effective communication about climate change' Book can be bought here.
Date Played?	23 March 2018
Key Lessons	<ul style="list-style-type: none"> ● The game is a fun way to learn about limited resources and co-planning ● It can also be a powerful tool that can steer discussions around the importance of a Blue Economy ● An engaging and interactive facilitator is key

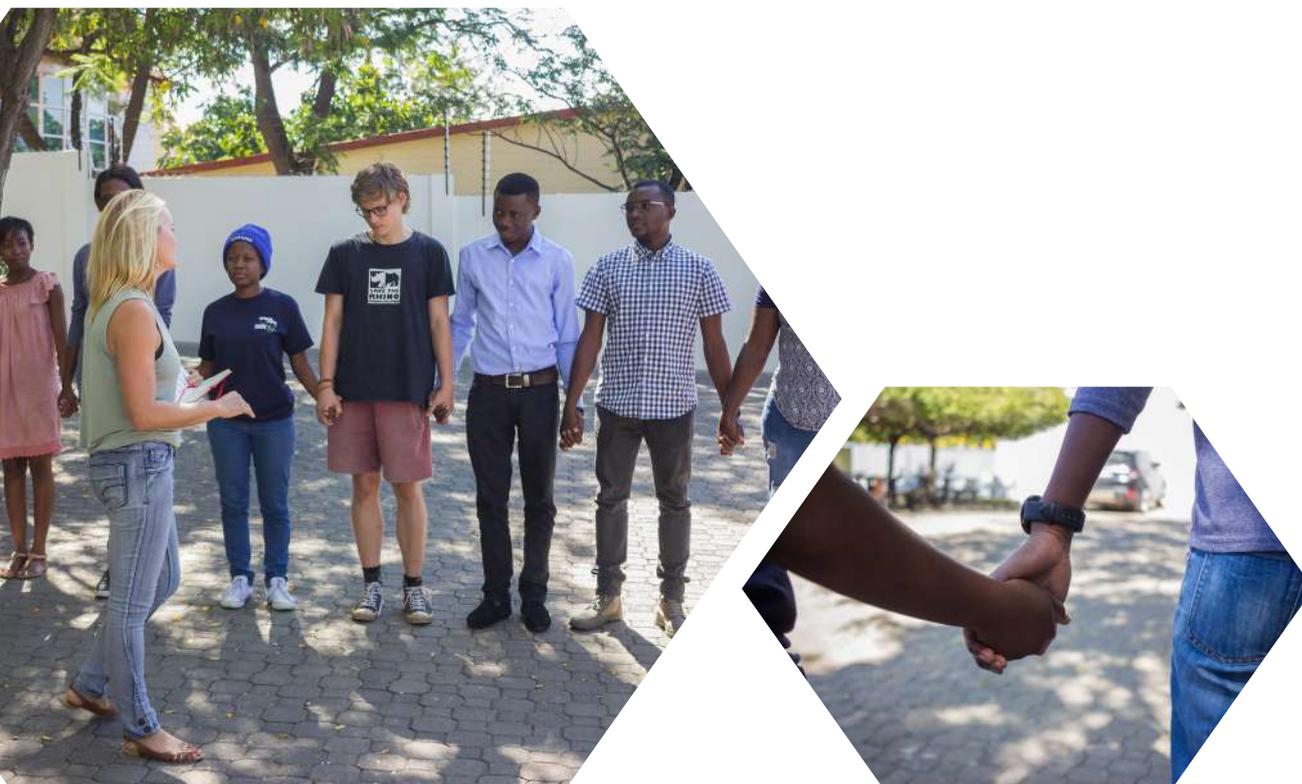


⁶ See footnote 1.

⁷ <https://www.amazon.com/Climate-Change-Playbook-Effective-Communication/dp/1603586768>

3. THE PRIVILEGE WALK

About	Participants role-play an individual and are asked to take a step forward based on a yes or no question asked by the facilitator. The game gets participants to understand the ways in which society privileges some individuals over others
Which SDGs	Goal 1 (End poverty), Goal 3 (Good health), Goal 4 (Quality education), Goal 5 (Gender equality), Goal 8 (Decent work and economic growth), Goal 10 (Reduced inequalities)
Benefits	<ul style="list-style-type: none">● Deepen participants' empathy and raise awareness of privileges and inequalities● Trigger discussions around economic inequalities and the way forward to inclusive economies
Created by	Unknown (many sources)
Type	Role-play individual
Space	Best to be played outside where there is enough space for participants to form a horizontal line.
Materials needed	Role cards per participant adapted to country or society context (we designed ones specifically for Namibia)
Basic Instructions	Role cards per participant adapted to country or society context (we designed ones specifically for Namibia)
Open Source?	Yes, and there are many variations how you can play. We adapted ours with our own questions
Date Played?	27 April 2018
Key Lessons	<ul style="list-style-type: none">● This game can be very powerful and forces deep reflection, especially if the debrief and overall facilitation is done properly● It can be contextualised to speak to different issues affecting society● Facilitator needs to be well-trained and sensitive to group dynamics This is because the game can push some people to an edge of their comfort zone (An edge in facilitator language means an uncomfortable space that can either change someone's mental mode/world view or make them shut off emotionally)



⁸ Email justine@progress-namibia.com for set of basic facilitation notes for the Namibia-specific game.

4. COMMUNITY-BASED DECISION MAKING GAME

About	Participants play the role of decision makers particularly city councils and make decisions that will impact over 400 000 people living in Windhoek
Which SDGs	Goal 8 (Promote inclusive employment and decent work for all) & Goal 6 (Ensure access to water and sanitation)
Benefits	Participants explore the influence of politics and economics on the environment and the game trigger discussions around redefining development considering the protection of our environment
Created by	Namib Desert Environmental Education Trust (NaDEET)
Type	Role-playing simulation game
Space	Best to be played indoors, were there is enough space to form various groups
Materials needed	Role cards per group adapted to country or society context (The ones came designed specifically for Namibia)
Basic Instructions	<ul style="list-style-type: none"> ● Each group represents various city council ● Groups read the introduction to a scenario. At the end of each card, participants are given various choices for how to proceed with the scenario ● Groups discuss which choice is best and ask the facilitator for that card ● The game ends when each team has worked through the scenario with their team's choices
Open Source?	No. The whole concept of the game was given to us by the NaDEET team
Date Played?	25 May 2018
Key Lessons	<ul style="list-style-type: none"> ● The game is a powerful tool that can effectively illustrate the importance of integrated decision making ● It further shows the interconnectivity of environmental, social and political systems ● For effective discussions, there needs to be professionals involved in environmental impact assessments to help steer discussions



⁹ <http://www.nadeet.org/>

¹⁰ Email vkeding@nadeet.org for the game concept and materials to print

5. POVERTY CHALLENGE GAME

About	The Poverty Challenge takes game is a simulation game that takes place in six areas, By representing families living in rural communities in these areas , players experience how changing to a more sustainable way of life can help to break the cycle of poverty. The activities of the game – collecting water, negotiating with market traders, disasters (chance cards), and training with NGOs (sustainability tokens) – have parallels in the real world
Which SDGs	Goals 1 (End poverty in all its forms everywhere), 10 (Reduce inequality within and amongst countries, Goal 2(End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Benefits	The Poverty Challenge helps players understand the issues surrounding rural poverty and sustainable development and generates discussions about sustainable development and other global issues in a fun and informal way
Created by	Christian aid
Type	Role-playing simulation game
Space	Best to be played indoors, were there is enough space to form various groups
Materials needed	Flip charts Sack templates, role cards, sustainability tokens, water buckets, habitat sheets, market traders' record sheets, training cards and chance cards (These are already provided for are ready for photocopying)
Basic Instructions	<ul style="list-style-type: none"> • Each group of participants takes up the role of a family living in the rural areas of Namibia • Each team's goal is grow crops, collect water and sell their harvest to the local traders •The local traders buy the harvested crops from the families and an NGO provides training to the families
Open Source?	Yes, Facilitation materials can be found here
Date Played?	29 June 2018
Key Lessons	<ul style="list-style-type: none"> ●The game can make participants experience the challenges affecting small-scale farmers in the rural areas ●The games requires a satisfactory number of participants of about 10 or more to run effectively ● Requires a lot of materials and thus, preparations should be done in advance ● Facilitator must be well trained to ensure effective time management and steer in-depth dialogue accordingly



6. SHOP TILL YOU DROP

About	Participants see how different levels of income affect their environment and that both poor and rich people affect the environment in one way or another. Participants get different amounts of cash and are allowed to go and do their monthly shopping by the shopkeepers
Which SDGs	Goal 12 (Ensure sustainable consumption and production patterns)
Benefits	<ul style="list-style-type: none"> ● Promote sustainable consumption and production patterns ● Demonstrate wealth inequality among people and the potential negative role of consumerism on society
Created by	NaDEET
Type	Role-play individual
Space	Best to be played indoor where there is enough space for participants to form various groups and move around
Materials needed	<ul style="list-style-type: none"> ● Game money, envelopes (wallets), "NaDEET Shopping Complex" sign, 7 shop signs, shopping cards per item to buy, large printed sign of different items available for purchase, 7 half milk cartons for items at shops, pre-stick, signs with economic status and plastic sandwich bags
Basic Instructions	<ul style="list-style-type: none"> ● Participants are given different amounts of money to go shopping ● They must first purchase necessities and with any money left over they may then purchase something of luxury discussion of inequality will follow the activity
Open Source?	No. The game is owned by NaDEET
Date Played?	27 July 2018
Key Lessons	<ul style="list-style-type: none"> ● The game is a fun way demonstrating the inequality of wealth among people and to demonstrate the potential negative role of consumerism on society and the environment ● Great tool to use when teaching about capitalist systems and consumerism ● Requires a spacious venue for easy mobility



¹² See footnote 11.

7. ARABLE LAND

About	Vanishing resources, like arable land, are a commonly shared concern globally, although most of us have not internalised this concern. This game can lead a group through a shared experience in which they confront the consequences of over-exploitation of such a resource. It helps illustrate some basic principles governing innovation and opinion change in groups and can provide a metaphor that is relevant to situations that arise when resources become inadequate to support the habitual way of doing business. It also encourages long-term thinking
Which SDGs?	Goal 15 (Life on land)
Benefits	<ul style="list-style-type: none"> ● Understanding of shared resources, and different management of such ● Thinking critically and out of the box ● Encourages basic systems thinking ● Encourages long-term thinking
Created by	Dennis Meadows, Linda Booth-Sweeney and Gillian Martin-Mehers
Type	Exercise-related game
Space	Best to be played outside where there is enough space for participants to move around and jump into loops.
Materials needed	Rope cut in sections and made into loops, enough space to roam
Basic instructions	<ul style="list-style-type: none"> ● Loops are placed on ground ● Each participant needs to find a new space in a different loop every time the facilitator says 'move', every time the participants move a loop is taken away
Open source?	No. The game, along with a series of great systems-thinking games can be found in the book 'The Climate Change Playbook: 22 systems thinking games for more effective communication about climate change. Book can be bought here
Date played	24 August 2018
Key lessons	<ul style="list-style-type: none"> ● The apple demonstration in the game is important, especially when you want to illustrate how much little arable land we have left. ● The game needs at least support of two co-facilitators/helpers ● More than 25 people and the debrief is not as deep - debrief was really important here and it was nice to have a slightly smaller group



¹³ <https://www.climateinteractive.org/programs/world-climate/>

8. THE PAPER BAG GAME

About	Participants role-play family groups struggling to survive in the current economic system. Participants make paper bags from newspapers and sell to the shopkeeper to make an income
Which SDGs	Goal 1 (Ending poverty in all its forms everywhere and ensuring inclusive and quality education for all and promoting lifelong learning) & Goal 8 (Promote wellbeing, employment and decent work for all)
Benefits	Participants understand the pressures of trying to survive in an economy with massive unemployment and no social security Trigger discussions around promoting wellbeing and decent work for all
Created by	Christian aid
Type	Group role-play and simulation
Space	Best to be played outside where there is enough space for walking in a horizontal line.
Materials needed	A lot old newspapers and paste. The rest of materials and tools available (Paper Bag presentation, how to make the bag, introduction to the game & worksheet) link in footnote 6. (We Contextualised the game to informal settlements in Windhoek, Namibia)
Basic Instructions	<ul style="list-style-type: none"> ● Each group has the role of a family living in the informal settlements of Windhoek ● Each team's role is to make as many paper bags as possible to sell to the shopkeeper ● Teams work out monthly earnings using a provided worksheet
Open Source?	Yes, a complete set of facilitation and game materials can be found here
Date Played?	21 September 2018
Key Lessons	<ul style="list-style-type: none"> ● The game requires a lot of newspaper ● Great tool to use when steering discussions around innovation, entrepreneurship and business creativity ● Game is a powerful tool which allows participants to feel the reality facing many people in the current economic system and unequal society. They can only reflect well if the debrief and overall facilitation is done properly. ● Facilitator needs to be well-trained and sensitive to group dynamics



9. BUILD A SOLUTION

About	Participants role-play communities living in a city affected by natural disasters. In an attempt to adapt to the severity of the natural disasters which are expected to worsen over time, each community must build the tallest and strongest building which is resistant to storms and flooding.
Which SDGs	Goal 12 (Ensure sustainable consumption and production patterns) Goal9 (Build resilient infrastructure, promote sustainable industrialisation and foster innovation)
Benefits	The game allows participants to explore innovation to facilitate sustainable and resilient infrastructure development as well as enables them to understand the importance for quality, reliable, sustainable and resilient infrastructure.
Created by	Progress Namibia & National Youth Coalition on Climate Change
Type	Group role-play and simulation
Space	Best to be played in door where various participants can form family groups
Materials needed	<ul style="list-style-type: none"> ● Different wood off-cuts, cards, prestick , pieces of box materials, sticks , straws , clay and any material that can form part of building materials.
Basic Instructions	<ul style="list-style-type: none"> ● Each group has the role of a community trying to build a resilient and sustainable building for 2 years. ● Each team's role is to build the tallest and strongest building as possible. ● Any falling peace from the building will results to loss of lives ● Chance cards will be distributed to the groups to make their work easier or much difficult. ● At the end of the year, teams work out how many lives lost and properties damaged.
Open Source?	No. The whole concept of the game sits with Progress Namibia and the National Youth Coalition on Climate Change
Date Played?	26 October 2018
Key Lessons	<ul style="list-style-type: none"> ● The game is a fun way demonstrating the impacts of natural disasters on infrastructure and the need for sustainable and resilient infrastructure ● Requires a lot of materials to cater for all groups ● Requires a practitioner with extensive background in infrastructure to enhance discussions



10. WORLD CLIMATE GAME

About	Simulation of the UN climate change negotiations for groups. Players take decisions on climate change issues that have direct impacts. A computer model is used to rapidly analyze the results of the negotiations
Which SDGs	Goal 12 (Ensure sustainable consumption and production patterns)
Benefits	Build climate change awareness Experience political dynamics that emerge in UN climate negotiations Understand trade-offs between certain types of economic growth and climate change impacts Understand the consequences (through finding out how their proposed policies impact the global system in real time - using the climate model tool)
Created by	MIT and Climate Interactive
Type	Group role-play and simulation
Space	Best to be played in door where various participants can form family groups
Materials needed	Materials and tools are available for download here (climate model, facilitator notes, country notes, etc)
Basic Instructions	<ul style="list-style-type: none"> ● Each group is responsible for a negotiating party (e.g. EU, Unites States, Other developed nations, China, Developing Nations, etc) ● Each group needs to negotiate for best possible outcome for its group ● Each decision per group is tested on the C-roads model (computer model)
Open Source?	Yes, a complete set of facilitation and games materials, as well as the download for the computer model, can be found here for free.
Date Played?	23 November 2018
Key Lessons	<ul style="list-style-type: none"> ● Game successful and recommend it as a strong awareness tool ● The game requires larger number of people to make it more interactive as a larger group means diverse groups represented in the negotiations. ● More impact is made when (as the facilitation guide suggests) there is a role-play of privilege between the groups (e.g. like giving the developed nations better snacks, water, operating space - as is the reality with differing budget and negotiating abilities at the real UN negotiations) ● Additional time required for an effective in-depth session



¹⁶ <https://www.climateinteractive.org/tools/c-roads/download-c-roads-world-climate/>

KEY LESSONS FROM THE GAMES FOR THE SDGS

After two years of successfully hosting the games for the SDGs, several key lessons were documented to improve the whole process and to ensure the games significantly managed to increase the impact. The following summaries the key lessons learnt through the whole process:

1. Need to make the games mobile

There has been a growing interest from universities as well as various schools to host the games with students and learners. This year already, we have received quite a diverse number of school learners who have enthusiastically shown interest to have the games run at their respective school.

On the 17th of October 2018, three of the games were hosted with about 150 young people from all spheres of the country as part of the Youth for Global Goals Conference which was aimed at introducing the SDGs to young people.

In November this year, the Department of Architecture and Spatial Planning from the Namibian University of Namibia had requested us to help the students present their research topics to community members through interactive sessions. On the 19th of November, two of our games were used to steer discussions around the feasibility study of urban agriculture in Farm Mix and the provision of adequate water and sanitation facilities in the informal settlement of Havana.

2. More strategic advertising to increase communication and engagement

We have been using our social media pages and those of our key partners to advertise the games (e.g. The Namibian Youth Coalition on Climate Change's Facebook page). Some of the invitations were disseminated via email to previous participants as well as to various schools and tertiary institutions'. A Facebook page specifically for the games was created but requires boosting to increase followers and make provision for constant engagement, particularly around conversations and discussions on the SDGs. Photographs and videos of each game session should be taken and shared on the social media platforms accordingly. Suggestions were done by key partner organisations to provide possible training on social media communications to key partners.

3. Measuring progress and impact quality versus quantity

The debrief of each game strongly enhances the impact of each game. The impact that the game gets to make, is high in nature, even if the numbers are small. Most participants returned to the games, and some had emotional and deeply connected experiences (what we in the facilitation world call 'edge work' where a participant goes to an uncomfortable space, the 'edge' in order to have a change in mental model/world view). For this to work, the series needs to be intimate and reach participants at a very personal level.

Despite the above observed impacts, progress and impact could be enhanced through interviewing participants after each game to get their deep reflections on impact of each game. Feedback videos should also be recording after each game played.

4. Games needs more value addition

There's a need to develop new games to avoid repetition of some of the games to those participants who have been attending regularly. The "Build a Solution" game was the only new game developed for the Youth for Global Goals Conference that took place in November 2018. New games to be developed should also try to trigger discussions around what the world would look like if and when all the SDGs have been achieved. Consideration should also be given to the possibility of making some of the games digital to enhance outreach to many young people from all grassroots.

5. De-brief session is an essential part of the gaming session, this needs strong facilitation skills

While the introduction to the SDGs, and the game itself, are important and particularly the game is interactive and a fun way to learn, the debrief is essential to have a shift in mental model/world view and self-reflection. The debrief needs a lot of preparation, and during it needs to be set up in a safe space with specific facilitation techniques (ideally the facilitator should have some experience with Mindell's 'Deep Democracy' Theory).

WAY FORWARD

The Hanns Seidel Foundation has allocating funds in order to continue the collaboration into 2019. About six games will be hosted next year and time will be invested in the research and development of two interactive civic education games on effective governance and democracy.

The organisational structure of the games process next year will change in order to make provision for youth ownership of the process. The Namibian Youth Coalition on Climate Change has been selected to take ownership of coordinating and hosting the games, in conjunction with the initial key partners. A training of trainers will be conducted in the beginning of 2019 with 10 young people who will be running the series of games next year.

¹⁷ <http://www.deepdemocracyinstitute.org/deep-democracy-explained.html>, a good book for facilitation of debriefing techniques and discussing difficult topics is Smit, H. The Depth Facilitator's Handbook. Transforming Group Dynamics. 2009. Moonshine Media.