

INTELLECTUAL PROPERTY, TECHNOLOGY TRANSFER AND COMMERCIALIZATION

Regional Training Workshop Report

26 – 28 June 2019

Addis Ababa, Ethiopia

By
The Scinnovent Centre



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SECTION 1: BACKGROUND AND CONTEXT: WHY THIS TRAINING AND WHY NOW?

Weak intellectual property regimes undermine knowledge and technology transfer between universities and research institutes with the private sector. To address this, most universities and public research institutes have established institutional intellectual property (IP) policies, created technology transfer offices (TTOs)/intellectual property management offices (IPMOs)/commercialization divisions to facilitate knowledge/technology exchange. While the IP policies exist in some universities/PRIs and non-existent in others, the TTOs/IPMOs are mostly under-resourced and under-staffed. The levels of IP awareness and support to researchers are equally weak.

In a Needs Assessment Exercise in Maputo (November 2016) and a validation/prioritization workshop in Pretoria (July 2017), the SGCs prioritized training in “Commercialization/utilization of research products” as a key intervention in building their capacity to broker collaborative partnerships.

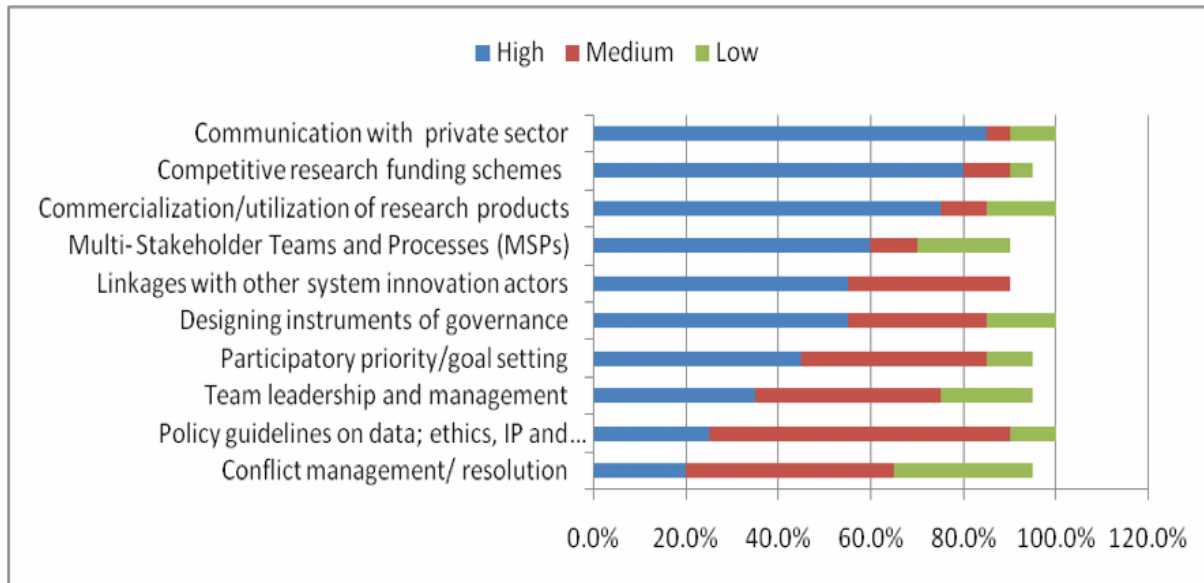


Figure 1: Importance and urgency of capacity strengthening needs

As part of its approach to promote public – private partnerships (PPPs) for research and innovation and support the SGCs in their facilitating role in promoting knowledge exchange with the private sector, the SGCI offered a specialized training to the Councils on “IP, Tech Transfer and Commercialization” during the Annual Regional Meeting to be held in Addis Ababa, Ethiopia (June 2019).

The focus of the training centred primarily on enhancing the capacity of Councils to broker/support collaborative partnerships and technology transfer between the research institutions with the private sector.

The scope addressed pertinent issues raised by the Councils in the Needs Assessment exercise including but not limited to:

- A. *IP Policies and Strategies: Funding, Innovation, Benefit Sharing*
 - i. In government/publicly funded research projects, who owns intellectual property rights? How are the benefits accessed and shared?
 - ii. How do these IP ownership/benefit sharing arrangements align/conflict with institutional IP policies?
 - iii. In multi-institutional partnerships/collaborations, how should issues of IP, publications and other benefits be accessed/shared?
- B. *Commercialization: Upscaling and Out-scaling*
 - i. What are the existing tech transfer/commercialization pathways? Which ones have been applied in African settings and what are the outcomes? What are the best practices?
 - ii. How do we foster/encourage academia – private sector partnerships and what possible roles for SGCs? Can IP frameworks help?
- C. *Technology Transfer: Role of TTOs/IPMOs*
 - i. How can SGCs support the establishment/strengthening of the TTOs/IPMOs in Universities and PRIs?
 - ii. How can SGCs support researchers and innovators in exploiting their IP?
- D. *Do it Yourself (DIY)/Decision support tools*
 - (i) What kind of support tools (manuals, templates, guidelines) do SGCs require to foster greater collaborative research, innovation and commercialization?
 - (ii) What additional capacity strengthening initiatives are required to enhance the role of Councils in catalysing knowledge and technology transfer with the private sector?

This report provides key highlights the training workshop and is organized as follows:

The preceding section provides the background and context of the training, its genesis and scope. Section 2 is a flashback to the Maputo Needs Assessment and provides key highlights of the IP-related capacity strengthening needs of the Councils. It shows both the successes (what the Councils were doing very well) and the challenges (areas where they indicated they needed SGCI support). It not only helps to show where the specific gaps are but also how the demands/needs of the Councils are being translated to targeted interventions. Section 3 is an elaboration of how the needs/gaps were translated into a training curriculum and section 4 delves into the delivery of the training and discusses some of the approaches to a practice-based training methodology.

Section 5 looks at the outcome of the training from the participants perspective and presents a two-stage evaluation approach to assess both the quality of the training (delivery and content) as well as the learning outcomes (changes in awareness, understanding and ability to apply). Section 6 discusses plans for the future including immediate (developing institutional IP strategies); intermediate (country implementation plans) and long-term (suggestions for SGCI-2) while the concluding section 7 is a reflection of the organizers (The Scinnovent Centre) on how the training sits within the broader SGCI 1 and prospects for more detailed work in SGCI – 2.

SECTION 2: THE MAPUTO NEEDS ASSESSMENT AS A BASIS

The successes..... what the SGCs had done well

Conflict management/ resolution

Kenya reported to having identified expectations of conflicts through SWOT analysis; Uganda had put in place a governing board to help resolve any conflicts; whereas Zambia reported successes in resolving issues involving grant recipients and their institutions.

Designing instruments of governing collaborations e.g. consortium agreements, contracts etc

Kenya has developed MOUs/MOAs with partners to facilitate collaborations and partnerships; Uganda has put in place grants management and collaboration offices; whereas Zambia's NSTC has experience in designing /operating corporation agreements – e.g. NRF (South Africa) & NSTC, NSTC & FNI (Mozambique).

Developing policy guidelines on data protection/sharing; ethics, intellectual property and publications

Botswana has been collaborating with WIPO on IPR and with UNESCO on ethics policies; Ethiopia has designed the necessary frameworks; Kenya has developed MOUs with partners and has initiated the drafting of its research policy; In Tanzania, institutional IP policies are partially available; Uganda has STI policy in place; Zambia drafts policy briefs /advisory notes for GIZ.

Facilitating linkages with other innovation system actors

Kenya has identified/mapped out possible actors/players in fostering the linkages; Tanzania has done well in incubations; Uganda has put in place a new Ministry of STI in place; while Zambia works closely with the technology business centre and TTOs in Universities.

Source: *Training Needs and Research priorities of the Science Granting Councils – the Maputo Needs Assessment Report (2018)*

The challenges...what SGCs needed help with

Conflict management/ resolution

Botswana needed help in establishing a research council; Ethiopia needed help in identifying sources of conflicts; Kenya needed help in plugging the identified conflict through management of interrelations; Malawi needed help for developing standard guidelines in conflict management; Tanzania needed help in capacity building for conflict resolution; while Zimbabwe needed help in managing conflicts of interest.

Designing instruments of governing collaborations e.g. consortium agreements, contracts etc

Botswana needed assistance on designing instruments e.g. contracts; Ivory Coast needed help in designing model contracts; Ethiopia needed help with establishment of think tank group; Ghana needed help in designing agreements/ contracts; Kenya needed help with development of legal frameworks for collaborations; Malawi needed help in developing skills and knowledge in negotiating/developing agreements, contract, and reconciling each priority needs and policies on a common project; Zambia needed help in developing instruments that serve interests of various actors e.g. tourists, NGOs, private sector; whereas needs help in designing consortium agreements.

Developing policy guidelines on data protection/sharing; ethics, intellectual property and publications

Ghana needed help in research ethics/intellectual property/publications; Kenya needed help in capacity building on developing guidelines; Malawi needed help in reducing conflict of interest; developing a national IP policy development and guideline; Uganda needed help in developing specific guidelines; whereas Zambia needed help with implementation of IPR regimes that capture interests of private sector.

Facilitating linkages with other innovation system actors

Ivory Coast needed help in coming up with methodology for facilitating the linkages; Ethiopia needed help with effective mechanisms of monitoring university-industry linkages; Ghana requires more training on linkage with other innovation actors; Kenya needs help in identifying the appropriate actors; Malawi needs help in defining and developing mechanisms for linkages with innovation actors; Tanzania needs more knowledge on incubation processes; Uganda needs help in consolidating the National Innovation system; whereas Zambia needs help with private sector engagement.

Facilitating commercialization/utilization of research products/outputs

Botswana needed help in creating policies and modalities on commercialization of research projects; Ivory Coast needed help in strengthening its capacity on commercialization; Ethiopia needed help in establishing a system for research output commercialization; Ghana needed help in utilization of research outputs; Kenya needs help in commercialization of research products/findings and facilitation of academic - industry linkages; whereas Malawi needs skills and knowledge in translation and promotion of systematic review of research results. Tanzania requires assistance with development of accreditation policy; Uganda needs help in realizing innovation hubs and science parks and Zimbabwe needs information on models that have worked elsewhere.

Source: *Training Needs and Research priorities of the Science Granting Councils – the Maputo Needs Assessment Report* (2018)

SECTION 3: FROM NEEDS ASSESSMENT TO TRAINING CURRICULUM

The capacity strengthening needs and gaps discussed above were translated to a training module/curriculum and programme providing a short description of how the training is organized, including the scope of each unit/module, learning objectives and outcomes. The Training materials included power point slides, case studies/local examples, group and individual exercises etc. A key component of the training was experience sharing and peer learning in facilitated Q&A sessions. These allowed more nuanced discussions on the specific country experiences, challenges, responses (covering policy and practice/admin domains).

Session 1: Levelling the field: Context, Definitions and Status	
<p>Research, Innovation and IP Management: Setting the context, making the connections</p>	<p>This session was delivered through an interactive lecture of about 30 mins followed by about 30 mins of facilitated Q&A. It helped set the stage for the rest of the training by ensuring that participants are of the same understanding on the key concepts, definitions and terminologies.</p> <p>It further helped the participants understand the linkages between research, innovation and development and the role of IP in this whole process. Key issues included: where are the entry points for IP? How does it facilitate/hinder each stage/process? What do we miss if we don't pay attention to IP management in the whole continuum?</p> <p>Considering the diversity (in formal training, roles, levels of understanding of the participants, this introductory and scene setting session was very useful in preparing the participants for the rest of the training.</p>
Session 2: Policy and Legal Issues for Innovation	
<p>National and International IP Frameworks/Regime</p> <p>Institutional IP Policies and Strategies</p> <p>Contracts, Agreements and related Tools for Managing Partnerships</p>	<p>This session was delivered through a mix of interactive lectures/presentations; group works and facilitated Q&A sessions. It focused mainly on the policies and strategies and addressed the following issues:</p> <ul style="list-style-type: none"> (i) In government/publicly funded research projects, who owns intellectual property rights? How are the benefits accessed and shared? (ii) How do these IP ownership/benefit sharing arrangements align/conflict with institutional IP policies? (iii) In multi-institutional partnerships/collaborations, how should issues of IP, publications and other benefits be accessed/shared?
Session 3: Facilitating Access to Innovation	
<p>IP Strategies, Mechanisms and Tools</p> <p>Technology Transfer Offices: Their roles, establishment and resourcing</p> <p>Harmonization of Commercialization with Public Interest</p>	<p>This session focused on the following key issues:</p> <ul style="list-style-type: none"> (i) How can SGCs support the establishment/strengthening of the TTOs/IPMOs in Universities and PRIs? (ii) How can SGCs support researchers and innovators in exploiting their IP? (iii) What kind of support tools (manuals, templates, guidelines) do SGCs require to foster greater collaborative research, innovation and commercialization? (iv) What additional capacity strengthening initiatives are

	<p>required to enhance the role of Councils in catalysing knowledge and technology transfer with the private sector</p> <p>The session was delivered through presentations, group works, facilitated Q&A and plenary reporting/feedback</p>
<p>Session 4: Commercialization, Upscaling and Out-scaling</p>	
<p>Technology Licensing and other commercialization pathways</p> <p>Innovation and Commercialization infrastructure at the Universities and Research Institutes: Spin-outs, spin-offs, incubation hubs, science parks etc</p> <p>The role of innovation/commercialization intermediaries</p> <p>IP evaluation, marketing and trading</p>	<p>This session focused on the following key issues:</p> <ul style="list-style-type: none"> • What are the existing tech transfer/commercialization pathways? Which ones have been applied in African settings and what are the outcomes? What are the best practices? • How do we foster/encourage academia – private sector partnerships and what possible roles for SGCs? Can IP frameworks help? • What is the role of innovation/commercialization intermediaries and how can we harness their potential for greater synergies? • How do you determine the financial value of your IP and in what other ways can researchers/IP holders benefit from ownership?
<p>Monitoring, Enforcement and Dispute Resolution: what role for the Science Granting Councils?</p>	<p>This session focused on the practical administration of IP, technology transfer and commercialization and discussed (with lots of participant inputs) the niche and space of the Councils as facilitators, intermediaries and arbiters in research and innovation. It was a prelude to the session on implementation plan development. It was delivered through a presentation and facilitated plenary discussion/Q&A</p>
<p>Session 5: Group Work: Towards an institutional IP Strategy</p>	
<p>Key elements of an effective institutional IP strategy</p>	<p>Participants were divided into two groups. Each group had a chair and rapporteur. The groups were tasked to discuss key elements of an effective IP strategy</p> <p>Group 1: Content issues: This group considered what the IP strategies must include and why? They were required to align the key issues identified with the SGC roles and functions. They were advised to consider both internal (organizational) as well as external (client/stakeholder) issues</p> <p>Group 2: Process issues: This group was to consider the presentation made in the plenary (on strategy development) and identify the relevant steps for developing the institutional IP strategies. <i>See annex 3</i></p>

SECTION 4: TRAINING APPROACH - PRACTICE-BASED LEARNING

Participants

The training brought together 31 participants from 10 SGCI countries: Kenya, Uganda, Tanzania, Ethiopia, Zambia, Mozambique, Botswana, Malawi, Ghana, Senegal and Burkina Faso. Other participants were from the United Kingdom (SPRU) and South Africa (NRF and NEPAD). Additionally, theme 4 Consortium partners including ACTS, STIPRO and AAU were represented. The participants were a mix of heads of the Councils and senior representatives. *See list of participants attached as annex 4.*

Pre-training assessment

This is usually a short survey (often done via survey monkey) to elicit the training needs, competency levels, areas of interest/emphasis and any additional topics/themes that the participants would like covered in the training. It is helpful in making the training a customised experience rather than a generic undertaking. However, for this training the Needs Assessment exercise conducted in Maputo (2016) and Pretoria (2017) was deemed more relevant and sufficient. It provided an institutional and national perspective to the training.

Training methodology

The delivery of this course was largely through (i) interactive lectures/presentations using power-point slides (ii) group works and individual exercises (iii) facilitated Q&A sessions. Emphasis was placed on local examples and case studies. Where there were no relevant real/actual examples, facilitators designed hypothetical cases that highlighted the issues under discussion. Sharing participant and country experiences helped contextualize the training further and brought to the fore practical realities and challenges of IP management, technology transfer and commercialization. The use of *energizers/ice-breakers* helped to keep adult learners active and engaged while *facilitated Q&A* sessions ensured interactive engagement. *Group works/exercises* were applied to promote peer learning and sharing of experiences. These were guided, documented and presented in plenary with additional materials provided to the groups. Group formations ensured a mix of experiences across the different country, geographic and linguistic diversity. Group leadership was voluntary and rotational. *Daily evaluations* were conducted for immediate feedback and incorporation into the training.

SECTION 5: ASSESSING THE QUALITY OF TRAINING - WHAT DID WE ACHIEVE?

We adopted a two-stage evaluation approach to assess the quality and delivery of the training workshop.

Level 1: Content and Delivery – relevance, depth, practicability, methodology/approach

Participants were requested to provide feedback on the training in terms of its relevance to their needs, how practical/applicable to their situations and contexts as well as the facilitators and their modes presentation. They were asked to the following questions:

1. What worked well?
2. What didn't work well?

3. What should we change?

Participant views on curriculum content and delivery

Country #1

1. Presentation on IP was very clear and simple to follow. I gained a lot on IPR issues
2. None
3. Time is not enough

Country #2

1. Facilitator was excellent
2. Topic well captured
3. Limited time to exhaust all

Country #3

1. What worked? Presentations-very concise, clear and very informative
2. What didn't work? None

Country #4

1. What worked well? Illuminating presentations on IP were an eye opener
2. What did not work well? Time constraint

Country #5

1. The session was very interactive for me. The presenter was very clear and has knowledge of the subject of discussion
2. I would like the focus to be on the IP policies of SGCs

Country #6

1. Presentations ete a la han teun de has attentes nene
2. La quntion relative en groupe et this Claire anssi

Country #7

1. What I liked: The case studies used in the presentations put the whole session in a practical picture which made it easy to understand
2. What I did not like: Session was over-loaded

Country 8

1. The Training is exceptional and well detailed
2. More time needed to explain stories across the SGCs

Country #9

1. Quite clear comprehension on IP context, IP rights, types of IPs and more, Case situations/exercises very good
2. To be done better:
 - Share the slides
 - Give more time for discussions

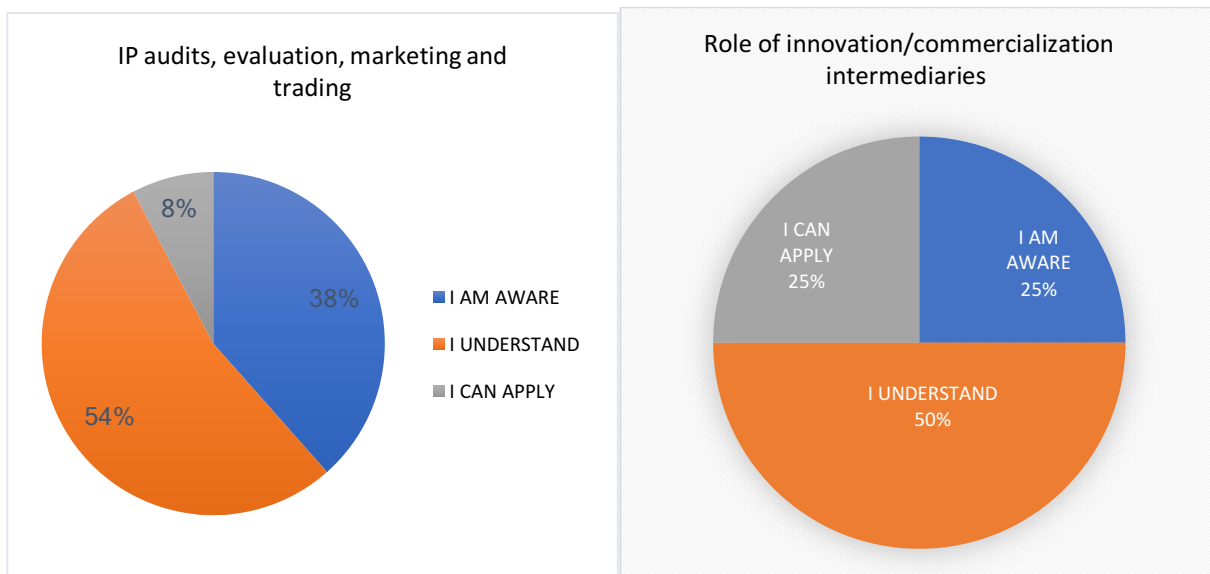
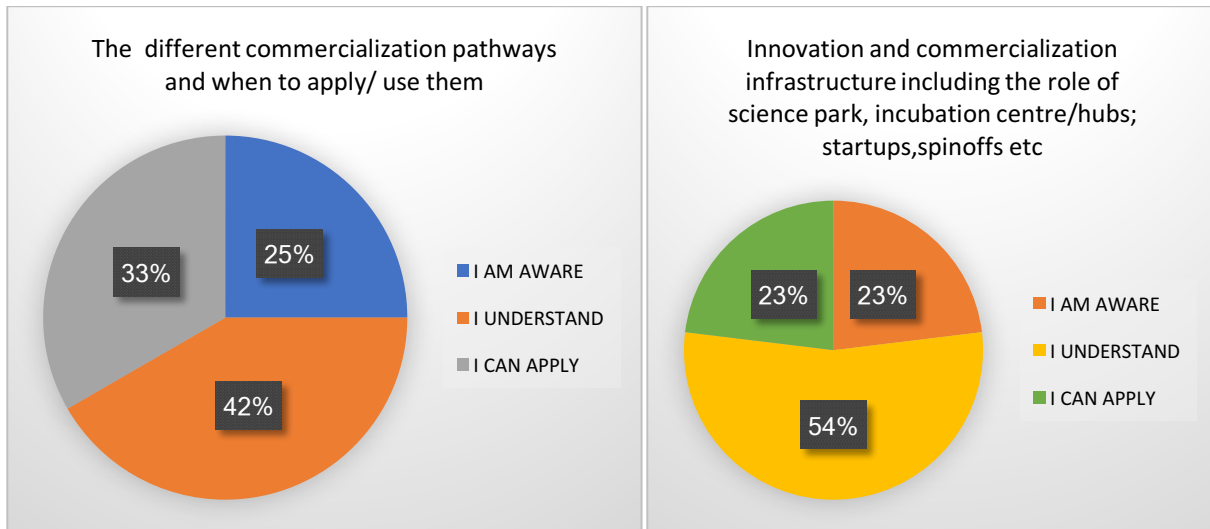
Country # 10

1. -What worked well? The presentations, good place
 - What did not work well? I can't think of any
 - What to change? Better to wait till the end

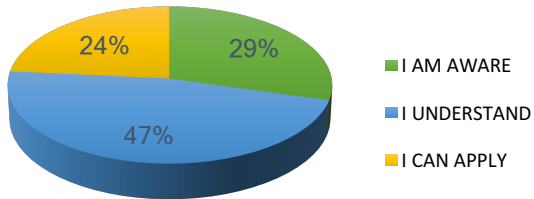
Level 2: Learning outcomes – changes in awareness, understanding and ability to apply

The second level of assessment asked participants how their awareness, understanding and ability to apply the concepts and topical issues in IP, technology transfer and commercialization had changed as a result of the training. This followed the 10 topics/themes in the training curriculum as in the *annex 2*. The responses are shown in the charts below

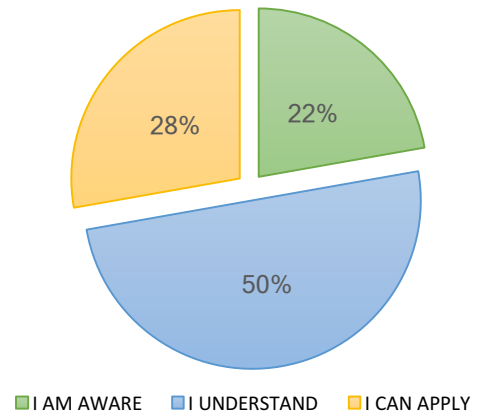
Learning Outcome Results



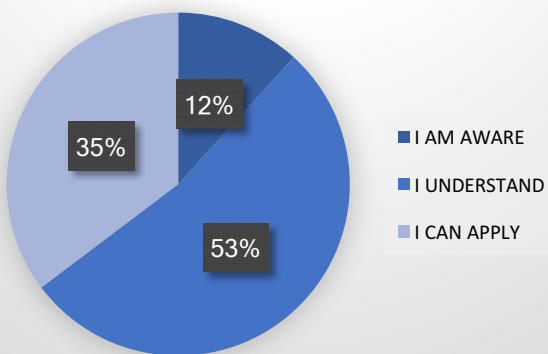
Role of SGCs in facilitating, monitoring, enforcement and dispute resolution of IP issues in publicly funded projects



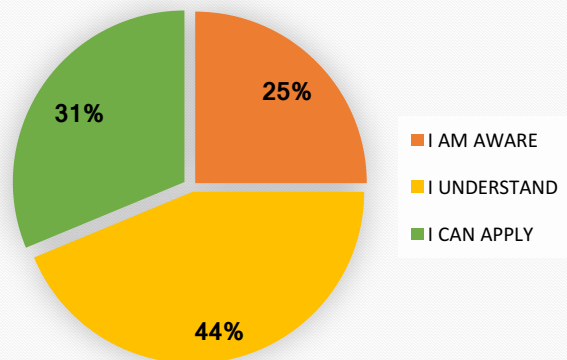
Definition, key concepts and terminologies of intellectual property rights, technology transfer and commercialization

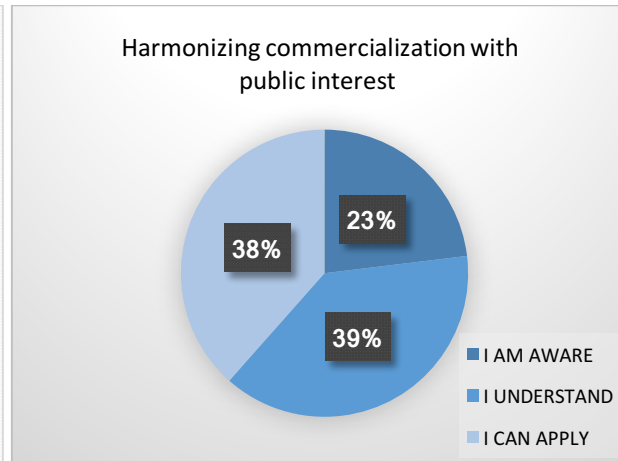
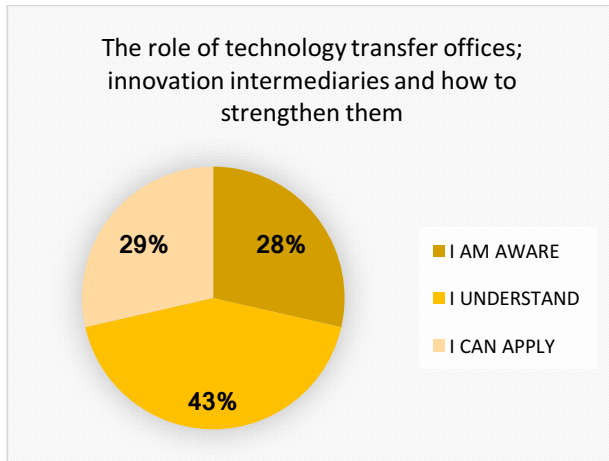


Policy and legal issues on innovation including institutional policies and strategy



Different IP system/ types, tools, mechanism, agreements, contracts and when to use/ apply them





SECTION 6: WHERE DO WE GO FROM HERE? IMMEDIATE, INTER-MEDIATE AND LONG-TERM PLANS

Immediate plans/support

Model institutional IP strategy: Building on the draft IP strategy developed during the training, craft a model IP strategy that Councils can customize to their contexts and specific country situations.

A key outcome of the training was key elements of an IP strategy for a generic IP management strategy that councils can customize. The short training time only allowed for discussion of the main elements/components of such as strategy leading to a draft document which the facilitators and organizers (Scinnovent Centre) will continue to work on and finalize based on views/perspectives of the participants. This was derived through group work (*see annex 3 for group instructions*). Emphasis was therefore placed on generating (i) an annotated table of contents - deciding on the main frame/ (what to include/exclude); specific roles/functions of/for the Councils

Intermediate post training support

IP/Tech Transfer and Commercialization Toolkit: This should be viewed/ designed both as a *training manual* (for those who may want to conduct similar workshops/trainings) and a *reference manual* (for those who want to learn on how to write implementation plans and IP strategies besides other DIY tools).

Long-term (SGCI – 2) support

(i) Implementation plans

This was another key outcome of the training. Participants were guided to craft follow up action plans with specific activities, timelines, responsibilities and any support required (technical/material etc).

These plans are specific to individual Councils/countries. ¹Ten (10) such plans were produced during the training and will guide mid- to long-term interventions in the specific SGCs.

(ii) Follow up Mentorship/Coaching Support

The implementation/action plans developed during the training require additional technical support/coaching/mentorship by the Consultants/facilitators. The specifics that emerged during the training include what areas might need additional support, and what nature of support e.g. virtual (skype, telephone, email etc) or would it require physical, face-to-face visits? The SGCs also identified what they would require from the SGCI. Analysis is on-going and a short synthesis will be prepared highlighting areas of need that could be incorporated into the SGCI – 2.

SECTION 7: SOME REFLECTIONS GOING FORWARD

Diversity (gender, age, expertise and seniority) and choice of attendees

Participants were nominated by the SGCs (presumably the HoRCS) based on a concept note/training curriculum shared with them. However, of concern is that nearly all the nominees (14 out of a possible 15) were men. The under-representation of women is either a reflection of the current situation in the SGCs (gender imbalance) or a selection/nomination bias. Either way, there are suggestions to pay more attention to gender issues in SGCI – 2 and some guidelines may be necessary to ensure equitable representation/participation.

Structure of the SGCs and who to include/or who is more relevant?

The structure of the SGCs differ across countries and this follows with the functions. For example, in Kenya, Zambia and South Africa, it emerged that different organizations deal with research funding, technology transfer and commercialization. Taking the example of Kenya, NRF would deal with research funding/resource mobilization while KENIA would be responsible for technology transfer and commercialization while NACOSTI is in charge of research priorities and quality assurance. In such a case, who should attend the training? A similar situation obtains in Zambia and South Africa (where the Technology Innovation Agency (TIA) is in charge of technology transfer and commercialization). It was a challenge when representatives/nominees were unable to respond to some of the issues because they were “outside their mandate” and “couldn’t speak for the other organizations or departments”.

To what extent can/should other innovation system actors be involved?

In matters of technology transfer and commercialization, the SGCs are facilitators/intermediaries or brokers/catalysts. The real action rests with the technology transfer offices (TTOs) or intellectual property management offices (IPMOs) in the universities/public research institutes. Other key actors are the national IP offices and the private sector. Our experience/view is that the interventions will remain incomplete without incorporation of the representatives of these actors. While the SGCs remain the primary focus, SGCI – 2 should consider a more integrated/inclusive approach.

¹ These are currently being designed/laid out and will be shared separately

For piloting and uptake/application, resources should be allocated

One key lesson from both the training on “communication with the private sector” and the “IP, tech transfer and commercialization” is that technical and financial support for follow-on activities are extremely important. Whereas the SGCs gain knowledge (increase their understanding), their ability to apply is usually constrained by lack of resources to implement the activities outlined in their action/implementation plans. We recommend that modest amounts be set aside to pilot the activities in selected SGCs. This will ensure that knowledge is translated into action and provide encouragement for other SGCs to emulate and advocate for more resources from their governments.

In conclusion, going forward *IP, technology transfer and commercialization* remains an area of great need and specific interventions should be considered/modelled around the implementation plans and mentorship support in SGCI – 2.

Annex 1 – Workshop Programme

DAY 1: IP POLICIES AND STRATEGIES		NOTES
13:30 – 14:00	Registration	Outside meeting room - Workshop materials provided to participants
Session 1: Introduction to the Workshop: Why are we here?		
14:00 – 14:10	Introduction to the workshop	Objectives of the workshop Expected outcomes Programme and training approach Post training activities
Session 2: Levelling the field: Context, Definitions and Status		
14:10 – 15:00	Research, Innovation and IP Management: Setting the context, making the connections	
15:00 – 16:00 Session 3: Policy and Legal Issues for Innovation		
15:00 – 17:00	National and International IP Frameworks/Regime Institutional IP Policies and Strategies Contracts, Agreements and related Tools for Managing Partnerships	
17:00 – 17:30: Feedback and Wrap-up Tea/ coffee break		

DAY 2: TECHNOLOGY TRANSFER		
Session 4: Facilitating Access to Innovation		
08:00 – 8:15	Recap of Day 1 Volunteer/participant	A brief overview of the previous day's key issues, take home messages. One participant will be encouraged to volunteer and make the presentation
08.15 – 10.30	IP Strategies, Mechanisms and Tools Technology Transfer Offices: Their roles, establishment and resourcing Harmonization of Commercialization with Public Interest	
10:30 – 11:00	Tea/Coffee Break	
Session 5: Group Work: Towards an IP Strategy		
11.00 – 12.30	Group 1: Key elements of an effective IP strategy Group 2: Guidelines for IP Management in government – funded multi-institutional projects Group 3: Guidelines for harmonizing commercialization with public interest	

12:30 – 13:00	Group reports	Groups will report to plenary followed by a brief Q&A session
13:00 – 14:00	Lunch break	
SESSION 6: COMMERCIALIZATION, UPSCALING AND OUTSCALING		
14:00 – 16:00	<p>Technology Licensing and other commercialization pathways</p> <p>Innovation and Commercialization infrastructure at the Universities and Research Institutes: Spin-outs, spin-offs, incubation hubs, science parks etc</p> <p>The role of innovation/commercialization intermediaries</p> <p>IP evaluation, marketing and trading</p>	
16:00 – 16:30	Monitoring, Enforcement and Dispute Resolution: what role for the Science Granting Councils?	
16:30 – 16:45	Reflections, feedback and wrap-up Tea/Coffee is served	

DAY 3: INTO THE FUTURE: WHAT NEXT?		
Session 7: Implementation plans and post-training support		
08:30 – 9:00	Recap and evaluation of Day 2 Participant/volunteer	Key issues, messages, lessons from Day 2
9:00 – 10:30	Developing Implementation Plans	Country teams to discuss follow up activities post the training. A template and further guidance will be provided
10:30 – 11:00	Tea/Coffee Break	
11:00 – 12:00	Group/country reports of implementation plans	Country teams present to plenary their ideas for additional input/comments by the facilitators and other participants
12:00 – 13:00	Further group work	Country teams incorporate comments/finalize the implementation plans
13:00 – 14:00	Lunch break	
Session 8: Evaluation, Post-training Support and Closure		
14:00 – 14:30	Feedback and wrap up	Administer post training evaluation survey; discuss any feedback/recommendations from participants and agree next steps
14:30 – 15:00	Tea/Coffee break and departure	

Annex 2: Learning outcomes

Topic/theme	Tick as appropriate (<i>you can tick more than one box</i>)			Remarks/comments/suggestions
	I am aware	I understand	I can apply	
1. Definitions, key concepts and terminologies of intellectual property rights, technology transfer and commercialization				
2. Policy and legal issues on innovation including institutional policies and strategies				
3. Different IP systems/types, tools, mechanisms, agreements, contracts and when to use/apply them				
4. The role of technology transfer offices; innovation intermediaries and how to strengthen them				
5. Harmonizing commercialization (entrepreneurship) with public interest				
6. The different commercialization pathways and when to apply/use them				
7. Innovation and commercialization infrastructure including the role of science parks, incubation centres/hubs; start-ups, spinoffs etc				
8. IP audits, evaluation, marketing and trading				
9. Role of innovation/commercialization intermediaries				
10. Role of SGCs in facilitating, monitoring, enforcement and dispute resolution of IP issues in publicly funded projects				

Annex 3 - Group work: Towards SGC IP Strategies

Group 1: Content issues

To focus on critical content issues – those issues that Councils deal/struggle with in the course of their work/performing their functions. Should also focus on the critical actors/clients and how the Council's address their needs. Finally, should focus on resource requirements (financial, infrastructural, skills/capacities, relational)

Questions:

What must we include in the strategy and why? – align the key issues to the SGC functions
What resources will we need and where can we get this support
Who are our key clients and what are their needs? How should/could these needs be addressed?

Group 2: Process issues

To focus on process issues – the pathway towards achieving/developing the institutional IP strategies. Look at the flow diagram for developing an IP strategy presented and identify the relevant stages/steps

For each step/stage identified/selected, discuss:

- What do we need to do?
- What resources do we require?
- When can we do this?
- What kind of support do we require from the SGCI?

Annex 4 – List of participants

No	Country	Title	First Name	Sur Name	Sex	Organization
1	Botswana	Mr	Ontlametse	Gaothuse	M	MoTE
2	Burkina Faso	Dr	Tamboura	Hamidou	M	FONRID
3	Ghana	Mr	jonathan	Amo-otoo	M	MESTI
4	Kenya	Mr	David	Ngigi	M	NRF
5	Malawi	Mr.	Mike Gilson	Kachedwa	M	NCSTI
6	Senegal	Mr	Daouda	Diouf	M	DFRSDT
7	Tanzania	Mr	Mashuhuri	Mwinyi Hamisi	M	COSTECH
8	Uganda	Mr	Geofferey	Sempiri	M	UNCST
9	Zambia	Mr	Clement	Kasaro	M	NSTC
10	Kenya	Mr	David	Njuguna	M	KIPI
11	Kenya	Dr	G.K	Kosimbei	M	KU
12	Kenya	Dr	Maurice	Bolo	M	SC
13	Kenya	Mr	Donelly	Mwachi	M	SGCI
14	UK	Dr	Chux	Daniels	M	SPRU
15	Tanzania	Mrs	Anne	Ngoo	F	COSTECH
16	Ethiopia	Mr	Aklilu	Gebre	M	MInT
17	Kenya	Dr	Diakalia	Sanogo	M	IDRC
18	Ethiopia	Mr	Abebual	Molla	M	MInT
19	Mozambique	Mrs	Dirce	Madeira	F	FNI
20	Kenya	Dr	Rebecca	Hanlin	F	ACTS
21	Kenya	Dr	Aschalew	Tigabu	M	ACTS
22	Kenya	Ms	Winnie	Khaemba	F	ACTS
23	Kenya	Ms	Mary	Muthoni	F	ACTS
24	South Africa	Ms	Dorothy	Ngila	F	NRF-SA
25	South Africa	Mr	Lukovi	Seke	M	NEPAD
26	Tanzania	Dr	Gussai	Sheikheldin	M	STIPRO
27	Zambia	Ms	Mupande	Nambala	F	NSTC
28	Ghana	Ms	Ruth	Dickson	F	AAU
29	Ghana	Ms	Samuel	Agyapong	M	AAU
30	Ethiopia	Mr	Semere	Gethnenos	M	MInT
31	Burkina Faso	Mr	Coulibaly	Ardiouma	M	FONRID

