Sustainability of interventions is one of the essential areas of focus in international development programs. Programs that include training, and contain specific learning objectives, try to find practical, effective, and sustainable tools and methods to transfer the required knowledge to their target community. Studies show that digital serious games have the potential to be one of these tools. The term *Serious Games* was coined by Clark Abt:

> Games may be played seriously or casually. We are concerned with ‘Serious Games’ in the sense that these games have an explicit and carefully thought-out educational purpose and are not intended to be played primarily for amusement. This does not mean that serious game is not, or should not be, entertaining. (p. 9)

Dörner et al. argue that serious games are created with two intentions: 

1. for entertainment, and 
2. for achieving at least one additional goal. They call these additional goals as “characterizing goals” (p. 3). In this paper we know them as **learning objectives**.

Digital games have the potential to be called “a revolutionary medium” (p. 2) which can help learners to gain knowledge and skills while providing fun moments for them. As An and Bonk argue, the first decade of the 21st century was a turning point in online learning environment and games and along with them digital games have been taken into consideration by a growing number of scholars. Whitton and Moseley advise developing digital game-based education as a need for use of educators. They bring different samples from extensive case studies and show how theory and practice would be linked much easier with utilizing educational games that can be designed using easily reachable and low-end technologies. As Bergeron observes, serious games might be “the most effective means of safely learning skills and attitudes” (p. 68), and there is a considerable amount of evidence that shows learning through games may last longer. These studies and results could particularly be helpful for development projects and the programs that focus on social change. These studies and results could particularly be helpful for development projects and the programs that focus on social change.

### Participatory Game Design

In recent years, there has been an increasing number of studies on engaging participants in the actual design of a serious game or what Simonsen and Robertson call **Participatory Design** (PD). The main concern of PD is to engage the participants, who will be affected by the designed technology, in co-creating process of the product to make it more responsive to their needs. One of the key ideas here is that “disempowered user groups should be empowered, and that diverse knowledge should be integrated” (p. 76).
Dodero and Melonio argue that a number of stages should be taken into consideration while designing a game, including “(1) the analysis of the goal of the game and a first ideation of the high level concept of the game, (2) game conceptualization and (3) game prototyping” (p. 42). In Participatory Game Design (PGD) these stages create opportunities for participants and stakeholders to be engaged in game design process.

## SGBV AS A SERIOUS ISSUE

### IMPORTANCE OF ADDRESSING SGBV IN ATVETs

Sexual and gender-based violence (SGBV) is a global concern affecting the overall well-being of millions of women in the world. Among the countries included in the WHO Multi-Country Study of Violence Against Women, Ethiopia has one of the highest rates of SGBV.

- The Ministry of Women, Children and Youth Affairs in Ethiopia indicated that 50 to 60% of women experienced GBV in their lifetime.
- UNFPA statistics show that 85% of reported rape survivors are under the age of 18.
- In the same study, over 35% of ever-married women said they had experienced physical, emotional, or sexual violence from their husband or partner.

Specifically, studies show the high prevalence of various SGBV related issues in post-secondary institutions, including rural Agricultural Technical Vocational Education Training (ATVET) colleges.

In a study conducted in Awassa, Ethiopia, more than one-third of 1330 female university students had experienced gender-based violence. It is essential to understand that the consequences of SGBV directly affects girls and young women’s professional, social, and individual life and indirectly affects the country’s human development and sustainable development goals.

ATVETs have unique features, which make students particularly vulnerable. For example, many of the students attending the ATVETs come from rural contexts and are thus facing unique cultural challenges in transitioning from rural to non-rural spaces. Further, students attending the ATVETs have exited high school after completing grade ten, so they are often living independently away from home for the first time at the age of 15 and 16. Given the unique competency-based and practice-oriented features of the agricultural curriculum, students must often travel back and forth to demonstration sites that are difficult to monitor to keep students safe. Chronic underfunding of ATVET institutions results in poor infrastructure for cafeterias, dormitories, and health care which we know are vital areas for maximizing student safety. There is clearly a need for more up-to-date data on the dropout rate for young women in ATVET Colleges. While there may be many factors, the climate of safety and security is likely to be a key one.

### IMPORTANCE OF AGRICULTURE COLLEGES IN THE CONTEXT OF COMBATING SGBV

Agriculture forms the base of the economy of most East African countries. The most populous landlocked country in the world, Ethiopia, with its 88 million inhabitants, relies on agriculture for 80% of the total employment and 84% of exports.

Ethiopia’s Ministry of Agriculture (MoA) states that although various policies and legal measures have been taken at national and international level in response to the prevailing gender inequalities, yet, the gaps between the progress and the need for achieving meaningful results remains to be enormous. The Gender Mainstreaming Guideline, published by MoA, shows that the approaches have not been as practical as they should have been. Thus, given the low level of impact that various measures have had, the need for adopting different approaches has become imperative.

It is key to develop Gender Transformative Approaches which explicitly challenge gender norms. Women provide a considerable portion of the agricultural labour in Ethiopia; however, their contributions often go mostly unrecognized, and their access to resources and community participation is restricted. Worse, a large number of women experience physical, emotional or sexual violence. Only half of the girls, who enroll in primary schools, ever make it to Grade 5.

Education is a basic human right, and gender equality is fundamental to its full realization. In this regard, the Government of Ethiopia promotes gender equality in and through education to ensure that women and men, female and male students have equal access to learning opportunities, as well as fair treatment in the learning processes, equitable outcomes and advancement in all spheres of life.

Therefore, addressing SGBV, specifically in the agriculture sector in Ethiopia, has a substantial advantage for equity in the economic, social and political spheres as well as achieving meaningful and sustainable development result. In the Ethiopian context, the links between agriculture development and gender suggest a more significant implication on poverty reduction and environmental sustainability. Women’s roles are critical and necessary for all aspects of development.
HOW A GAMING APPROACH CAN HELP

Ethiopian ATVET instructors often experience various restricting conditions, which prevent them from playing an effective role in creating a safe and SGBV-free learning environment in their colleges. These restricting situations can include absence of resources, lack of training sessions, and socio-cultural barriers for female instructors. This condition calls for a new, accessible, and self-educating tool that can support instructors. Taking a gaming approach and developing a serious game seems to be a feasible, effective, and sustainable way to support ATVET instructors to learn about strategies that they can use on campuses to prevent SGBV.

WHAT IS MELA?

Mela is a serious game, that has been attached to the Agricultural Transformation Through Stronger Vocational Education (ATTSVE) Project. The ATTSVE project aims to support Ethiopia in entering a market-focused agricultural system while fostering gender equality, diversity, and inclusiveness. Implemented over a period of six years (2014-2019), the ATTSVE project is designed to enhance the capacity of the Ethiopian ATVET system to prepare skilled, competent, and technical graduates. Mela is designed to be a self-educating tool for ATVET instructors to address SGBV. The aim is to create the real-life situations for instructors and transfer the knowledge of some strategies that they can use in their classes or on campus to contribute to decreasing the SGBV incidents or increasing the gender equality.

STORYLINE OF MELA

Mela is an Amharic term, which means “Find a Solution.” The overarching story in Mela is very realistic. It starts at the beginning of an academic year in an ATVET college. The instructor goes to the class and learns about her/his new students. After running the first class, the instructor gives students an assignment for the next sessions, and the story continues. During different types of academic activities, the instructor faces some situations, where she/he needs to decide among a few options.

All the scenarios are based on real situations that come from participatory workshops, group discussions and research interviews as well as previously published documents on SGBV in post-secondary institutions. The scenarios are presented across five chapters/levels. In each level, decisions become more challenging in comparison with the previous chapter/level. At the end of the academic year, the instructor observes the result of his/her decisions in student’s grades as well as his/her “professional” or “personal” scores and the number of certificates that he/she can collect.

SPECIAL FEATURES OF MELA

Mela Certificates

While playing the Mela game, depending on their decisions and the number of times that they play, a player can get the maximum of 22 certificates in different topics. This is one of the feedback mechanisms that awards player for their contribution in addressing SGBV issues of their college. Below are some examples of the certificates:

<table>
<thead>
<tr>
<th>Certificate Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Leadership Supporter</td>
<td>Gender Responsive Advocate</td>
</tr>
<tr>
<td>Gender Bias Breaker</td>
<td>Conflict Resolution</td>
</tr>
</tbody>
</table>

Educational Resources within Mela

In the bookshelf of the player in the Mela game, there are 36 PDF documents, including research studies, reports, guidelines, toolkits that all are related to gender-based issues, specifically in Ethiopia. The resources have been published by different organizations (including the government of Ethiopia). The player has access to all these documents throughout playing the game. These are detailed, reliable, and accessible documents for the player if they want to learn more about a specific gender-related topic.
ABOUT PARTICIPATORY GAME DESIGN IN CREATING MELA

Mela was developed in a participatory process. In this method, the data were gathered from the college instructors, as the end-users of the game. Following four phases show the details of our participatory methodology.

PHASE 1: INTERVIEWS & CELLPHILMS

In the first phase, the researcher (Hani Sadati) visited the four ATVETs (Maichew, Nedjo, Wolaita-Sodo, and Woreta) and interviewed five instructors in each college. He also administrated a one-day cellphilm (cellphone + video) workshop in every college for the same instructors, who participated in the interviews. The goal of Phase 1 was to collect data mainly on two topics:

a. instructors’ potential role in addressing SGBV issue in the colleges, and
b. their limitations and barriers in fulfilling these potential roles.

PHASE 2: PARTICIPATORY GAME DESIGN WORKSHOP

The second phase included organizing a participatory game design workshop with the participation of ATVET college Gender Focal Persons and Language Focal Coordinators. Most of the participants were the same as Phase 1 participants. Fifteen ATVET instructors attended this two-day workshop, learned about educational games, and step by step developed stories that can be used in a digital game, aiming to address SGBV in ATVETs. The ideas that were developed in this workshop inspired game designers in developing Mela. The project’s game development team also assisted in facilitating the workshop.

PHASE 3: DEVELOPING THE PROTOTYPE AND THE GAME

The third phase was designed to develop the prototype and then the actual game. In collaboration with a game development team in Addis Ababa, who came together under the D5gamecon group, the current version of Mela was developed in two parts:

1. A prototype of a game was created;
2. After running several prototype-test sessions and collecting feedback, the actual game was created in five levels.

Mela has been introduced in several game-test sessions in Montreal and in Addis Ababa.
PHASE 4: FINAL GAME-PLAY SESSION, SURVEY, GROUP DISCUSSION

It is essential to know how the instructors think about the effectiveness of Mela as an educational tool and receive the final feedback from them. Therefore, Phase 4 was dedicated to data/feedback collection specifically from the ATVET instructors. The data in this phase came from individual questionnaires and group discussions that instructors had after playing each level of the game. This data is used to finalize the game and make it as compatible with ATVET settings as possible.

Cellphilms’ Role in Participatory Game Design

The cellphilms produced by participants in Phase 1 (see Table 1) show some of the potential roles that instructors can play to address SGBV in their colleges. Also, one of the videos (Video 3 below) shows some barriers that exist among college instructors and prevent addressing SGBV issues accurately. The cellphilms provided excellent locally-based material (SGBV issues, stories, and college environment for visuals) to be used in the game design phase.

<table>
<thead>
<tr>
<th>TITLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Supporting Survivors</strong></td>
<td>In the college computer lab, a male student harasses a female student verbally and physically. She leaves the lab with anger. An instructor notices that she is distressed and asks her about the issue. Once the instructor finds out what happened, he helps the student to meet the college Discipline Committee. They follow the issue by reconciliation meeting. The male student learns that his act was sexual abuse. He promises not to repeat. This cellphilm tries to inform instructors of their potential role as an active bystander and female student’s advocate.</td>
</tr>
<tr>
<td><strong>2. How to Report GBV</strong></td>
<td>On an ATVET campus, a male student verbally harasses a female student, who is on her way to a class. The female student runs away from the perpetrator, but she looks disappointed. An instructor sees her, asks about the problem, and after learning what happened accompanies the female student to the gender club to report the incident.</td>
</tr>
<tr>
<td><strong>3. Lack of Instructor’s Commitment to Respond for GBV Problem</strong></td>
<td>Two students go to the instructor’s office regarding a gender-based violence issue that happened to a female student. The instructor was not at the office and students wait for him to come. After a while, the instructor comes to the office and students try to share their concern, but the instructor acts like he doesn’t have enough time to focus on the issue. He leaves the office and asks the students to come back later. This cellphilm tries to address the lack of commitment and sense of responsibility among some instructors regarding SGBV issues of their college.</td>
</tr>
<tr>
<td><strong>4. Providing Advice</strong></td>
<td>A male student commits verbal violence against a female student in the class and continues while the female asked him to stop. After the class, the female student goes to the instructor’s office and reports the issue. The instructor calls the male and female together to his office and explains why the male student’s behaviour was wrong. Then the instructor asks the male student to make an apology to the female, and he does.</td>
</tr>
<tr>
<td><strong>5. Effect of Early Marriage on Female Students in ATVET College</strong></td>
<td>A pregnant female student goes to an instructor to get some help/advice on the problems that she faces on campus due to her pregnancy. The instructor advises her to go to the Gender Club, explaining about the facilities that they provide to females and particularly pregnant students. The student goes to the Gender Club and learns about the Waiting Room—a room that they can get rest during their presence in the college. The second part of the cellphilm shows that the student is in a class with her child, and an instructor provides her with a special tutorial class. This class is to compensate for the classes that she missed during her maternity leave.</td>
</tr>
<tr>
<td><strong>6. Rural Female Student and Communication</strong></td>
<td>In a class at ATVET college, the instructor notices that a female student, who comes from a rural background, does not participate in the class due to shyness. After the class, the instructor (takes the counselling role and) gives some pieces of advice to the student to not feel shy in the class and to develop communication skills. In the next class, the female student shows more participation. Also, the female student gets the courage to report a sexual abuse incident in the class, which results in sending out the male student from the class. Later the final grades of the female student show a significant improvement. The instructor also prepares a small prize for the female student due to her success.</td>
</tr>
</tbody>
</table>

*Table 1: The cellphilm titles and their descriptions; created by instructors of four ATVET colleges.*
How Mela Learning Objectives Were Developed

To prepare the educational material (learning objectives) for this serious game, the researcher used multiple methodologies, including interviews, participatory workshops (cellphilm and participatory game design), and small group discussions. Overall, 20 instructors from the four ATVET colleges participated in the data collection process. During this process, two main questions were answered by the participants:

1. What are the potential roles of an instructor to address SGBV in ATVET college?
2. What are the barriers that stop the instructors in playing those potential roles?

The answers to the above questions helped the researcher to prepare the list of roles that instructors potentially can play to address SGBV in the colleges. This list later helped the game designers to develop more context-related scenarios for the game.

In reply to the second question, instructors referred to different barriers like financial issues and lack of time, but among the barriers, there was also a lack of knowledge about SGBV concepts and some specific roles that an instructor can play in the college. Therefore, the learning objectives of Mela were designed to raise awareness on some main SGBV concepts and roles that instructors can play to address them. During this process, about 30 learning objectives were created. Following are some examples:

- To teach instructors how to create awareness in the college regarding females’ abilities
- To teach instructors how to encourage female students to report SGBV incidents

A FEW WORDS ON GAME MECHANICS

Five different levels have been designed in the game mechanics, accompanying with an overarching story with about ten characters (five students and five college staff/instructor). Inside the overarching story, several sub-scenarios in multiple branches have been developed at each level, which help in delivering the learning objectives.

The game’s feedback system has been designed to show the players their status and whether they are on the right track or not regarding the decisions that they make during the game. In many sections, the player faces challenging situations that they need to make decisions. This means that the player should select between two or more options that either is related to the professional code of conducts, or personal choice. Also, the game mechanics have been designed in a way that the player’s behaviour regarding gender-related issues can affects the students’ grades at the end of each semester. In this way, the player can experience the pedagogical benefits of a gender transformative approach to learning.

WHAT ATVET INSTRUCTORS SAY ABOUT MELA

After the final game-play session instructors filled out a questionnaire regarding how they feel and think about the game. Here are some quotes from participants:

I would play the game again, because I want to recognize all contents related to SGBV issues carefully and to translate it for others as a message.
Mela can advance the knowledge of instructors to be view in different direction specially regarding SGBV.
It is very nice. It has both entertainment and teaching points.

All the 5 levels are good game. It have very important point to build instructor’s capacity, student presentation knowledge.
It is entertaining game; everybody can easily learn the aspect of gender-based impacts without getting boring.
Yes, it is very important to capacity building for preventing SGBV.

It is one way of enjoyment in addition to increase knowledge and as I play again and again, I will understand it better.
The game gives a lot of information for instructors how to help their students in SGBV cases.
The game is so wonderful because it solves SGBV on campus.

To motivate a colleague to play the Mela I would tell them when I play the game I am really changed my mind/attitude based on SGBV than I had before.
All the five levels are good game. It has very important point to build instructor’s capacity, student’s perception, etc.
I am responsible to teach about this game for the concerned body’s.
MELA’S CONTRIBUTIONS TO SUSTAINABILITY IN GENDER-RELATED ACTIVITIES

In the context of participatory visual methodologies once Mitchell and Sommer asked a question:

*What happens when the researchers depart and how the use of participatory visual methodologies can empower participants to continue their efforts beyond the study?* (p. 522)

To answer this question I think one should consider what is left behind in the community after the researcher leaves. What is the real and tangible outcome of the participatory work that people can take in their hand, touch it, interact with it and refer to it when they talk about their experience? The tangible outcome becomes more important when it is considered as a mementom of a collective work, which can reinforce interpersonal connections among participants and the sense of belonging to the community and social well-being.

In our participatory game design process what is left in the community is the Mela game.

In this context, Mela, not only is a self-educating tool, but also can be used as a tool to generate other types of activities that are meant to address gender-based issues of the college. The creativity about how to use the game in a college can be infinite, but here are some samples of what one can do with this game in a college:

**GAME-PLAY SESSIONS**

Organizing game-play sessions by Gender Clubs regularly (probably two times a year at the beginning of each semester) for instructors. ATTSVE Colleges already have been equipped with tablets and computers.

**GAME-PLAY SESSIONS FOR OTHERS**

If the Gender Club has the budget, they can organize game-play sessions for the broader academic community in their region. For example, they could invite other instructors from other nearby colleges or universities.

**CREATIVE WAYS TO USE MELA**

- **GAME-PLAY SESSIONS**
- **GAME SESSIONS FOR OTHERS**
- **MELA CERTIFICATES**
- **FIND GENDER ISSUES**
- **PLAYING MELA ON THE WALL**
- **QUIZ NIGHTS**
- **MELA IN OTHER Contexts**
- **USING MELA RESOURCES**

**MELA CERTIFICATES COMPETITION (HOW MANY CERTIFICATES DO YOU HAVE?)**

During the Mela game, the player has the chance to collect in total 22 certificates like:
- “Active Bystander,”
- “Stereotype fighter,” or
- “Gender Advocate.”

However, it is impossible to obtain all certificates in one run.

The Gender Club can organize a long-term competition (e.g., during a semester) and ask instructors to play with the game and collect the certificates. By the deadline, the winner would be the person who received the highest number of certificates.

**FIND THE GENDER ISSUES THAT ARE ADDRESSED IN THE GAME**

An activity could be to organize sessions and ask participants to play the game and list the gender issues that this game tries to address. The game addresses these issues in different sections, like game conversations, stories, emails, and the options that player need to select. This activity also can turn into a competition.

For example, participants can be divided in multiple groups. They will have a given time to find and make a list of the gender issues that game tries to address. The group with the highest number of issues can be the winner. Another version of this competition can be done to find the learning objectives of the game. This can be even more challenging!

**PLAYING MELA ON THE WALL**

There is a great deal of SGBV-related information inside Mela. One person might miss all the information if they don’t pay enough attention. Therefore, one of the activities could be projecting the game on a wall or screen where several people can see it at once. Although this is a single-player game, people can play it together. This means that they can proceed in the game and wherever they need to make decisions, or wherever they face a new concept, they can discuss and share their ideas about it.

For example, one of the emails in the game talks about “Gender-Based Proverbs” or stereotypes in society, and its harmful effects. In this point, players can think of what the other gender-based proverbs or stereotypes are and how they can lead to SGBV in the society or at the campus.
USING MELA IN OTHER CONTEXTS

Mela was designed with the idea of addressing with instructors the issue of SGBV on ATVET campuses in Ethiopia, and it involved many ATVET instructors in its production. However, the game could have many other applications:

Students in ATVETs

Although the game has been designed for ATVET instructors, it can also be helpful to make it accessible to the students as well. By playing the game, students can learn about the main concepts of SGBV, specifically from the instructor’s viewpoint. They also can learn about the instructor’s responsibilities and student’s rights regarding SGBV issues on the campus. Learning about their rights gives the students (specially females) more self-confidence or courage to speak-up the potential incidents that might happen to them.

Instructors in TVETs focusing on areas other than agriculture

Mela also can be useful for other TVET colleges. Most of the learning objectives in Mela and most of the scenarios that have been created based on the learning objectives are applicable to other college settings. Therefore, Mela can be a self-educating tool also for other TVET instructors.

University instructors across Ethiopia

Literature review shows that universities across Ethiopia are dealing with many of the same SGBV-related issues in their campuses. A few of the Addis Ababa University professors already have played the Mela, and they think that it can be a useful instructional tool for universities as well.

In other areas of sub-Saharan Africa

Literature reviews highlight that many of the same issues of SGBV in post-secondary institutions exist across the region. Mela can be seen as an educational tool for the educational institutions of the whole region.

CREATING ACTIVITIES WITH MELA RESOURCES

Various types of educational resources have been incorporated inside the Mela game that can be used for follow-up activities:

Conversations

Throughout the game, many conversations happen in various scenarios among the game characters.

For example, conversations between instructor and student, and instructor and staff. Some conversations shown in speech bubbles include instructive information for instructors. The content of these speech bubbles could be adapted and used in Gender Club activities.

Emails

The certificates are usually followed by emails that the player receives in their game dashboard. Each email includes detailed information about one important concept that has the potential to increase the player’s knowledge or change their attitudes about SGBV. During the five levels of the game, a player has the potential to get 25 emails in their dashboard. Making quizzes using the information that players get in their emails can be an example of follow-up activity. This can be even organized alongside other informal events also.

For example, one of the emails in the game talks about “Power Abuse” in educational institutions and how it causes SGBV against female students. A quiz might be created, asking people about:

- The meaning of power abuse,
- The statistics around this misconduct,
- What regulations could govern the staff-student relationships, etc.

The answers to these questions are accessible inside the game, but people need to play the game and find them.

Resources (PDF Format)

Besides the certificate feedback system and the emails that a player receives, there are other resources that are reliable and accessible for the player (during the game) if they want to learn more about a specific gender-related topic.

These resources could also be used by Gender Clubs for activities such as workshops. Gender Clubs can choose resources and present a summary of them for instructors or students on different occasions.

QUIZ NIGHTS

Organizing quiz nights on the campus for instructors. These can happen alongside a coffee ceremony or another event. Gender club members can develop some questions out of the game and then organize a quiz night for instructors. During this competition, instructors need to answer the questions by playing the game (maybe just one or two levels). This would be fun and instructional as well.
GROUP ACTIVITY

Practical Ways of Motivating Other Instructors to Use Mela

Total Time: 75 minutes (the duration of the session can be vary based on participants’ availability)

Activity Goal

By involving in this activity participants will learn about four practical methods of motivating their colleagues to interact with Mela game.

Activity Schedule (designed for four groups)

- 10 minutes: Introducing the activity and assigning randomly by facilitator.
- 25 minutes: Each group would work on their scenario and will prepare the requested tasks.
- 40 minutes: Each group has 10 minutes to present their ideas.

The scenarios that will be given to the groups randomly are (see following page):

<table>
<thead>
<tr>
<th>SCENARIO</th>
<th>DESCRIPTION</th>
<th>HINTS/SUGGESTIONS</th>
</tr>
</thead>
</table>
| 1. Mela Workshop for Instructors          | You have been asked to do a workshop in your college to motivate instructors to play the game. You have 20 minutes to come up with the practical ideas of organizing this workshop. Then you will have 10 minutes to present your ideas in a way that other groups also can adopt from your strategies to organize similar workshops at their college. | Think about what is the right time of the workshop.  
  How would you choose the participants?  
  Would you invite males or females or both?  
  How long would be your workshop?  
  What will you present?  
  What are the main topics that you would cover?  
  How would you give instructions?  
  Will you use ATVET tablets/PC?  
  What you will present that motivates instructors to play the game?  
  What parts of Mela would be your focus area? |
| 2. Mela Presentation for Instructors       | You have been asked to do a motivational presentation about Mela and its effects on building the capacity of instructors to address SGBV issues in the college. The target group or audience of your presentation are the college instructors. You have 20 minutes to come up with the practical ideas of your presentation. Then you will have 10 minutes to present your ideas in a way that other groups also can adopt from your strategies to do similar presentation at their college. | Think about when is the right time to do the presentation.  
  How to invite instructors?  
  Would you invite males or females or both?  
  How long would be the presentation?  
  What would be your focus area in your presentation?  
  How can you categorise it?  
  Do you want to use images?  
  Do you want to use some pictures from the game? |
| 3. Mela Presentation for ATVET Administrations | You have been asked to do a motivational presentation about Mela in your college for administrations of four ATVET colleges (Nedjo, Maichew, Soddo, and Woreta). How you would organize your presentation to motivate them to have Mela events in their colleges? You have 20 minutes to come up with the practical ideas of your presentation. Then you will have 10 minutes to present your ideas in a way that other groups also can adopt from your strategies to do similar presentation at their college. | Think about when is the right time to do the presentation.  
  Who will invite? And How?  
  How long would be the presentation?  
  What do you want to focus on in your presentation?  
  How can you categorise it?  
  Do you want to use images?  
  Do you want to use some pictures from the game? |
| 4. Mela Cellphilm                          | You have been asked to create a cellphilm with the topic/prompt: “Mela; how a serious game can combat SGBV?” You have 20 minutes to come up with the practical ideas of making your cellphim. If in 20 minutes you can make a one-minute cellphilm, you are a Cellphilm Master! But if the timing is tight at least you should have your storyboard ready in 20 minutes. | Think about what can be the title of your cellphilm.  
  Where to film (location)?  
  The audience?  
  The scenario or story of the cellphilm? |
WHAT DIFFERENCE DOES THIS MAKE?

Evaluating the impact of SGBV interventions remains an understudied area, especially in relation to long term change and the idea of making campuses safer for young women. Having an impact on the attitudes and behaviours of instructors is key however and questions such as the following can be helpful:

- What counts as baseline data?
- What are the perspectives and views of instructors before and after?
- Is it possible to get buy-in from managers? What are their views?
- What differences are there in relation to reportings of SGBV? Do they change over the time of the intervention?
- Do students themselves experience change?

CHANGING SCENARIOS AND CONSISTENCY

The scenarios might constantly keep changing and this makes problem for the programmer when they work at the same time with game designers and story developers. In addition, and more important, one challenge was to keep eye on the learning objectives to not lose them during the change of scenarios. It is a challenge to keep every element of the game in line with each other. The characters, the main subject of the game, the scenarios, learning objectives etc. should be consistent.

TIME LIMITATIONS IN PARTICIPATORY GAME DESIGN WORKSHOP

A game with multiple levels needs to have multiple scenarios as well, but in a one-day PGD workshop, the time restricts the number of scenarios that participants can develop. In other words, the scenarios that are developed in PGD workshop, might be less than the needed number of scenarios for a game. Therefore, it is recommended that in the pre-PGD steps (e.g., primary data collection stages) the researcher gathers enough accurate data from the community. The accurate and comprehensive data can help the researcher in story developing stages, to build on the scenarios that participants develop in the PGD workshop.

TRANSLATIONS

Initially, the plan was to translate the Mela game into three more local languages (Amharic, Oromo, and Tigrinya) other than English, which is the official language of instruction in post-secondary institutions in Ethiopia. However, some challenges delayed this process.

For example, the length of sentences in one of the languages were much longer than the other languages. This causes a problem when you want to fit the words in speech bubbles or narration boxed. In addition, the right time for translation is another challenge. After creating the first draft of the game, you need to test it, but at the same time, the budget is limited, so it is challenging to spend money to translate a text that might change after the game test. In other words, if you do not translate in the early stages, you will not have feedback, and if you translate in the early stages, you might need to change it at the end. In brief, translating the game text to other languages turned into a severe challenge for us. Our experience in translating some parts of the game also showed that we could not have certainty on the quality of the translations and its wordings. However, in this study, the content is critical and sensitive. We need to make sure that the wording is appropriate, and it will transfer the exact concepts and “learning objectives” of the game. In the end, mostly due to the latter challenges, we decided to have the game only in English.

FUN? IN A SERIOUS GAME ABOUT SGBV?

In serious games it is important that serious content and fun content are integrated to have a good serious game. There are strong indicators that fun can indeed help promote the characterizing goal (learning objective) of a serious game. Prensky separates fun into two components: enjoyment and amusement. But how can fun be incorporated into a game which aims to address sexual and gender-based violence?! This can be a challenge always.

MAKING A CHALLENGE WAS A CHALLENGE

How we are going to make a challenging game that helps for re-playability of the game? How options should be designed that the answers are not obvious? This is another challenge that serious game designers always need to think about it.

THE IDEA OF GAMING IS NOT VERY COMMON IN ACADEMIC SETTINGS

Usually games are considered as an entertainment tool for children. Sometimes serious games are not taken into consideration seriously because adults might not accept them as a serious educational approach.
RECOMMENDATIONS ON SERIOUS GAMES AS SELF-EDUCATING TOOLS

### 1. Serious Games as Self-Educating Tools for Everyone

Although there is a growing body of literature that recognizes the importance of using digital games as an educational tool for students or youth, considering the games as self-educating tools for adults (e.g., practitioners, instructors, managers) needs more attention.

The idea of using serious games as self-educating tools, not only can be applicable in many contexts, it might especially be more efficient in the contexts that regular training is costly and non-convenient for both organizers and participants. In these contexts, serious games could be considered as self-educating solutions.

### 2. Serious Games as Complementary to Other Toolkits/Initiatives

Designing a strategy for sustainability is an essential part of intervention programs that seek to bring a change in a community. As part of these strategies, different types of toolkits are provided for the target groups. Our experience shows that serious games can be one type of toolkit that not only could complement other resources, but also has the potential to involve and gather other types of toolkits together to make one comprehensive recourse of information.

It is recommended resource that in designing serious games, the developers pay attention to the other toolkits and consider how they can create a game that complements the other toolkits/initiatives.

### 3. Serious Games for Addressing Other Topics and Issues

Serious games could be in various genres, like action adventure, a strategy game, or a sports game. So, too the focus areas and topics in creating serious games can be much broader. It can include various socio-cultural and economic issues such as immigrants’ issues in the host/home country, HIV prevention or learning about key aspects of project management. Indeed, any topic that includes a learning process might have the potential to be addressed in a serious game. A few examples in the agriculture sector could include:

- raising awareness on different aspects of environmental issues in agriculture;
- practical methods of income generation;
- value chains;
- awareness creation among farmers about the hazards of pesticide usage.

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**HOW TO ACCESS MELA**

**Mela** is free and accessible for different types of devices that work under Android or Apple operating systems. Once it is available on the Play Store or Apple Store, it will be announced on the game website and its social media, like Facebook.

![Main menu page of the Mela game](beta Version)

www.melagame.com  @melagame

If you have any question regarding having access to the game, please contact the researcher, Hani Sadati:

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WORKS CITED


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