



**Recruiting, Retooling,  
Up-skilling, Profiling and  
Connecting Confident Grassroots  
Innovators in the SADC Region:**

The impact case study of  
IDIN-SADC Consortium





# Background

The IDIN-SADC (International Development Innovation Network – SADC) is a regional consortium co-founded in 2017 by global IDIN members These Hands GSSE in Botswana; Kafue Innovation Center in Zambia; and Twende Social Innovation Center in Tanzania.

It is governed by an Executive Committee (EC) of the above mentioned grassroots innovation ecosystem builders that are based in the SADC region.

The EC veers away from traditional top-down approaches to community development and technology intervention and instead leads a bottom-up movement of grassroots communities who demonstrate interest in innovation. The EC partners with these communities to co-create appropriate technologies that address immediate livelihood challenges, to set up small ventures around these technologies, and to develop innovation centres to continue community-driven innovation work.

We co-developed our open source curriculum and approach to addressing this international development challenge with the Massachusetts Institute of Technology D-Lab (MIT D-Lab) and the Global International Development Innovation Network (IDIN). This methodology is recognised by COSTECH in Tanzania, Botswana Innovation Hub (BIH) in Botswana, National Technology Business Center of Zambia (NTBC), USAID Higher Education Learning Network in USA, USAID Global Development Labs in the USA and OECD. Our approach has been tried and tested in over 15 countries across the globe and has over 1000 active members globally from over 61 countries.

We had tried and tested our approach for 5 years (2013-2017) in the founding member countries of Botswana, Zambia and Tanzania before deciding in 2018 to pilot its scalability across the SADC region with an 18-month long project implemented between 2019 and 2021 in Botswana, Zambia, Tanzania and Namibia, with grant funding from the Finland Ministry of Foreign Affairs through its Southern Africa Innovation Support Programme (SAIS 2) Inclusive Innovation Fund and interest free bridging finance from the Letshego Group.





### Objectives of the Project:

1. To increase our IDIN-SADC services in existing member states (Botswana, Zambia and Tanzania) and grow the grassroots innovation ecosystem in SADC member states.
2. To co-create at least 5 technologies that will help improve community livelihoods in the SADC region.
3. To use our IDIN-SADC methodology to catalyze the grassroots innovation ecosystem in Namibia.

### Targeted Project Activities:

- 51 Build it Training Sessions
- 32 Creative Capacity Building Workshops
- 7 Business Workshops
- 6 Exhibition Displays
- 6 Chapter Meetings
- 6 Exchange Visits
- 7 Innovation Centre Setups
- 50 Consortium Pico grants
- 1 IDDS Namibia 2021 Summit

### Targets of the Project Activities

When we started this 18-month project we had estimated that through our planned activities and a total budget of 138565 Euros.

1. We would recruit, retool, up skill and profile a total of 1845 new grassroots innovators and register a total of 2000 new grassroots innovators;
2. With 75% of them being youth and 55% being women, recruited and selected through 50 new key community partners and organisational partners;
3. Resulting in 138 new working prototypes being co-created and registered;
4. 30 working prototypes being completed to usage;
5. 10 of them being commercializable technologies;
6. With 5 at least selling to one of our targeted local users;
7. Using 6 chapter meetings for our grassroots innovators to meet and support each other;
8. Hosting or attending 6 big exhibitions of grassroots technologies, inviting the general public and relevant stakeholders;
9. Organizing 6 exchanges across 3 SADC country borders;
10. Run 1 2-week International Development Design Summit in Namibia; to recruit, register, retool, up skill and profile new grassroots innovators; co-create and register new grassroots innovators; and

### Targeted Outputs of the Project:

1. Training Reports
2. Prototype Reports
3. Exhibition Reports
4. Chapter Meeting Reports
5. Exchange Visit Reports
6. Innovation Center Reports
7. Financial, Narrative and Technical Milestone Reports
8. IDDS Namibia 2021 MERL Reports

### Targeted Outcomes of the Project:

1. IDIN-SADC members will co-create, collaborate and be more connected through sharing of news, technologies, and lessons learned.
2. People using new technologies and their co-creative design skills to improve their own livelihoods in targeted country contexts of the SADC region
3. New Innovation centre in operation in Namibia





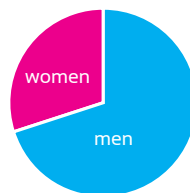
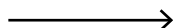
### Achievements on Targeted Project Activities:

1. 51 Build it Training Sessions
2. 32 Creative Capacity Building Workshops
3. 15 Business Workshops
4. 15 Exhibition Displays
5. 15 Chapter Meetings
6. 2 Physical Exchange Visits and 2 Virtual Exchange Visits
7. 7 Innovation Centre Setups
8. 50 Consortium Pico grants

### Achievement on Gender Allocation in Project Activities

1. Activities Used

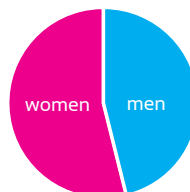
- 51 Build it Training Sessions
- 32 Creative Capacity Building Workshops
- 15 Business Workshops



Gender: 70% men (858/1225) and 30% women (367/1225)

2. Activities Used

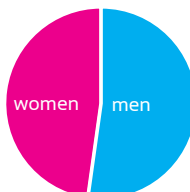
- 15 Exhibition Displays



Gender: 46.18% men (121/262) and 53.82% women (141/262)

3. Activities Used

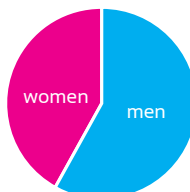
- 15 Chapter Meetings



Gender: 52.48% men (180/343) and 47.52% women (163/343)

4. Activities Used

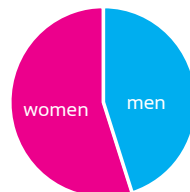
- 2 physical exchange visits and 2 virtual exchange visits



Gender: 58.33% men (7/12) and 41.67% women (5/12)

5. Activities Used

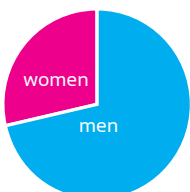
- 7 innovation centre setups



Gender: 45% men (61/135) and 55% women (74/135)

6. Activities Used

- 50 Consortium Pico grants



Gender: 71.63% men (149/208) and 28.37% women (59/208)



### Achievements on Targets of Project Activities:

- Using **92.37% (127,986.88 Euros)** of the total budgeted funds of **138565 Euros** we were able to meet all our set targets with highly significant numbers.

### We were able to:

- Retool, up skill and profile **66.4% (1225)** of the targeted **1845** new grassroots innovators through our training; with **69% (845/1225)** of them being youth and **30% (368/1225)** of them being women; recruited and selected through **76% (38)** of our targeted **50** new key community partners and organisational institutions;
- Resulting in **77.54% (107)** of the targeted **138** new working prototypes being co-created and registered;
- With **176.67% (53)** of the **30** targeted to be completed for use being completed for usage;
- Develop **550% (55)** of the **10** targeted to be commercializable;
- Sell **200% (10)** of the **5** expected to atleast sell to one of the targeted local users;
- Use **15** chapter meetings for **285.83% (343)** of the targeted **120** new and existing grassroots innovators to meet and support each other;
- 727.77% (262)** of the targeted **36** exhibitors host or attend **15** mini exhibitions to exhibit **29.63% (64)** of the targeted **216** grassroots technologies, and engage with **40% (200)** of the targeted **500** general public and relevant stakeholder attendees for feedback and sales.
- Open **7** new innovation centres with **87.1% (135)** of the targeted **155** new members across **3** SADC member states;
- And register **64.2% (1284)** of the total targeted **2000** new grassroots innovators through all our activities across the **4** SADC member states of Botswana, Zambia, Tanzania and Namibia to add them to our existing network of our close to **800** grassroots innovators, **5** key community partners and **3** founding organisational partners in Botswana, Zambia and Tanzania.

## Rural Innovation Centers and Chapters in Botswana



## IDIN-SADC Consortium Innovation Centers





## Achievements on Targeted Outputs of the Project

1. Training Reports
2. Prototype Reports
3. Exhibition Reports
4. Chapter Meeting Reports
5. Exchange Visit Reports
6. Innovation Center Reports
7. Financial, Technical and Narrative Milestone Reports





## Achievements on Objectives and Outcomes:

**Objective 1:** To increase our IDIN-SADC services in existing member states (Botswana, Zambia and Tanzania) and grow the grassroots innovation ecosystem in SADC member states.

**Outcome 1:** IDIN-SADC members will co-create, collaborate and be more connected through sharing of news, technologies, and lessons learned.

**Output 1:** Training Reports

**Indicator 1:** Number of participants confident in design and the basics of business thinking

**Indicator 2:** Number of confident and connected innovators

### Activities used:

- 51 Build it Training sessions
- 32 Creative Capacity Building Workshops
- 15 Business Workshops

**Activities Indicator:** Number of Registration lists

### Purpose of the Activities:

- To register all new grassroots innovators who connected with our grassroots focused regional network of grassroots innovators, students, organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- To identify the gaps available in how our new grassroots innovators connect with our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; innovation centres; countries; and regions.

### Results:

- 20 CCB Workshop embedded Build it training sessions hosted in Botswana; 6 separate Build it training sessions and 10 combined Build it sessions hosted in Zambia; 18 separate Build it training sessions hosted in Tanzania; 4 combined Build it training session hosted in Namibia
- Our target was to run 51 Build it training sessions
- 107.84% of the target was achieved
- 978 new grassroots innovators in were recruited and registered through our build it training sessions
- 597 new grassroots innovators attended our build it training sessions only
- 361 new grassroots innovators in total attended both our build it training sessions and creative capacity building workshops.
- Our target was to recruit and register 1035 new grassroots innovators through our Build it training sessions.
- 94.49% of the target was achieved
- This high achievement shows great progress towards the achievement of our target of having our new grassroots innovators connecting to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.

- This high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.
- 10 combined CCB workshops hosted in Botswana; 10 combined CCB workshops hosted Zambia; 11 Separate CCB workshops hosted in Tanzania and 1 combined CCB workshop hosted in Namibia
- Our target was to have host 32 CCB Workshops for our new grassroots innovators
- 100% of the target was achieved
- 595 new grassroots innovators were recruited and registered through our creative capacity building workshops.
- 234 new grassroots innovators attended our creative capacity building workshops only
- Our target was to recruit and register 655 new grassroots innovators through our creative capacity building workshops.
- 90.84% of the target was achieved
- This high achievement shows great progress towards the achievement of our target of having our new grassroots innovators connecting to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- This high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.
- 10 Business workshops in Botswana; 2 Business workshops in Zambia; 2 Business Workshops in Tanzania and 1 Business workshop in Namibia.
- Our target was to host 7 business workshops for our grassroots innovators
- 214.29% of the target was achieved.
- 308 new grassroots innovators were recruited and registered through business workshops
- All our 308 new grassroots innovators that attended our creative capacity building workshops also attended our business workshops
- Our target was to recruit and register 155 new grassroots innovators through our business workshops.
- 198.71% of the target achieved
- This high achievement shows great progress towards the achievement of our target of having our new grassroots innovators connecting to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- This high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.



- **1225** new grassroots innovators recruited and registered to our regional network to use our co-creative design process, co-create, collaborate and share news and lessons learned through build it sessions, creative capacity building workshops and business workshops.
- Our target was to recruit and register **1845** new grassroots innovators connecting to our network to use our design process, co-create, collaborate and share news and lessons learned
- **66.4%** of the target was achieved
- This moderately high achievement shows great progress towards the achievement of our target of having our new grassroots innovators connecting to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- This moderately high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.
- We learned that there is a moderately significant level of connection of our new grassroots innovators to our regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres, which allow them to use our design process, co-create, share news and lessons learned.
- We now have **38** new registered key community partners and organisational partners. Our target was to recruit and onboard **50** new key community partners and organisational partners. We are quite satisfied with the **76%** achievement of the target. It gives us great confidence that our network will continue to be connected and to connect to use our co-creative design, co-create, collaborate and share news and lessons with the support of these important stakeholders of our effective grassroots innovation ecosystem.
- We now have a total of close to **2000** registered and connected IDIN-SADC Consortium network members that have been directly trained or engaged using our IDIN co-creative design process methodology to technological development and community empowerment across the SADC region in Botswana, Zambia, Tanzania and Namibia. We had a target of having **2500** total registered and connected IDIN-SADC Consortium members. Achieving **80%** of our targeted total number of registered network members is exceptional and gives us confidence that our methodology is well received in the SADC region. We are confident that they will continue to co-create, collaborate, share ideas and lessons learned through our various new and existing platforms and support from our new and existing key community partners, organisational partners

## Output 4: Chapter Meeting Reports

**Output Indicator 1:** Number of meeting participants

**Activities used:** 15 Chapter Meetings

**Activities Indicator:** Number of Registration lists

### Purpose of the activities:

- To register all new grassroots innovators who connected with our grassroots focused regional network of grassroots innovators, students, organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned through our exchange visits.
- To measure the confidence level of our grassroots innovators in continuing to use new technologies and their creative design skills to improve their own lives and the livelihoods of others in rural communities in the SADC region.
- To identify the gaps available in how our new grassroots innovators connect with our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to co-create, collaborate and share news and lessons learned.

### Results:

- **10** chapter meetings were hosted in Botswana; **2** chapter meetings were hosted in Zambia; **2** chapter meetings were hosted in Tanzania; and **1** chapter meeting in Namibia.
- Our target was to have **6** chapter meetings hosted for new and existing grassroots innovators.
- **250%** of the target was achieved
- **343** new and existing grassroots innovators were attended our chapter meetings
- **284** of our new grassroots innovators that attended our chapter meetings had also attended our creative capacity building workshops and business workshops.
- **59** of our new grassroots innovators attended our chapter meetings only.
- Our target was to have **120** new and existing grassroots innovators connect through our chapter meetings.
- **285.83%** of the target was achieved
- This high achievement shows great progress towards the achievement of our target of having our new grassroots innovators connecting to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- This high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.
- We learned that our grassroots innovators mostly connect with our grassroots innovation focused regional network through other grassroots innovators; design and business thinking training sessions; key community stakeholders; organisational partners; chapters; innovation centres; exhibitions; exchange visits; calls for grant applications; using 2G and 3G cell phones; phone calls; and our communications through our facebook pages; facebook groups; whatsapp groups; sms; email, newspapers; radio; television. We also learnt that our grassroots innovators desire to stay connected to our network.
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- Our grassroots innovators have suggested that we consider a cheap and easy access central platform that they can use at their chapter meetings and innovation center meet ups to allow them to access each other; access our services; use our design process; co-create; collaborate; share news and lessons learned; advertise their simple technologies or community businesses; access suppliers of material for their simple technologies or community businesses; access funding and financial services for their simple technologies and community businesses; access buyers for their simple technologies or community businesses.; and sell.
- We now have a total of **30** active chapters under our IDIN-SADC consortium network spread across Botswana, Zambia, Tanzania and Namibia.
- This high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.
- **13** new and existing grassroots innovators from Zambia, Tanzania and Botswana met virtually and physically to use our co-creative design process, co-create, collaborate, and share news and lessons learned.
- Our target was to have 18 new and existing grassroots innovators from Botswana, Tanzania, and Zambia meet physically to use our co-creative design process, co-create, collaborate, and share news and lessons learned.
- **72.22%** of the target was achieved.

## Output 5: Exchange Visit Reports

**Output Indicator 1:** Iterations made on the prototypes

**Activities:** 2 virtual exchange and 2 physical Exchange Visits

**Activities Indicator:** Registration Lists

### Purpose of the activities:

- To register all new grassroots innovators who connected with our grassroots focused regional network of grassroots innovators, students, organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned through our exchange visits.
- To identify the gaps available in how our new grassroots innovators connect with our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres.
- To measure the confidence level of our grassroots innovators in continuing to use new technologies and their creative design skills to improve their own lives and the livelihoods of others in rural communities in the SADC region.
- This moderately high achievement shows great progress towards the achievement of our target of identifying and supporting our committed new grassroots innovators to continue to connect to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- This moderately high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.
- Our grassroots innovation focused regional network Constitution was finalized and adopted; 1 build it instruction teaching was developed and taught by our new and existing grassroots innovators from Botswana, Zambia and Tanzania
- Our target was to have our new and existing grassroots innovators iterate 3 grassroots innovations.
- **33.33%** of the target was achieved.

### Results:

- **2** virtual exchange visits and **2** physical exchange visits to connect our new and existing grassroots innovators in Botswana, Tanzania and Zambia to use our co-creative design process, co-create, collaborate, share news and lessons learned.
- Our target was to have **6** physical exchange visits to connect our new and existing grassroots innovators in Botswana, Zambia and Tanzania to use our co-creative design process, co-create, collaborate, and share news and lessons learned.
- **33.33%** of the target achieved
- This moderately low achievement shows great progress towards the achievement of our target of identifying and supporting our committed new grassroots innovators to continue to connect to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- This moderately low achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.



## Output 6: Innovation Center Reports

**Output Indicator 1:** Number of innovation centres setup

**Activities used:** 7 Innovation centres setup

**Activities Indicator:** Value of Refurbishments, Tools and Material

### Purpose of the activities:

- To recruit and register all new innovation center members who became members of our grassroots focused regional network of grassroots innovators, students, organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- To identify the potential gaps in how our new innovation center members will connect with our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to co-create, collaborate and share news and lessons learned.
- To recruit and register all new innovation centres setup by our grassroots focused regional network of grassroots innovators, students, organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- To identify the potential gaps in how our new innovation centres will connect with our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to co-create, collaborate and share news and lessons learned.

### Results:

- 5 new innovation centres in Botswana; 1 new innovation centre in Namibia; and 1 Innovation center in Tanzania.
- Our target was to launch 7 new innovation centres for our new and existing grassroots innovators in the SADC region.
- 100% of the target achieved
- 9547.63 Euros was used and 7 venues were donated by community partners to setup the 7 innovation centres
- Our target was to use 11688 Euros to set up the 7 innovation centres
- 81.92% of the target was achieved.
- This high achievement shows the significant commitment levels from our key community partners and organisational partners to setup low cost physical spaces where our new grassroots innovators can continue to connect to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- This high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.

- 135 new innovation center members recruited and registered in Botswana, Namibia and Tanzania.
- All our new innovation center members attended both our build it training session and creative capacity building workshops.
- Our target was to recruit and register 155 new innovation center members.
- 87.1% of the target was achieved
- This high achievement shows great progress towards the achievement of our target of having our new grassroots innovators grow in confidence and commitment to use simple technologies and mini business plans as solutions that can improve the lives and livelihoods of rural communities in the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres being more connected through sharing of news, technologies and lessons learned.
- We now have a total of 14 rural innovation centres with 23 Innovation center managers that are registered and supported by the IDIN-SADC consortium spread across Botswana, Zambia, Tanzania and Namibia.

## Output 8: IDDS Namibia 2021 Report

**Output Indicator 1:** Number of International Participants

**Out Indicator 2:** Number of Local Participants

**Out Indicator 3:** Number of Regional Participants

**Output indicator 4:** Number of connected and confident innovators

**Activity planned:** 1 IDDS Namibia 2021 Summit

**Activities Indicator 1:** IDDS Namibia 2021 Monitoring and Evaluation Report

### Purpose of the activities:

- To recruit and register all new grassroots innovators and connect them to our grassroots focused regional network of grassroots innovators, students, organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- To identify the gaps available in how our new grassroots innovators connect with our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres.
  - Results:
  - No IDDS Summit held this year due to Covid 19 Protocols, Travel Restrictions and Disturbances
  - We lost out on recruiting and registering 35 new grassroots innovators (local, regional and international participants)
  - We lost out on an opportunity to connect new members to our IDIN-SADC regional network to the rest of our global IDIN network (IDIN steering committee and International Organizers).



**Objective 2:** To co-create at least 5 technologies that will help improve community livelihoods in the SADC region.

**Outcome 2:** People using new technologies and their co-creative design skills to improve their own livelihoods in targeted country contexts of the SADC region.

**Output 1:** Training Reports

**Indicator 1:** Number of participants confident in design and business thinking

**Indicator 2:** Number of confident and connected innovators

**Activities used:**

- 51 Build it training sessions
- 32 Creative Capacity Building Workshops
- 15 Business Workshops

**Activities Indicator:** Number of Registration lists

**Purpose of the Activities:**

- To recruit, retool and up skill a new pool of new grassroots innovators that are confident to use the design and business thinking skills they have acquired to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.
- To collect data that will help us to profile all our recently recruited, retooled and up skilled pool of grassroots innovators according to their names; gender; age; contact details; skills levels; projects; organisational partners; chapters; and innovation centres.

**Results:**

- **20** CCB Workshop embedded Build it training sessions hosted in Botswana; **6** separate Build it training sessions and **10** combined Build it sessions hosted in Zambia; **18** separate Build it training sessions hosted in Tanzania; **4** combined Build it training session hosted in Namibia
- Our target was to run **51** Build it training sessions
- **107.84%** of the target was achieved
- **978** new grassroots innovators in total attended our build it training sessions
- **597** new grassroots innovators attended our build it training sessions only
- **361** new grassroots innovators in total attended both our build it training sessions and creative capacity building workshops.
- Our target was to recruit and register **1035** new grassroots innovators through our Build it training sessions.
- **94.49%** of the target was achieved
- This high achievement shows great progress towards the achievement of our target of recruiting, retooling, up killing and profiling of new grassroots innovators that are confident to use their acquired design skills and business thinking skills to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
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- **10** combined CCB workshops hosted in Botswana; **10** combined CCB workshops hosted Zambia; **11** Separate CCB workshops hosted in Tanzania and **1** combined CCB workshop hosted in Namibia
- Our target was to have host **32** CCB Workshops for our new

grassroots innovators

- **100%** of the target was achieved
- **595** new grassroots innovators were recruited and registered through our creative capacity building workshops.
- **234** new grassroots innovators attended our creative capacity building workshops only
- Our target was to recruit and register **655** new grassroots innovators through our creative capacity building workshops.
- **90.84%** of the target was achieved
- This high achievement shows great progress towards the achievement of our target of recruiting, retooling, up killing and profiling of new grassroots innovators that are confident to use their acquired design skills and business thinking skills to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- **10** Business workshops in Botswana; **2** Business workshops in Zambia; **2** Business Workshops in Tanzania and **1** Business workshop in Namibia.
- Our target was to host **7** business workshops for our grassroots innovators
- **214.29%** of the target was achieved.
- **308** new grassroots innovators were recruited through business workshops
- All our **308** new grassroots innovators that attended our creative capacity building workshops also attended our business workshops
- Our target was to recruit and register **155** new grassroots innovators through our business workshops.
- **198.71%** of the target achieved
- This high achievement shows great progress towards the achievement of our target of recruiting, retooling, up skilling and profiling of new grassroots innovators that are confident to use their acquired design skills and business thinking skills to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- **1225** new grassroots innovators were recruited, retooled, up skilled and profiled and are now confident to use the design and business thinking skills they have acquired to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region; through build it sessions, creative capacity building workshops and business workshops
- Our target was to have **1845** new grassroots innovators recruited, retooled, up skilled and profiled and be confident to use the design and business thinking skills they have acquired to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region; through build it sessions, creative capacity building workshops and business workshops
- **66.4%** of the target was achieved
- This high achievement shows great progress towards the achievement of our target of recruiting, retooling, up skilling and profiling of new grassroots innovators that are confident



to use their acquired design skills and business thinking skills to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.

- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.

## Output 2: Prototype Reports

**Output Indicator 1:** Number of working prototypes produced

**Output Indicator 2:** Number of projects moving forward

### Activities used:

- 32 Creative Capacity Building Workshops
- 15 Business Workshops

**Activities Indicator:** Number of Registration lists

### Purpose of the activities:

- To co-create and register grassroots innovations and mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- To collect data that will help us to profile our new grassroots innovations and mini business plans according to their problem areas, features, functionalities, solution statements, costs of development, prices of sale, and stages of development, chapters and innovation centres.
- To measure the number of total working prototypes and mini business plans that have the potential to sell and improve the lives and livelihoods of rural communities in the SADC region.

### Results:

- 10 combined CCB workshops hosted in Botswana; 10 combined CCB workshops hosted Zambia; 11 Separate CCB workshops hosted in Tanzania and 1 combined CCB workshop hosted in Namibia
- Our target was to have host 32 CCB Workshops for our new grassroots innovators
- 100% of the target was achieved
- This moderately high achievement shows great progress towards the achievement of our target of recruiting, retooling, up skilling and profiling of new grassroots innovators that are confident to use their acquired design skills and business thinking skills to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.
- This moderately high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- 10 Business workshops in Botswana; 2 Business workshops in Zambia; 2 Business Workshops in Tanzania and 1 Business workshop in Namibia.
- Our target was to host 7 business workshops for our grassroots innovators
- This moderately high achievement shows great progress towards the achievement of our target of recruiting, retooling and up skilling of new grassroots innovators that are confident to use their acquired design skills and business thinking skills to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region
- This moderately high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.

- Our 32 CCB workshops had 107 working prototypes being produced by our new grassroots innovators
- 53 innovations were completed and are being used to improve the lives and livelihoods of rural communities in the SADC region
- Our target was to have 30 grassroots innovations completed and being used to improve the lives and livelihoods of rural communities in the SADC region.
- 173.33% of the target was achieved.
- Our target was to have new grassroots innovators produce 138 working prototypes
- 77.54% of the target was achieved
- These high and moderately high achievements show great progress towards the achievement of our target of co-creating and registering new grassroots innovations that can help improve the lives and livelihoods of rural communities in the SADC region.
- These high and moderately high achievements show great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.

- Our 15 Business Workshops had 55 mini business plans being developed by our new grassroots innovators.
- Our target was to have our new grassroots innovators develop 10 mini business plans or commercializable solutions
- 550% of the target was achieved.
- This high achievement shows great progress towards the achievement of our target of co-creating and registering new mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.

- 19 projects were moved forward post training by our new grassroots innovators
- Our target was to support our new grassroots move forward 18 projects
- 105.55% of the target was achieved
- This high achievement shows great progress towards the achievement of our target to see our new technologies and mini business plans move forward, potentially sell and help improve the lives and livelihoods of rural communities in the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.

## Output 3: Exhibition Reports

**Output Indicator 1:** Number of working prototypes exhibited

**Output Indicator 2:** Number of projects sold

**Output Indicator 3:** Value of projects sold

**Output Indicator 4:** Feedback received

**Activities used:** 15 Exhibition Displays

**Activities Indicator:** Number of Registration lists

### Purpose of the activities:

- To measure the level of confidence our new grassroots innovators have in taking their projects to market
- To measure the level of eagerness our new grassroots innovators have in getting feedback about their projects
- To measure the level of eagerness our new grassroots innovators have in selling their projects
- To measure the level of confidence our grassroots innovators have in engaging with community end users about their projects



- To measure the level of confidence our grassroots innovators have in pitching and explaining their mini business plan to potential clients or investors
- To measure the number of projects that our grassroots innovators are ready to disseminate and get feedback on.
- To measure the number of projects that our grassroots innovators have developed mini business plans for.
- To measure the level of direct engagement our grassroots innovators had with attendees
- To note the direct feedback given to our grassroots innovators by exhibition attendees
- To measure the number of direct sales made by our grassroots innovators
- To track the amount of direct sales made by our grassroots innovators
- To measure confidence level of community members to use new technologies
- To measure the level of community demand for projects made by our grassroots innovators.
- To measure the level of socio-economic benefit to our grassroots innovators from the sale of their projects.
- To measure the level of growth in our grassroots innovators motivation after selling their projects.
- To measure the number of potential returning customers or referrals for our grassroots innovators
- To collect data that will help us to profile our exhibited projects according to their problem areas, solution statements, and stages of development, prices, features and functions.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- **200** people directly engaged with new and existing our grassroots innovators at their exhibition stall
- Our target was to have **500** people visit our exhibition stall and engage with our new and existing and grassroots innovators
- **40%** of the target was achieved
- This moderately low achievement shows the significant Covid 19 disturbances towards the achievement of our target of getting a lot of community members to visit and engage with the exhibition stalls of our new and existing grassroots innovators while exhibiting their existing and new projects as solutions that can help improve the lives and livelihoods of rural communities in the SADC region.
- This moderately low achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- **10** projects were sold by our new and existing grassroots innovators
- Our target was to have our new and existing grassroots innovators sell at least 5 projects
- **200%** of the target was achieved
- This high achievement shows great progress towards the achievement of our target of supporting our new and existing grassroots innovators to sell some of their simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.

#### Results:

- **10** Exhibitions in Botswana; **2** Exhibitions in Zambia; **2** Exhibitions in Tanzania; **1** Exhibition in Namibia.
- Our target was to have **6** exhibitions for our grassroots innovation centres
- **250%** of the target was achieved
- This high achievement shows great achievement towards the achievement of our target of getting our new and existing grassroots innovators exhibiting their existing and new projects as solutions that can help improve the lives and livelihoods of rural communities in the SADC region
- **64** new projects were exhibited by our new and existing grassroots innovators
- Our target was to support our new and existing grassroots innovators exhibit **216** new and existing projects.
- **23.29%** of the target was achieved
- This low achievement shows the significant Covid 19 disturbances towards the achievement of our target of getting our new and existing grassroots innovators exhibiting their existing and new projects as solutions that can help improve the lives and livelihoods of rural communities in the SADC region.
- **150** USD prize money awarded to one of our new grassroots innovators for pitching their new grassroots innovation at an exhibition in Tanzania.
- This low achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- **262** of our new and existing grassroots innovators exhibited
- Our target was to support **36** new grassroots innovators to exhibit
- **727.78%** of the target was achieved
- This high achievement shows great progress towards the achievement of our target of having our new grassroots innovators grow in confidence and become eager to sell, exhibit or pitch their simple technologies and mini business plans as solutions that can improve the lives and livelihoods of rural communities in the SADC region.
- **1022.52** Euros was received for projects sold by our new and existing grassroots innovators.
- Our target was to have our new and old sell goods worth **2000** Euros
- **51.13%** of the target achieved
- This moderately high achievement shows great progress towards the achievement of our target of supporting our new and existing grassroots innovators to get socio-economic benefits from the sale of their simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.
- This moderately high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- Overall community members, who visited our grassroots innovators as they exhibited their projects, gave positive feedback.



## Output 7: Financial, Technical and Narrative Milestone Reports

**Output Indicator 1:** Amount of Pico grants disbursed

**Output indicator 2:** Number of projects moved forward

**Activities used:** Consortium Pico Grants

**Activities Indicator 1:** Number of Applications Received

**Activities Indicator 2:** Number of Projects Sold

### Purpose of the activities:

- To co-create and register grassroots innovations and mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- To support and register the co-creation of new grassroots innovations and mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- To collect data that will help us to profile our new grassroots innovations and mini business plans according to their problem areas, solution statements, features and functions.
- To measure the number of total working prototypes and mini business plans that have the potential to sell and improve the lives and livelihoods of rural communities in the SADC region.

### Results:

- **30** applications were received for funding from our new and existing grassroots innovators
- Our target was to have our new and existing grassroots innovators submit **50** grant applications
- **60%** of the target was achieved.
- This moderately high achievement shows great progress towards the achievement of our target of co-creating and registering new mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- This moderately high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region
- **30** grants issued to our new and existing grassroots innovators
- Our target was to issue out **50** grants to our new and existing grassroots innovators
- **60%** of the target was achieved
- This high achievement shows great progress towards the achievement of our target of co-creating and registering new simple technologies and mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region
- **7208.69** Euros in grants was issued to **30** applicants from our pool of new and existing grassroots innovators
- Our target was to issue **7500** Euros to **50** applicants from our pool of new and existing grassroots innovators.

- **96.12%** of the target was achieved.
- This high achievement shows great progress towards the achievement of our target of co-creating and registering new mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- 19 projects from our training were moved forward by our new grassroots innovators
- 18 new post training projects were developed by our new and existing grassroots innovators
- **2** projects have gone to market and are making a great impact (Matuulale Brick Moulder and Moi City Smart Garden from Moiyabana Innovation Center in Botswana)
- Only **30** projects were submitted for assistance with small continuity project grants
- Our target was to support our new grassroots innovators to move forward **18** projects
- **105.55%** of the target was achieved
- These high achievements show great progress towards the achievement of our target to see our new technologies and mini business plans move forward, potentially sell and help improve the lives and livelihoods of rural communities in the SADC region.
- This high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- **208** people in total benefitted from the small continuity project grants across Botswana, Zambia, Tanzania and Namibia



## **Output 8: IDDS Namibia 2021 Report**

**Output Indicator 1:** Number of International Participants

**Out Indicator 2:** Number of Local Participants

**Out Indicator 2:** Number of Regional Participants

**Output indicator 8:** Number of connected and confident innovators

**Activity planned:** 1 IDDS Namibia 2021 Summit

**Activities Indicator 1:** IDDS Namibia 2021 Monitoring and

Evaluation Report

### **Purpose of the activities:**

- To co-create and register grassroots innovations and mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- To measure the number of total working prototypes and mini business plans that have the potential to sell and improve the lives and livelihoods of rural communities in the SADC region.
- To recruit, retool, up skill and profile a new pool of new grassroots innovators that are confident to use the design and business thinking skills they have acquired to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.

### **Results:**

- No IDDS Summit held this year due to Covid 19 Protocols, Travel Restrictions and Disturbances
- We lost out on recruiting, retooling, up skilling and profiling 35 new grassroots innovators (local, regional and international participants)
- We lost out on co-creating 7 working prototypes

**Objective 3:** To use our IDIN-SADC methodology to catalyze the grassroots innovation ecosystem in Namibia.

**Outcome 3:** New Innovation centre in operation in Namibia

**Output 1; 2; 3; 4; 6; and 7:** Training report; Prototype report; Exhibition report; Innovation Center report; and the Financial, Technical and Narrative Milestone reports.

**Output Indicator 1:** Number of Grassroots Innovation Ecosystem meeting places set up for MSR members in Namibia

**Output Indicator 2:** Number of Innovation Centres setup in

## **Namibia**

### **Activities used:**

- 1 Combined Build it, CCB and Business Workshop
- 1 Innovation Center Setup

**Activities Indicator 1:** Registration Lists

**Activities Indicator 2:** Value of Refurbishments, Tools and Material

### **Purpose of the activities:**

- To recruit, retool, up skill and profile a new pool of new grassroots innovators that are confident to use the design and business thinking skills they have acquired to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.
- To collect data that will help us to profile all our recently recruited, retooled and up skilled pool of grassroots innovators according to their names; gender; age; contact details; skills levels; projects; organisational partners; chapters; and innovation centres.
- To register all new grassroots innovators who connected with our grassroots focused regional network of grassroots innovators, students, organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- To identify the gaps available in how our new grassroots innovators connect with our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres.
- To co-create and register grassroots innovations and mini business plans that can help improve the lives and livelihoods of rural communities in the SADC region.
- To collect data that will help us to profile our new grassroots innovations and mini business plans according to their problem areas, solution statements, features and functions.
- To measure the number of total working prototypes and mini business plans that have the potential to sell and improve the lives and livelihoods of rural communities in the SADC region.



## Results:

- 15 new grassroots innovators were recruited, retooled, up skilled and profiled
- Our target was to recruit, retool, up skill and profile 35 new grassroots innovators.
- 42.86% of the set target was achieved
- This moderately low achievement shows great progress towards the achievement of our target of recruiting, retooling and up skilling of new grassroots innovators that are confident to use their acquired design skills and business thinking skills to co-create simple technologies and community businesses that can help improve their own lives and the livelihoods of others in rural communities of the SADC region.
- This moderately low achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- 15 new grassroots innovators connected with our regional network to use our co-creative design process, co-create, collaborate and share news and lessons learned.
- Our target was to have 35 people connecting to our network to use our design process, co-create, collaborate and share news and lessons learned
- 42.86% of the target was achieved
- This moderately low achievement shows great progress towards the achievement of our target of having our new grassroots innovators connecting to our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres to use our design process, co-create, collaborate and share news and lessons learned.
- This moderately low achievement shows great progress towards the achievement of our desired outcome of having our grassroots innovation focused regional network of grassroots innovators; students; organisational partners; chapters; and innovation centres network members being more connected through sharing of news, technologies and lessons learned.
- 4 working prototypes were produced by our new grassroots innovators
- Our target was to have new grassroots innovators produce 7 working prototypes
- 57.14% of the target was achieved
- This moderately high achievement shows great progress towards the achievement of our target of co-creating and registering new grassroots innovations that can help improve the lives and livelihoods of rural communities in the SADC region.
- This moderately high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- 2 projects moved forward post training by our new grassroots innovators
- Our target was to support our new grassroots innovators to move 4 projects forward post the training
- 2 new post training projects were developed by our new grassroots innovators
- 50% of the target was achieved
- This moderately high achievement shows great progress towards the achievement of our target of co-creating and registering new grassroots innovations that can help improve the lives and livelihoods of rural communities in the SADC region.
- This moderately high achievement shows great progress towards the achievement of our desired outcome to have people using new technologies and their co-creative design and business skills to improve their own livelihoods in target country contexts of the SADC region.
- Ongenga Village in the Ongenga Constituency of Ohangwena Region in Northern Namibia
- The Ohangwena region is the 2nd most impoverished region of Namibia with a population of over 20000 people. This gave us confidence that our co-creative design process methodology and innovation center support services are ideal as interventions for technological development and rural community empowerment.
- The Ongenga Rural Innovation Center was launched on the 18th of December 2020 at the Ongenga Technical College by the Ongenga Constituency Councillor and the Letshego Bank Ohangwena Regional Representative to serve as a shared community work space where they can regularly meet to access tools and use our co-creative design process, co-create, collaborate and share news and lessons learned.
- It is now operating out of a donated unused building by the Ongenga Constituency Office in Ongenga village.
- It now has 3 innovation center managers, 2 males and 1 female.
- It has 15 members
- It is overseen by MSR and supported by Ongenga Technical College.
- This high achievement gives us confidence that our new network members in Namibia are connected to co-create, collaborate, share news and lessons learned with confidence;
- This high achievement gives us confidence that our new network members in Namibia are eager to use new technologies and their co-creative design skills to address their livelihood challenges in the targeted country context.
- These achievements give us confidence to ascertain that we have an innovation in operation in Namibia.







# Sectors Covered

We mainly identify with the international development sector and our approach is a tried and tested methodology that has innovated on how traditional international development to technological development and community empowerment are practiced. Because we work with grassroots communities that generally do not have access to most of the basic services, tools and implements. During our 18 month period we worked with our communities to co-create projects that identified problem areas in the following sectors:

1. Agriculture
2. Construction/Housing
3. Education
4. Transport and logistics
5. Food processing
6. Energy
7. Hospitality
8. Health
9. Waste Management
10. Sanitation
11. Menstrual Health
12. Food preparation
13. Human and Wildlife Conflict



# Team and Governance

Our consortium leadership team known as the Executive Committee was made up from 2 representatives each representing the founding member organisations being These hands in Botswana; Kafue Innovation Center in Zambia and Twende in Tanzania.

The three organisations served as in-country stakeholder managers, partnership managers, trainers and project implementers in these 3 countries. These Hands as the overall project coordinators also had stakeholder management and implementation responsibility for activities in Namibia as a new member state and the overall project oversight.

We recruited 12 (1 male and 11 females) free student interns from across the globe at the beginning of the project that helped develop key templates and documents that all 3 partners could easily use for uniform project implementation and decision making about post project work. They also did a lot of work like Legal research to explore ideal formation structure and country to register in; drafting of ideal constitution and its supporting bye laws; Fundraising model research to develop an ideal fundraising strategy that will help sustain the new organization's operations and its support services to existing and new network members; Media research to develop the ideal communications strategy for the new organization.; and MERL research to develop monitoring, evaluation, reporting and learning templates and indicators for the new organization to track its impact. They worked with our existing organizational partners, innovation centers, and chapters to gather as much input and to consolidate everyone's thoughts into a shared vision for the growth of an effective and efficient grassroots innovation ecosystem in the SADC region.



# Our Success Story

## Moiyabana Innovation Centre, Central District, Botswana

Moiyabana is a village in Central District of Botswana. The village is located 50 km south-west of Serowe. The population of the village was 2,619 in 2001 census. 2010 Poverty Mapping statistics show that there about 1165 households in a population of 4394 people with 1472 of these people living in poverty. As thus there is real need for a bottom up intervention.

In February 2019, These Hands received a request for their trainings in Moiyabana Village from the area social worker who works with the youth.

In March 2019, they took time to understand the village setting, its proximity to hardware stores and shops for supplies. They also guided the social worker to recruit 20 unemployed youth for a potential Combined Creative Capacity Building training from the 7th September – 18th September 2020.

These Hands then ran a 2 week hands on Combined Creative Capacity Building Workshop to empower a group of 20 unemployed youth from Moiyabana Village with a myriad of problem solving skills and knowledge. It offered them a technological approach to addressing their livelihood challenges.

**Core of Knowledge Content Area:** The training emphasized the following:

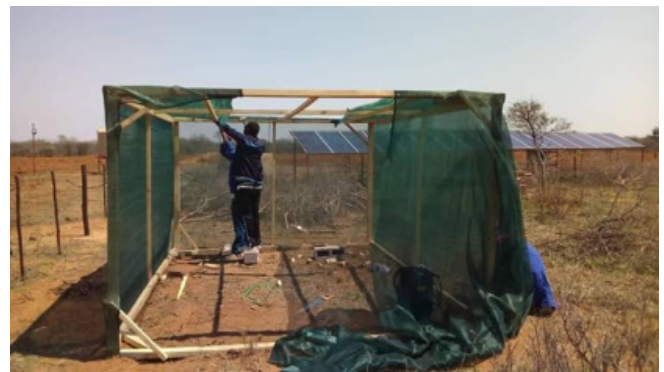
- a) Full Co-Creative Design process
- b) Wood work and Metal work
- c) Basic Business Thinking

Our training objectives were to get our participants:

- To introduce the design process
- To emphasize key concepts of the design process
- To provide an example of the design process
- To show the value of repeating the cycle to improve a design
- To show the beauty of a simple design
- To demonstrate a technology that may be of interest
- To make 4 simple and appropriate technology prototypes using the our design process
- To gather their own needs as community members
- To develop potential continuity plans as community members.
- To help set up a post training community based innovation centre where the communities can continue to access tools and materials for free to work on their innovations and develop new ones.

## Training results;

- a. 18 participants retooled, up skilled and profiled in total (10 males and 8 females)
- b. 50% of the participants were youth between the ages 18-35 years
- c. The participants co-created 4 working prototypes
  - a human powered fodder chopper
  - a 4.5 inch human operated brick moulder
  - a charcoal powered popcorn maker
  - a smart garden
- d. The participants developed 4 mini business plans and exhibition pitches
- e. All the 18 participants exhibited their 4 working prototypes
- f. 3 projects were sold and 1 order was placed at the Exhibition
  - 1 unit of Moi City Smart garden (Moiyabana) - 90 Euros
  - 2 units of Matulaale Brick Moulder ( Moiyabana) - 35 Euros each
  - 150 units of Popcorn Snacks made from the Popcorn Maker (Moiyabana) - 0.075 Euros each (11 Euros)
  - The village chief of Moiyabana placed an order for a fodder chopper from our Moiyabana Innovation Centre team members. He is awaiting iteration and then he will make time to test it and then buy it.
- g. 4 new projects developed post training
  - 1 unit of Gravesite shade stand (Moiyabana)
  - 1 unit of the Clothes Hanger/Rail (Moiyabana)
  - 1 unit of a clay brick moulder (Moiyabana)
  - 4.5 inch bricks projects (Moiyabana)
- h. 5 projects sold post training
  - 1 unit of Gravesite shade stand (Moiyabana) - 60 Euros
  - 1 unit of the Clothes Hanger/Rail (Moiyabana) - 11 Euros
  - 1 unit of a clay brick moulder (Moiyabana)- 11 Euros
  - 1 unit of Matulaale Brick Moulder ( Moiyabana)- 17.85 Euros
  - 4.5 inch Bricks (Moiyabana)- 1148.56 Euros
  - A total of 1384.41 Euros generated in 10 months
  - Will use 335 Euros to purchase a wire fencing industrial machine in order to produce and sell wire fencing to their community and surrounding areas.
- i. 1 Innovation centre setup at a VDC donated building and 2 innovation centre managers appointed.
- j. Governed by a committee elected from the members.





# Way Forward

- We will officially register the IDIN-SADC Consortium as a Non-Profit Organization in Botswana.
- The consortium will be governed by a constitution and an Elected Executive Committee from its members
- In the first year of transition after registration the Executive Committee is to be made up by representatives from the 3 founding partner members and SADC member states of Botswana, Zambia and Tanzania.
- The Executive Team will recruit and hire dedicated staff members for the regional secretariat office from network members and members of the public that fit the profiles/job description on 1 year renewable contracts.
- There will be an annual general meeting where the general membership will elect a new Executive Committee that will lead for 3 years; give the new Executive Committee a new mandate; know the regional secretariat team; know the country lead implementation partners and deliberate on key program areas that the new executive committee and secretariat will take as action items to better support the network.
- Memberships is open to individual grassroots innovators, students and grassroots innovation ecosystem builder organisations that are interested or use or have engaged with our IDIN co-creative design process approach to technological development and community empowerment to improve their own lives and the livelihoods of communities within the SADC region.
- Members will pay annual membership fees as determined by the Executive Committee and adopted by the general membership
- We will also have honorary members and advisory members
- The IDIN-SADC consortium will open a regional grassroots innovation secretariat office at Botswana Innovation Hub in Gaborone, Botswana to offer its services to the SADC region.
- Post registration of our organization we will launch our Digital Transformation Strategy and adopt the Lets Go Digital platform as an exclusive platform for our IDIN-SADC ecosystem in order to further support and better connect our grassroots innovation ecosystem.



# Social Network Statistics

In order to further understand our network for future planning we used a number of interesting social network statistics to investigate the characteristics of our budding network and identify the key actors and commonalities between actors in our network.

The 3 statistics that we used the Gephi Software to simulate and calculate are the:

- Betweenness centrality
- Closeness centrality
- Modularity

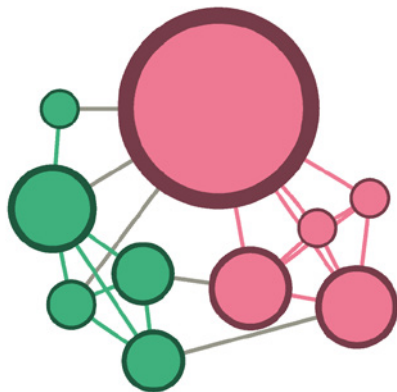
**Betweenness centrality:** Measures the frequency of occurrence of a node on the shortest paths between network nodes. Betweenness centrality is also an indicator measuring the extent of a node's roles as broker (Abbasi et al., 2012), and has also been used in several studies as a proxy for social capital (Tsai & Ghoshal, 1998).

**Closeness centrality:** Measures the average distance between a node and all other nodes. It measures how many steps on average it takes for an actor to reach everyone else in the network. Actors who have high closeness centrality measures can most efficiently make contact with others in the network (Freeman et al., 1979).

**Modularity:** Identifies groupings to highlight the communities in a network (Muff et al., 2005). The connection (density of edges) is greater between the nodes of the same cluster compared to those of different clusters.

Below are the illustrations and simulations of graphs, results plus interpretations of our grassroots innovation ecosystem at the following points:

- At the beginning of our IDIN-SADC consortium project in 2019
- At the end of the IDIN-SADC Consortium project in June 2021
- Post registration and launch of the IDIN-SADC Consortium Non-Profit Organisation and Secretariat Office.
- Post the launch of our digital transformation strategy and adoption of the Lets Go Digital platform



**Figure1:** A social network analysis graph of our grassroots innovation ecosystem at the beginning of the project in November 2019 showing our two distinct clusters or communities and how they are connected through the different nodes and pathways to form our network after running a betweenness centrality test and a modularity class test.

**Remember:**

- With the varying node sizes, the larger the nodes indicated, the higher the betweenness centrality.
- The connection (density of edges) is greater between the nodes of the same cluster compared to those of different clusters.



Figure2: A social network analysis graph of our grassroots innovation ecosystem at the beginning of the project in November 2019 showing our different labelled nodes in their two distinct clusters after running a closeness centrality test and a modularity test.



Figure3: A social network analysis graph of our grassroots innovation ecosystem at the beginning of the project in November 2019 showing our two distinct clusters or communities and how they are connected through the different nodes and pathways to support our network. This simulation was captured after running a betweenness centrality test and a modularity class test. The nodes and paths were then stretched out to see the relationship of the different actors more clearly.

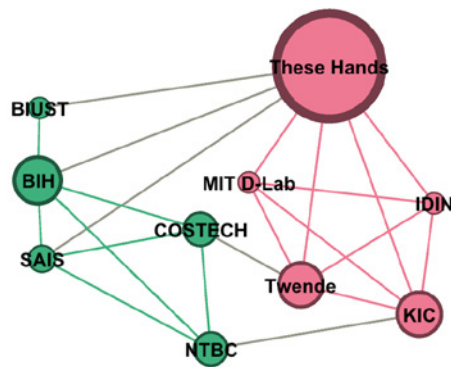


Figure 4: Graph showing results of Betweenness Centrality test of our network at the beginning of our grassroots innovation ecosystem in November 2019.

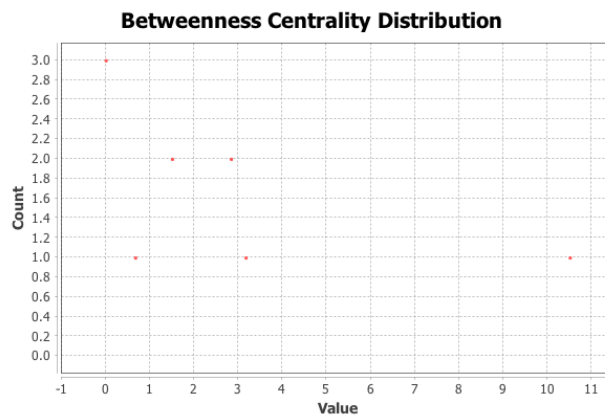
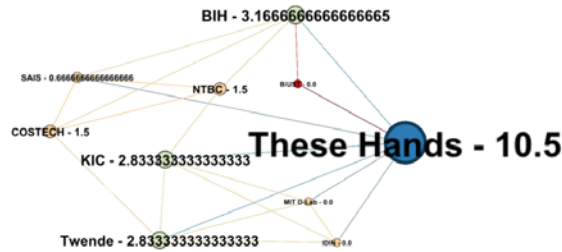


Figure 5: Graph illustrating a simulation and showing values of Betweenness Centrality Distribution of our network at the beginning of the project in November 2019.



**Interpretation of betweenness centrality results:**

Our computations and simulations show that centrality is distributed between 6 main nodes of our network. The These Hands node being the one with most social capital or betweenness centrality at 10.5, which means that it has the largest influence on the transfer of items through the network, under the assumption that item transfer follows the shortest paths.

Figure 6: Graph showing results of Closeness Centrality Distribution between the nodes of our network at the beginning of our grassroots innovation ecosystem in November 2019

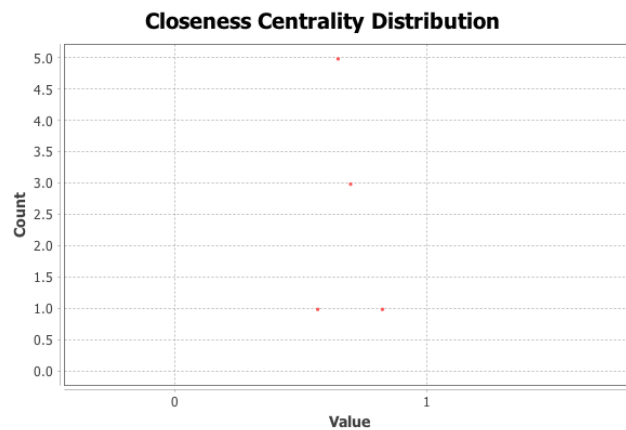


Figure 7: Graph illustrating a simulation and showing the distances between nodes clearly and the results of Closeness Centrality Distribution between the nodes of our network at the beginning of our grassroots innovation ecosystem in November 2019.



Diameter:2  
 Radius:2  
 Average Path length: 1.5111111111111111

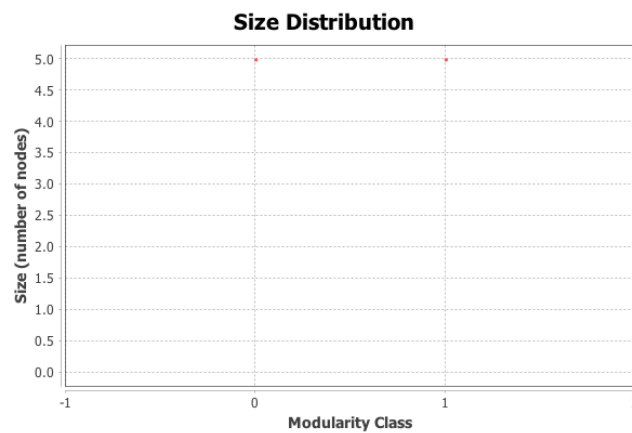
**Interpretation of closeness of centrality test results:**

Our computations and simulations show that there are 4 main steps that any actor can take to reach everyone in our network. Higher scores are given to the nodes that appear more central in terms of distance as it implies that they can reach other nodes in a few hops. The These Hands node with the highest score of 0.81 is the more central node and can reach all other nodes with the most ease.

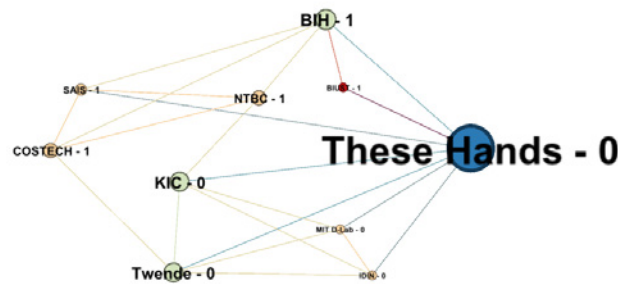
A network diameter of 2 shows the longest graph distance between any two nodes in our network at the beginning of the project in November 2019, whilst the low average path length of 1.511 signifies that our network has a few central nodes that are closely connected. In the case of closeness centrality, or average shortest path length, lower values indicate more central nodes.

The benefits of closeness centrality are that it indicates nodes as more central if they are closer to most of the nodes in the graph. This strongly corresponds to visual centrality i.e. a node that would appear toward the center of a graph when we draw it usually has a high closeness centrality like we see in Figure 2 and confirmed by figure 7.

**Figure 8: Graph showing results of the size of distribution of the nodes of our network into the identified clusters at the beginning of our grassroots innovation ecosystem in November 2019.**



**Figure 9: Graph illustrating a simulation and showing results of which node of our network belongs to which cluster or community at the beginning of our grassroots innovation ecosystem in November 2019**



**Interpretation of modularity class test results:**

Our computations and simulations show that there are 2 main clusters that items flow through in our network identified as 0 and 1. Both clusters have 5 nodes each. Since Modularity varies between 0 and 1, thus a value of 0.263 indicates a relatively low modularity. This suggests that our ecosystem consists of few internally dense groups that are closely connected to each other as indeed can be observed in figure 2 and figure 9 above. Figure 10: A social network analysis graph of our grassroots innovation ecosystem at the end of project implementation in June 2021 showing our four distinct clusters or communities and how they are connected through the different nodes and pathways to form our network after running a betweenness centrality test and a modularity class test.

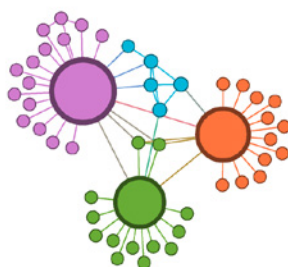






Figure 11: A social network analysis graph of our grassroots innovation ecosystem at the end of project implementation in June 2021 showing our different labelled nodes in their four distinct clusters after running a closeness centrality test and a modularity test.

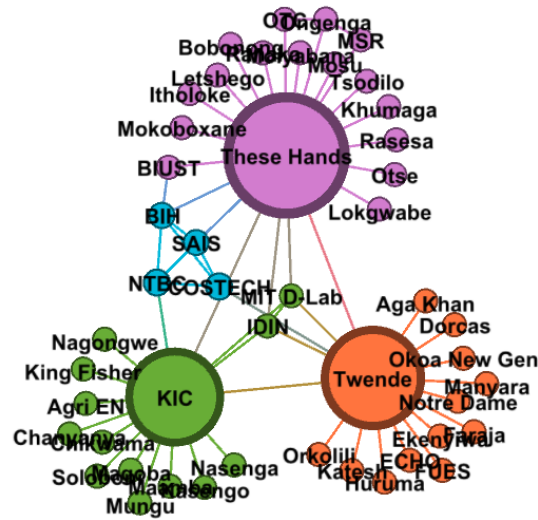


Figure 12: A social network analysis graph of our grassroots innovation ecosystem at the end of project implementation in June 2021 showing our four distinct clusters or communities and how they are connected through the different nodes and pathways to support our network. This simulation was captured after running a betweenness centrality test and a modularity class test. The nodes and paths were then stretched out to see the relationship of the different actors more clearly.

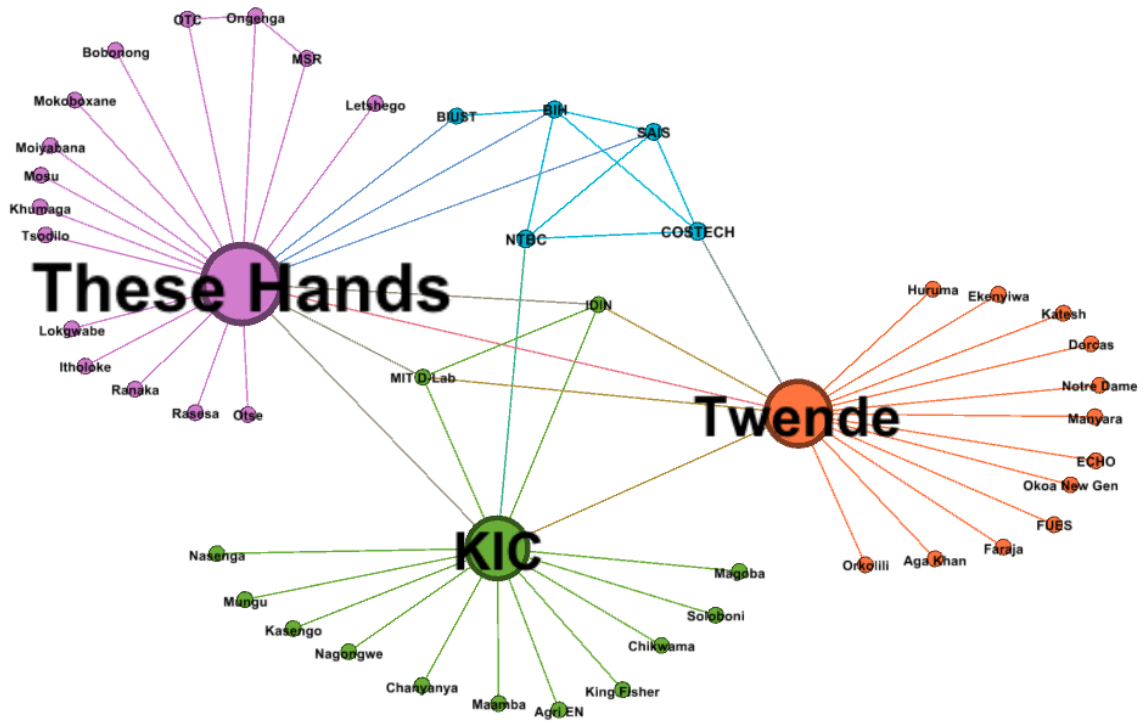




Figure 13: Graph showing results of Betweenness Centrality test of our network at the end of project implementation in June 2021.

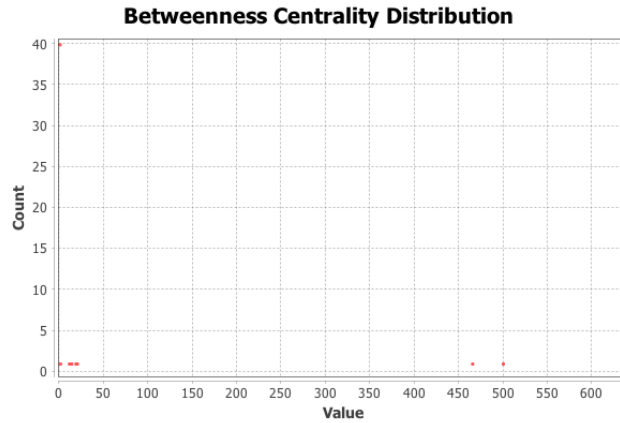
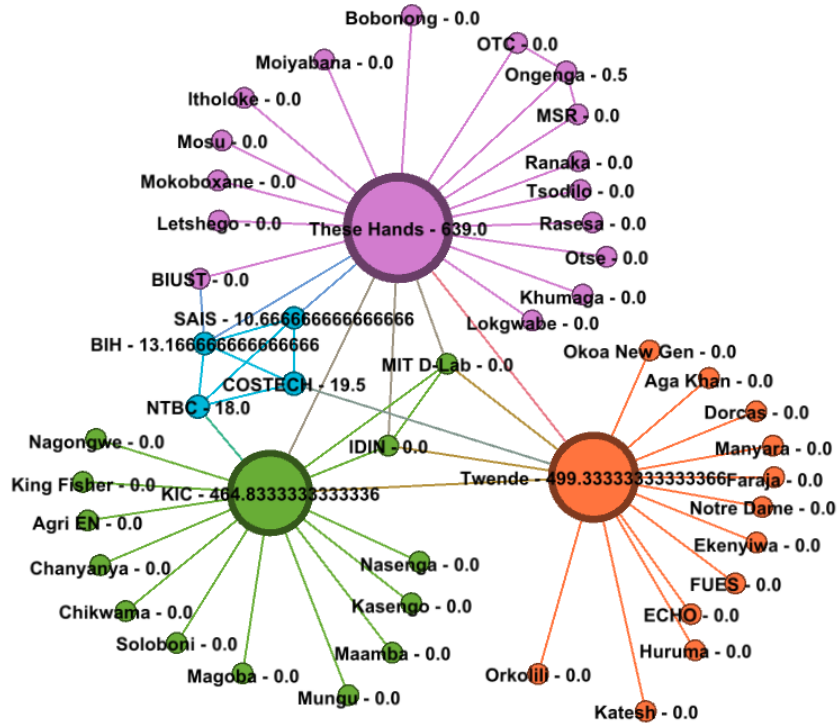


Figure 14: Graph illustrating a simulation and showing values of Betweenness Centrality Distribution of our network at the end of project implementation in June 2021.



**Interpretation of betweenness centrality results:**

Our computations and simulations show that centrality is distributed between 5 main nodes of our network. The These Hands node being the one with most social capital or betweenness centrality at 639, which means that it has the largest influence on the transfer of items through the network, under the assumption that item transfer follows the shortest paths.

Figure 15: Graph showing results of Closeness Centrality Distribution between the nodes of our network at the end of project implementation in June 2021

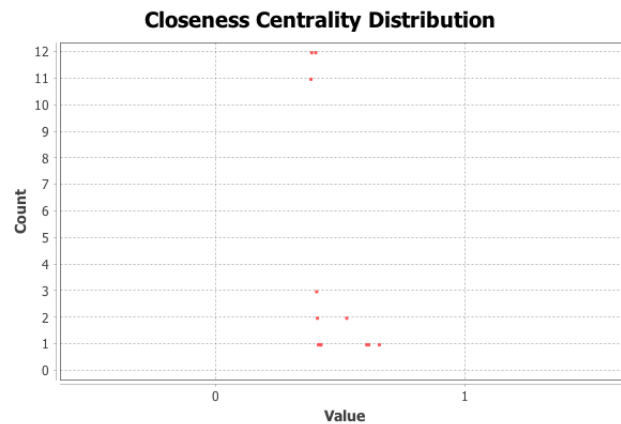
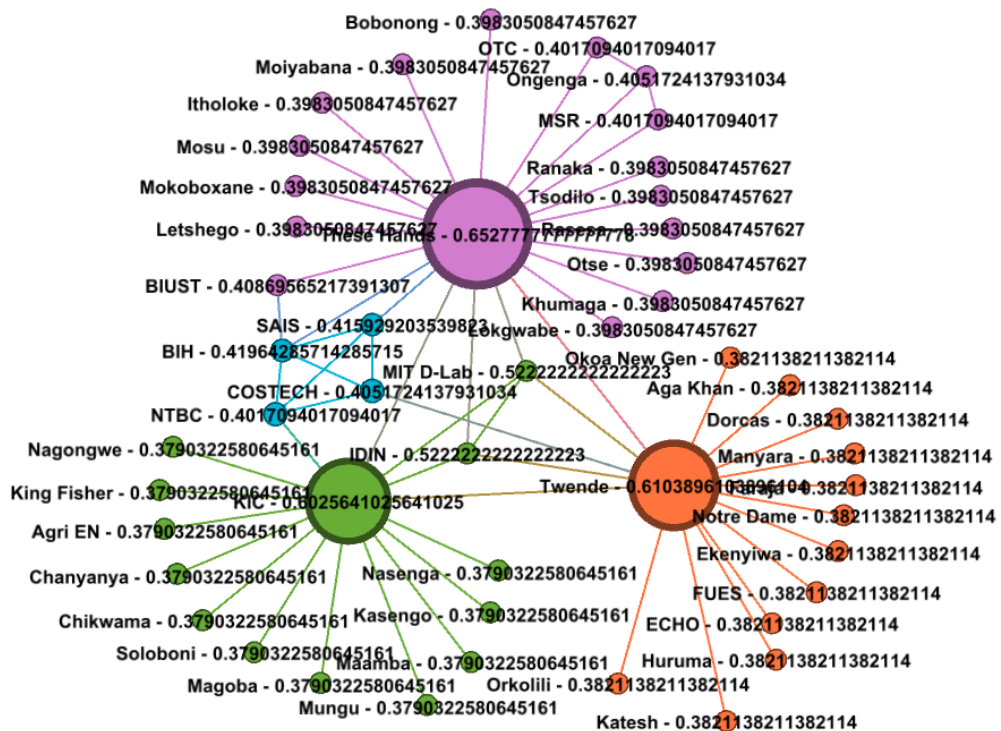


Figure 16: Graph illustrating a simulation and showing the distances between nodes clearly and the results of Closeness Centrality Distribution between the nodes of our network at the end of project implementation in June 20



Diameter: 3  
 Radius: 2  
 Average Path length: 2.476063829787234

**Interpretation of closeness of centrality test results:**

Our computations and simulations show that there are 5 main steps that any actor can take to reach everyone in our network. Higher scores are given to the nodes that appear more central in terms of distance as it implies that they can reach other nodes in a few hops. The These Hands node with the highest score of 0.65 is the more central node and can reach all other nodes with the most ease. See figure 11 and figure 16 above.

A network diameter and radius of 3 shows the longest graph distance between any two nodes in our network at the end of project implementation in June 2021, whilst the moderately low average path length of 2.476 signifies that our network has several central nodes that are closely connected. In the case of closeness centrality, or average shortest path length, lower values indicate more central nodes.

The benefits of closeness centrality are that it indicates nodes as more central if they are closer to most of the nodes in the graph. This strongly corresponds to visual centrality i.e. a node that would appear toward the center of a graph when we draw it usually has a high closeness centrality like we see in Figure 11 and confirmed by figure 16.



Figure 17: Graph showing results of the size of distribution of the nodes Class of our network into the identified clusters at the end of project implementation in June 2021

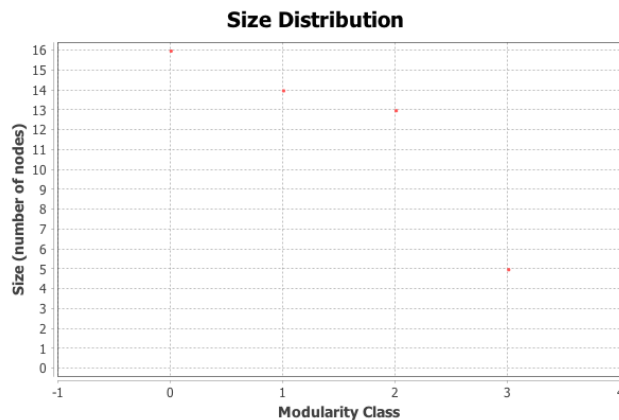


Figure 18: Graph illustrating a simulation and showing results of which node of our network belongs to which cluster or community at the end of project implementation in June 2021.



#### Interpretation of modularity class test results:

Our computations and simulations show that there are 4 main clusters that items flow through in our network identified as 0, 1, 2 and 3. Cluster 0 has 16 nodes; Cluster 1 has 14 nodes; Cluster 2 has 13 nodes; and cluster 3 has 5 nodes. Since Modularity varies between 0 and 1, thus a value of 0.539 indicates a moderately high modularity. This suggests that our ecosystem consists of several internally dense groups that are moderately connected as indeed can be observed in figure 11 and figure 18.

Figure 19: A social network analysis graph of our grassroots innovation ecosystem after registering and launching IDIN-SADC Consortium organisation showing our four distinct clusters or communities and how they are connected through the different nodes and pathways to form our network after running a betweenness centrality test and a modularity class test.





Figure 20: A social network analysis graph of our grassroots innovation ecosystem after registering and launching IDIN-SADC Consortium organisation showing our different labelled nodes in their four distinct clusters after running a closeness centrality test and a modularity test.



Figure 21: A social network analysis graph of our grassroots innovation ecosystem after registering and launching IDIN-SADC Consortium organisation showing our four distinct clusters or communities and how they are connected through the different nodes and pathways to support our network. This simulation was captured after running a betweenness centrality test and a modularity class test. The nodes and paths were then stretched out to see the relationship of the different actors more clearly.

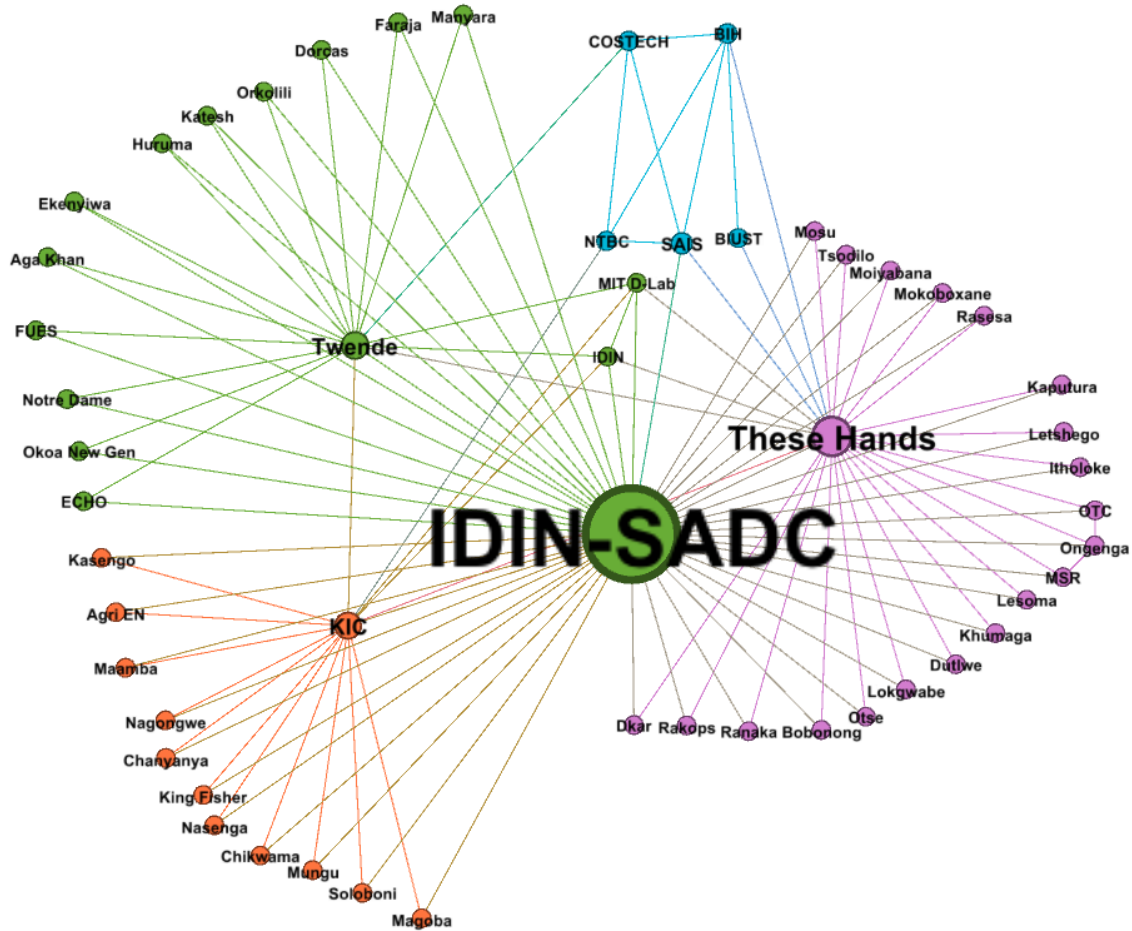






Figure 24: Graph showing results of Closeness Centrality Distribution between the nodes of our network after registering and launching IDIN-SADC Consortium organisation.

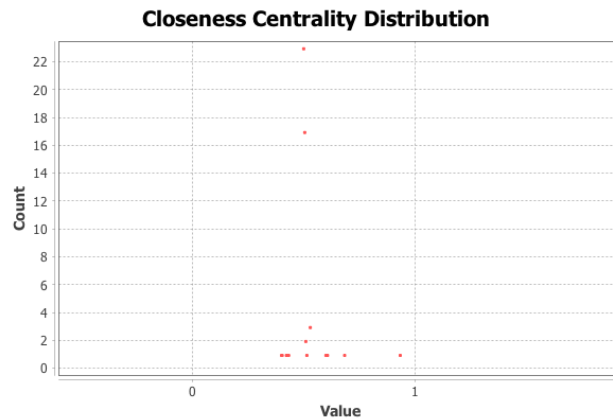
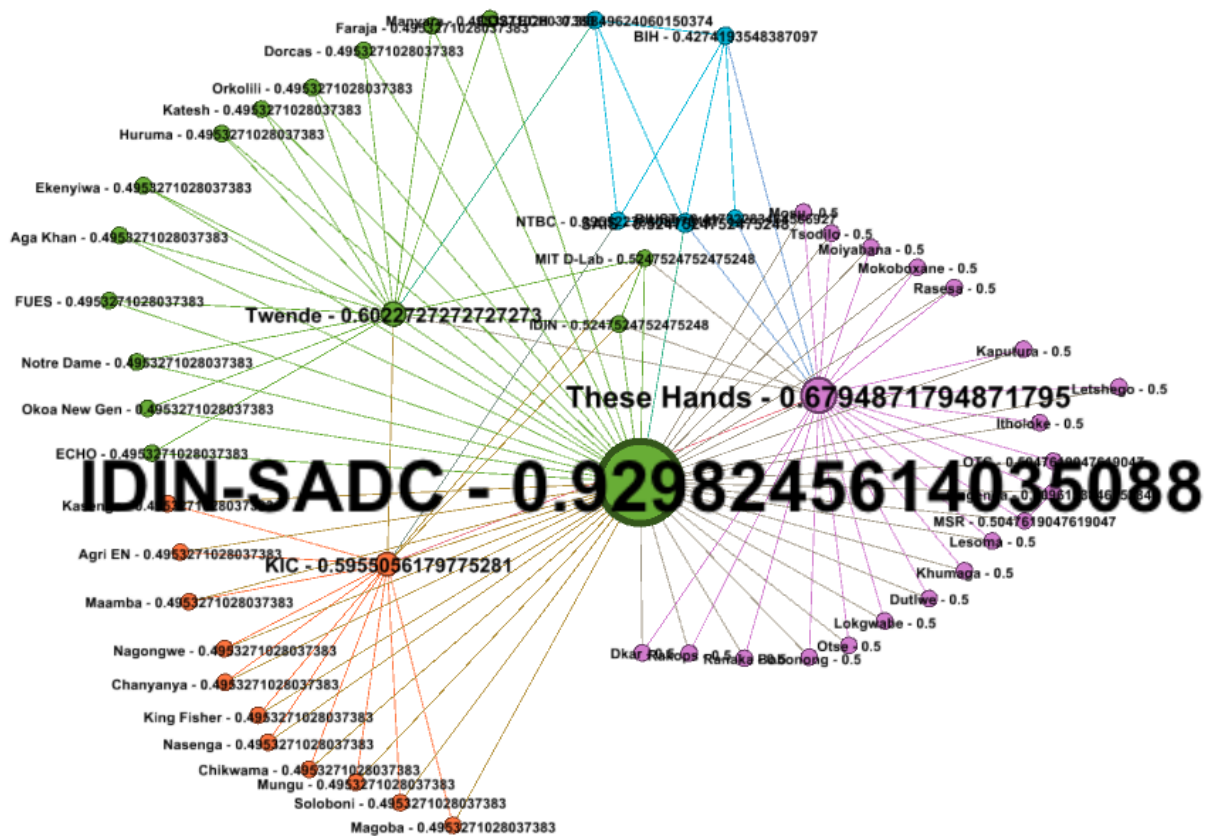


Figure 25: Graph illustrating a simulation and showing the distances between nodes clearly and the results of Closeness Centrality Distribution between the nodes of our network after registering and launching IDIN-SADC Consortium organisation.



Diameter: 3  
 Radius: 2  
 Average Path length: 1.995108315863033

### Interpretation of closeness of centrality test results:

Our computations and simulations show that there are 5 main steps any stakeholder can take to reach everyone in our network. Higher scores are given to the nodes that appear more central in terms of distance as it implies that they can reach other nodes in a few hops. The IDIN-SADC node that has the highest score of 0.93 is the more central node and can reach all other nodes with the most ease. See figure 20 and figure 25 above.

A network diameter of 3 shows the longest graph distance between any two nodes in our network at the end of project implementation in June 2021, whilst the moderately low average path length of 1.995 signifies that our network has several central nodes that are moderately connected. In the case of closeness centrality, or average shortest path length, lower values indicate more central nodes.



The benefits of closeness centrality are that it indicates nodes as more central if they are closer to most of the nodes in the graph. This strongly corresponds to visual centrality i.e. a node that would appear toward the center of a graph when we draw it usually has a high closeness centrality like we see in Figure 20 and confirmed by figure 25.

Figure 26: Graph showing results of the size of distribution of the nodes of our network into the identified clusters after registering and launching IDIN-SADC Consortium organisation. Figure 27: Graph illustrating a simulation and showing results of which node of our network belongs to which cluster or community after registering and launching IDIN-SADC Consortium organisation.

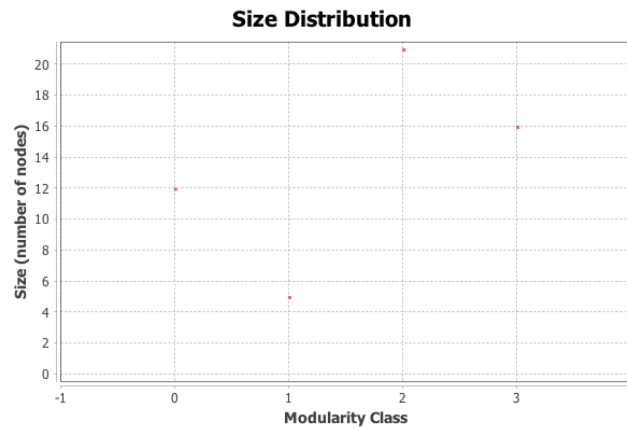
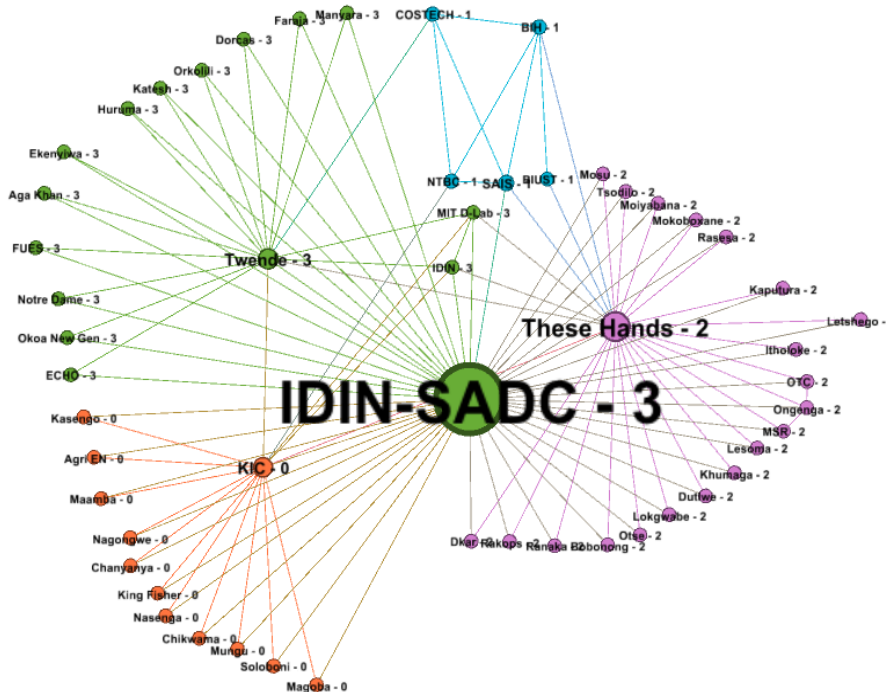


Figure 27: Graph illustrating a simulation and showing results of which node of our network belongs to which cluster or community after registering and launching IDIN-SADC Consortium organisation.



### Interpretation of modularity class test results:

Our computations and simulations show that there are 4 main clusters that items flow through in our network identified as 0, 1, 2 and 3. Cluster 0 has 12 nodes; Cluster 1 has 5 nodes; Cluster 2 has 21 nodes; and cluster 3 has 16 nodes. Since Modularity varies between 0 and 1, thus a value of 0.282 indicates a moderately low modularity. This suggests that the ecosystem consists of several internally dense groups that are closely connected to each other as indeed can be observed in figure 20 and figure 27.



Figure 28: A social network analysis graph of our grassroots innovation ecosystem after aligning our digital strategy with the Letshego Group and adopting the Lets Go digital platform, showing our four distinct clusters or communities and how they are connected through the different nodes and pathways to form our network after running a betweenness centrality test and a modularity class test.

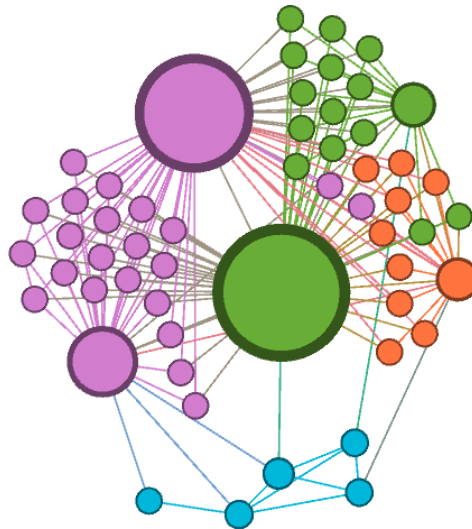


Figure 29: A social network analysis graph of our grassroots innovation ecosystem after aligning our digital strategy with the Letshego Group and adopting the Lets Go digital platform, showing our different labelled nodes in their four distinct clusters after running a closeness centrality test and a modularity test.

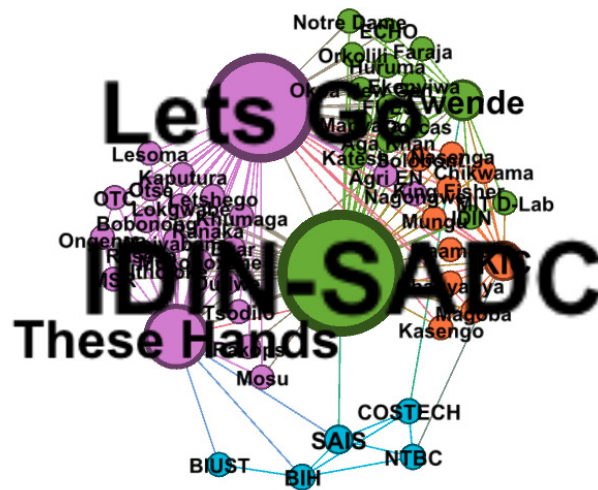
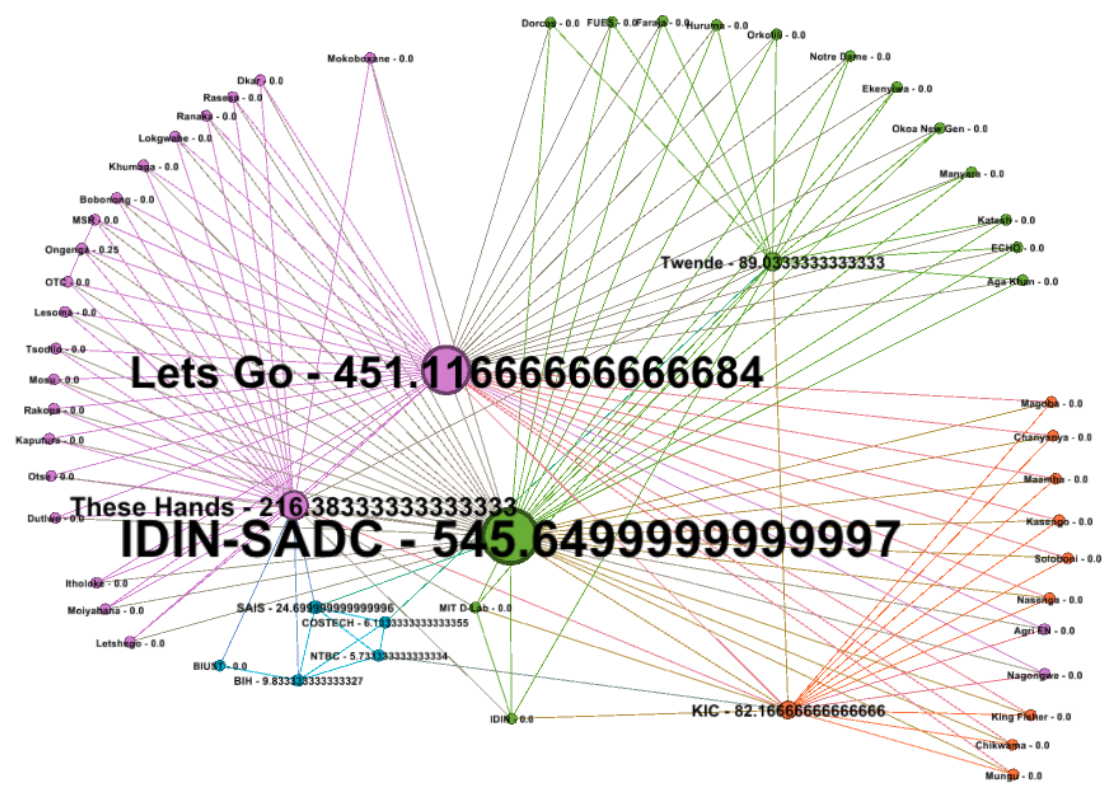






Figure 32: Graph illustrating a simulation and showing values of Betweenness Centrality Distribution of our network after aligning our digital strategy with the Letshego Group and adopting the Lets Go digital platform.



**Interpretation of betweenness centrality results:**

Our computations and simulations show that centrality is distributed between 5 main nodes of our network. The These Hands node being the one with most social capital or betweenness centrality at 545, which means that it has the largest influence on the transfer of items through the network, under the assumption that item transfer follows the shortest paths.

Figure 33: Graph showing results of Closeness Centrality Distribution between the nodes of our network after aligning our digital strategy with the Letshego Group and adopting the Lets Go digital platform.

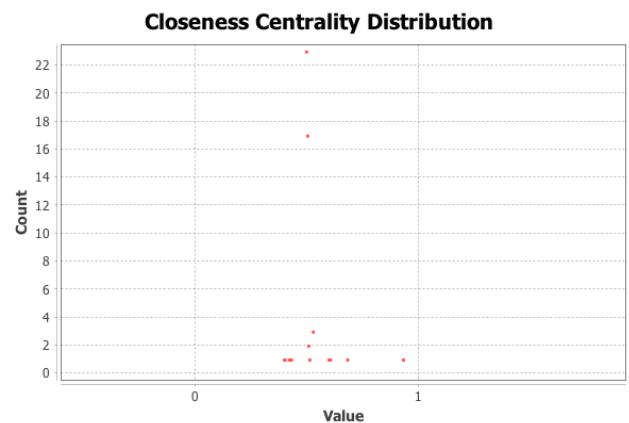
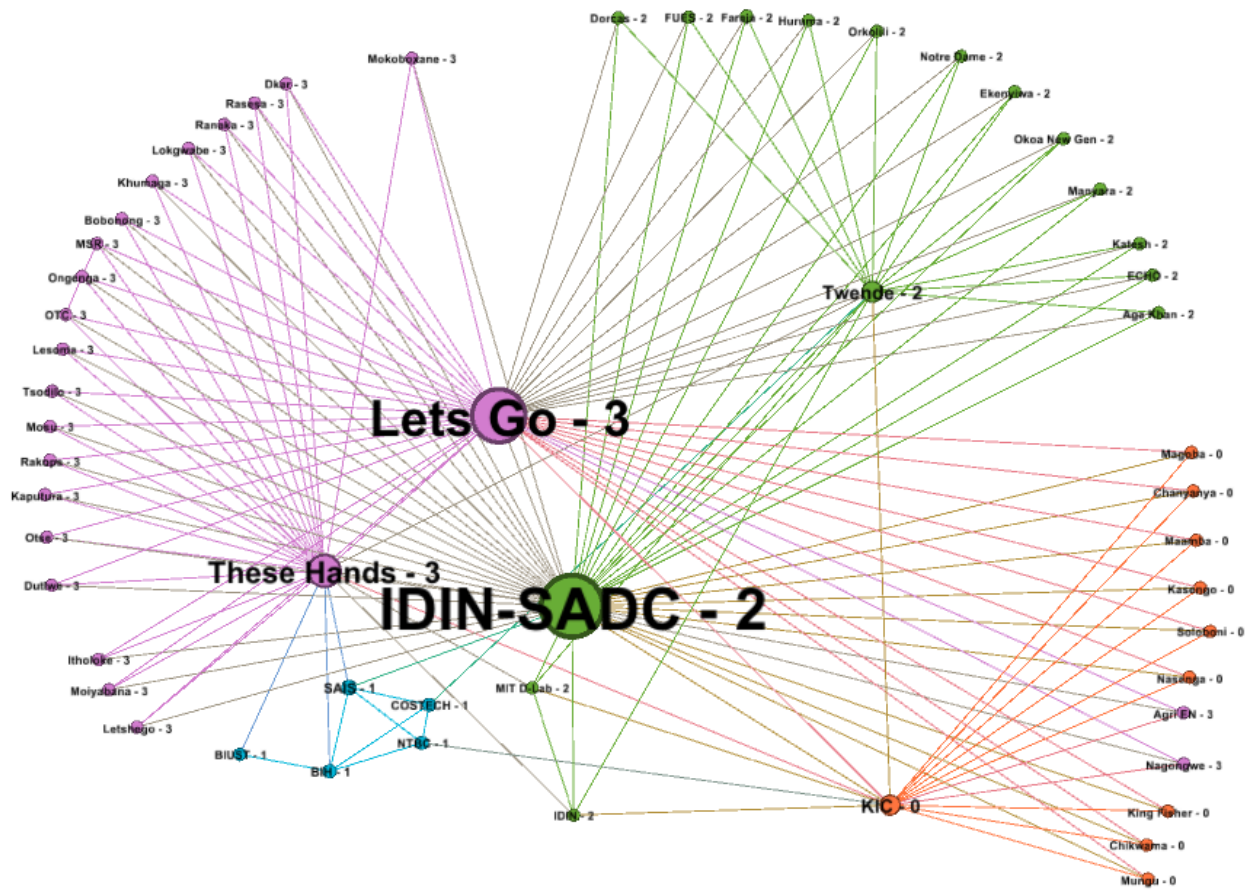






Figure 36: Graph illustrating a simulation and showing results of which node of our network belongs to which cluster or community after registering and launching IDIN-SADC Consortium organisation.



### Interpretation of modularity class test results:

Our computations and simulations show that there are 4 main clusters that items flow through in our network identified as 0, 1, 2 and 3. Cluster 0 has 10 nodes; Cluster 1 has 5 nodes; Cluster 2 has 16 nodes; and cluster 3 has 24 nodes. Since Modularity varies between 0 and 1, thus a value of 0.21 indicates a moderately high modularity. This suggests that our ecosystem consists of several internally dense groups that are closely connected to each other as indeed can be observed in figure 29 and confirmed by figure 36.

*Realeboga  
Asante Sana  
Zikomo  
Ndangi*