

# RIGHTS, RESOURCES, MARKETS AND DEVELOPMENT



## A South African/Namibian Farmer's Guide to Using Intellectual Property

FUNDED BY PROJECT DURAS

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# WORKSHOP GUIDEBOOK

# ABOUT THIS MANUAL

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**T**his publication is a product of the Project DURAS “Linking Farmers to Markets through Valorization of Local Resources: The Case for Intellectual Property Rights of Indigenous Resources”. A project funded by the French Minister of Foreign Affairs and implemented through the University of Pretoria, Department of Agricultural Economics, Extension and Rural Development in collaboration with South African, Namibian, French and American collaborators. Project DURAS (*Promotion du Développement Durable dans les systèmes de Recherche Agricole du Sud*) “Promoting Sustainable Development in Agricultural Research in the South” was conceived to contribute to strengthening the involvement of southern stakeholders in the agricultural research process and ensuring their voices are heard at the international level. It also aims to enhance the scientific potential of these stakeholders through implementation and management of research programmes which they believe to be strategically important for their regions.

The project collaborators believe that many poor communities in rural areas of Southern Africa own a rich diversity of traditional knowledge and indigenous resources (Cape indigenous flora; Mopani worms; Marula fruit etc.) and produce agro-food products based on local resources (Rooibos tea etc.). Considering that many of them have a given quality, reputation or other characteristic essentially attributable to their geographical origin, labelling and protection through a geographical indication (GI) could apply to them. Nevertheless, rural communities in the SADC region generally market low value products or raw materials. Where differentiated products do exist, they are often the result of the initiative of medium or large-scale farmers and enterprises.

Two central questions will be addressed by this project: "How can local communities efficiently qualify and differentiate their production through geographical indications?" And "What is the nature and extent of the required institutional and legal framework to achieve this objective?"

This resource guide is designed to support an in-person capacity-building workshop implemented by the collaborators. The structure of the resource guide is intended to make it possible for local organizations to replicate and implement the training in a variety of contexts.

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While this guide is intended to guide farmers and farmer organizations through a process of understanding rights, examining resources and assessing the efficacy of intellectual property rights, always consult legal counsel before proceeding with any option. Laws and legal requirements are constantly changing and being modified. This resource guide is meant to guide the reader through a process of knowledge analysis and help identify potential intellectual property options – not to replace legal counsel.

## ABOUT THE AUTHORS



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Following her tenure as a research assistant in the Department of Animal and Wildlife Sciences at the University of Pretoria, she served as a visiting scholar at the American Goat Research Institute in Oklahoma, in the United States from 1993 to 1996. On returning to South Africa she created and managed the FSRE & SMME Development Programme at the Irene Animal Nutrition and Products Institute of the ARC until 2002. As leader of this programme she concentrated on development projects that emphasised job-creation, value-adding, gender, resource and information access, and indigenous resources and knowledge. In 2002 she established a consultancy practice specialising in Agriculture, Engineering, Development and Science; Scientific Roets (PTY) Ltd. She received her PhD in Agricultural Economics from the Department of Agricultural Economics, Extension and Rural Development of the University of Pretoria under the leadership of Prof. Johann Kirsten in 2004. Merida was awarded the J.L. Irvin-Rumevite Prize in Ruminant Nutrition in 1991, the Bronze Medal of the South African Society of Animal Science in 1994, the Research Marketing Directors' Award of ANPI in 1998, was nominated for the Woman in Agricultural Science Award in 1998, received the Best Scientist award from the National Department of Agriculture in 2001 for her work on the Commercialisation of Indigenous Goats, was nominated as Agriculturalist of the Year by the Agricultural Writers Association of the Northern Region in 2002 and was granted a fellowship by the American Association for the Advancement of Science in collaboration with the South African Department of Science and Technology in Radio Science Journalism in 2002. In her spare time Merida uses her microscope to study the natural environment of her and her husband Adriaan's farm outside the town of Kokstad in rural KwaZulu-Natal, South Africa.



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*Merida Roets and Justin van Fleet first met in 2002 at the American Association for the Advancement of Science in Washington D.C., where Merida was a South African Radio Science Fellow and Justin a staff member for the Science and Human Rights Program. Since 2002, the two have been brainstorming a way to integrate intellectual property tools developed at AAAS into the Southern African context. This publication is the result of years of brainstorming and cross-Atlantic emails.*

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*Cover: Cartoon used with permission of Dr.Jack and Farmer's Weekly*

*"This manual builds off the AAAS publication by Hansen and van Fleet entitled "Traditional Knowledge and Intellectual Property: A Handbook on Issues and Options for Traditional Knowledge Holders in Protecting their Intellectual Property and Maintaining Biodiversity, American Association for the Advancement of Science, Washington, DC, 2003" by placing IP in a Southern African context.  
To learn more, visit: [shr.aaas.org](http://shr.aaas.org) <<http://shr.aaas.org>>*

# TIPS FOR FACILITATORS

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## Introduction

As a facilitator, you are responsible for creating the learning environment and maintaining the flow of the workshop. You must be aware of the participants' needs and be sensitive to their concerns. The following tips will help you to achieve a successful workshop.

### ***Tips for Success: Tips for your success as a facilitator:***

1. Manage time wisely. Time is a motivating factor in learning processes. If you go too slowly, the participants will lose interest and commitment.
2. Give brief presentations. Encourage participants to speak up and participate actively in discussions and exercises.
3. Follow the instructions for the exercises:
  - use different techniques
  - promote active participation
  - increase interest and level of motivation
4. Avoid 'shortcuts' while working on topics. Keep the same level of interest while making presentations, doing exercises and listening to reports. Remember that as a facilitator you are responsible for the results of the workshop.
5. Do not let your interest and willingness to teach diminish. Show concern for the participants' learning and be patient!
6. Be an attentive and good listener. The participants expect you to value their ideas and to look at them while speaking. These positive attitudes increase your credibility with the participants.
7. Praise your participants for their efforts and for good performance. This shows that you recognize their input and consequently increases their level of motivation.
8. Make sure that your participants feel positive and that they are satisfied with the workshop. Ask for their feedback at the end of the day.
9. Be confident of your success as a facilitator. Go through the whole plan and be well prepared. Let them see you are competent and self-confident.

### *My Notes*

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# PURPOSE

## Introduction

Intellectual property (IP) refers to the creations of peoples' minds: inventions, designs, processes, knowledge or unique characteristics resulting from human ingenuity. Intellectual property rights (IPRs) are forms of recognition of ownership over these creations of the mind, giving the owner exclusive rights to their use, sale and modification. The purpose of this resource guide is to allow farmers and farmer organizations to evaluate agricultural products – and the knowledge that goes into production of those products – to determine whether intellectual property rights may help promote linkages to markets and increase the value of the agricultural goods. This resource guide helps assess the potential use of intellectual property in regard to the community goals, values and interests, ensuring that intellectual property promotes development in a positive manner.

## What will this training do?

This training will take the participant through several steps, allowing him or her to understand the potential values or “red flags” associated with utilizing intellectual property rights for agricultural goods. The training will do this by a series of steps:

1. Exploring the rights of South African and Namibian farmers;
2. Mapping the community to determine:
  - who are the “members” or “resource owners” invested in the production of the resource and
  - what are the goals of the members of the given community;
3. Examining agricultural resources to determine the potential knowledge claims, paying specific attention to:
  - the production steps,
  - the unique characteristics associated with those steps, and
  - the unique characteristics of the final agricultural product;
4. Matching community goals and values with the characteristics of each knowledge claim to determine potential synergies and tensions with intellectual property rights options;
5. Assessing each of the applicable intellectual property rights options for each knowledge claim;
6. And creating a plan of action to utilize the intellectual property system.

This resource guide will point out ways in which intellectual property can help or harm the community and assist in the identification of potential protection measures the community can take to prevent misappropriation of the knowledge surrounding its agricultural resources.

Throughout the guide, the word community will be used when talking about the knowledge stakeholders. This word should be used loosely to define the participants attending the training and the others they represent taking part in the production of the agricultural resource. Community can refer to a group of farmers, a cooperative, a company, or a group of people sharing in the production of an agricultural product.



## What will this training not do?

Completing the training and reading this resource guide cannot guarantee that intellectual property rights will be compatible with the community's agricultural resources. There are no promises that intellectual property will be compatible with the knowledge, promote economic development, or that the community's application for intellectual property rights will be approved by the government. This tool is not an advocate for or against the use of intellectual property, but instead an impartial assessment tool designed to help the agricultural community in South Africa and Namibia decide whether intellectual property rights can support community needs and generate development opportunities.

### **Activity 1: Setting the Scene**

The day of the training will be a day of intense learning and interaction. To ensure that the group achieves the goals by the end of the day, begin by setting ground rules for the workshop. Every participant should be given a small piece of paper (a quarter of an A4 foolscap paper will do).

#### **Group exercise: 10 minutes: Instructions**

1. Have each participant write down the most important rule he or she feels should be adhered to during the course of the workshop. When finished participants should hand the piece of paper to the facilitator.
2. The facilitator will read out each of the participant's suggested rules, and write them in large letters on a piece of flip-chart paper (with the heading "Rules of this Workshop") taped (with masking tape) to the venue's wall.
3. The facilitator will ask if there are more suggested rules for the workshop. These will be added to the list of rules.
4. Facilitator: Have you included rules such as:
  - You are responsible for your own comfort
  - Let's start and stop on time.
  - Let's experiment and explore new ideas and ways of doing things
  - Suspend judgment
  - Take responsibility for learning
  - Have fun!

#### *My Notes*

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### **Activity 2: Planning to learn something new**

It is important that every participant goes away from the workshop feeling that they have made a contribution to the workshop as well as feeling that they have benefited from the workshop. To ensure this, participants should help outline what it is the group is interested in learning. Every participant is given a piece of paper (half an A4 foolscap with do).

#### **Individual Exercise: 5 minutes: Instructions**

1. Participants should write down one thing that he or she would like to learn in today's workshop.
2. The pieces of paper should be kept in sight during the workshop. When participants feel they have learned that thing, tear the piece of paper up and throw the pieces into the air, so that the group can celebrate!

My Notes

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**Activity 3: Introducing the participants**

Before the start of the capacity-building workshop, it is important for all participants in the training to feel comfortable with one another and understand why each individual is sitting around the same table to assess the applicability of intellectual property for South African/Namibian agricultural resources. This simple activity can start the dialogue and help to facilitate this process. It also engages participants in outlining potential outcomes that they would like to see result from the workshop, allowing the facilitator(s) to focus on these desired outcomes during the training process. The facilitator(s) should participate in this activity to ensure that a sense of equality is felt among instructors and participants.

**Working in Pairs: 1 hour: Instructions**

1. Participants should pair off. If there are an odd number of participants, there may be one group of three.
2. Each pair should take five minutes to interview one another. Each partner should ask the other partner four questions:
  - a. What is your name?
  - b. What is your role in the agricultural community?
  - c. Why did you decide to attend this training?
  - d. What do you hope to be an outcome of this training?
3. Once the interviews are complete, each partner will introduce the other to the entire group. After they are introduced, allow the partner the opportunity to add or clarify anything that was mentioned in his or her introduction.
4. As the partners are introduced, the facilitator will keep track of the desired outcomes of the group during the training.
5. The facilitator will review the outcomes with the entire group and address any immediate concerns or unrealistic expectations.
6. Continue to the next section on exploring rights.

My Notes

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# EXPLORING RIGHTS

## Overview

Several international agreements – from declarations and legally-binding covenants to trade agreements – provide protections for the rights of South African and Namibian farmers' knowledge, innovation and development. The **Universal Declaration of Human Rights (UDHR)**, signed in 1948, states that everyone has the right to ...

*"...freely participate in the cultural life of the community, to enjoy the arts and share in scientific advancement and its benefits."*

This document also states that everyone...

*"...has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."*

While not legally-binding, the declaration sets forth a clear, common ideal that society as a whole is to benefit from scientific advancement while at the same time individuals have rights over their personal discoveries and innovations, both scientific and artistic. Governments signing the UDHR indicate that they intend to provide these rights to their citizens. South Africa and Namibia have both signed this declaration.



This declaration has been divided into two additional documents which are legally binding and also signed by South Africa and Namibia. One of these documents, the **International Covenant on Economic, Social and Cultural Rights (ICESCR)**, codifies these rights into international law, meaning that the member countries must implement laws to protect these rights within their borders. The rights are outlined in Article 15 and state:

The State Parties to the present covenant recognize the right of everyone:

- To take part in cultural life;
- To enjoy the benefits of scientific progress and its applications;
- To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Looking particularly at clauses B and C, the governments of South Africa and Namibia have committed to providing the **right to scientific advancement** and its application (new discoveries, medicines, agricultural techniques, etc.) to all of its citizens, while at the same time protecting the **rights of the individual inventors and innovators** in the sciences.

**Moral rights** are rights of credit or ownership that attribute an individual with a particular innovation whereas **material rights** refer to rewards for contributing an innovation to society (often monetary rewards). One way that this is done is through its intellectual property laws. While it is debatable whether intellectual property adequately protects the rights, especially in determining the tipping point between the rights of the individual and the rights of the group, in its current legal format, it allows for individuals to have protection over the rights of a discovery for a period of time, and then allows the discovery to become public knowledge and available to everyone. We will look more at how this system can work later in this guidebook.

The **Convention on Biological Diversity (CBD)**, another international agreement to which South Africa and Namibia are members, sets forth a mandate for countries to adopt national legislation to

*"...respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities... for the conservation and sustainable use of biological diversity."*

It also states that the wider application of the knowledge, innovations and practices should occur with ...

*“...the approval and involvement of holders of such knowledge” and that...*

*“...equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices”*

...should be encouraged.

Essentially, the Convention protects the knowledge-holders’ right to participate and determine the use of the knowledge and at the same time, share in any benefits arising from its use. **The International Labor Organization Convention No. 169** also safeguards the rights of

*“...peoples concerned to the natural resources pertaining to their lands,”*

including the right to

*“...participate in the use, management and conservation of these resources.”*

The South African constitution provides for property rights; where property is seen as those resources that are generally taken to constitute a person’s wealth, which are recognized and protected by law. Such resources are legally protected by private law rights – real rights in the case of physical resources, contractual rights in the case of performances, and intellectual property rights in the case of intellectual property. Specifically, clause 4b of Section 25 of the South African Constitution states that “property is not limited to land.”

South Africa and Namibia protect these rights through their legislative system, creating laws that support the countries’ commitment to international agreements and standards.

**Intellectual property law** is one way that these countries protect the rights of the individual and groups over knowledge, innovation and discoveries. While some of the laws in each country differ, the basic premise behind the creation of the laws is the same; this guidebook will make note of any specific distinctions of which the reader should be aware. One way in which the protections for intellectual property are standardized are through the **World Trade Organization’s Agreement on Trade Related Aspects of Intellectual Property (TRIPs)**. This agreement internationalizes the minimum protections for intellectual property in countries like South Africa and Namibia. If South African or Namibia fail to provide these protections, their status in the WTO can be jeopardized. By providing protections such as patents, copyrights and trademarks, knowledge can be protected within the borders of South Africa and Namibia belonging to the respective citizens of these countries *and by foreigners*. It is very important to note that these minimum protection standards benefit the moral and material rights of South Africans, Namibians, and foreigners within the South African and Namibian borders. For example, a discovery in Europe could be protected in South Africa, protecting the moral and material interests of the European innovator in South Africa, preventing its use, sale or distribution without the proper protection of moral and material rights of the European owner. To facilitate this process, agreements such as the Patent Cooperation Treaty allow a patent on an innovation to be filed once and protected in many countries across the globe. We will talk about patents later in this guidebook.

## Summary of Agreements and Rights

Agreement	Right
<p><b>Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights</b></p>	<p>Societal Right to Scientific Advancement and its Benefits</p> <p>Individual right to moral interests resulting from a scientific, literary or artistic production</p> <p>Individual right to materials interests resulting from a scientific, literary or artistic production</p>
<p><b>Convention on Biological Diversity</b></p>	<p>Right to respect, preservation and maintenance of knowledge, innovations and practices of local communities</p> <p>Right to approve and be involved in the wider use of knowledge, innovations and practices</p> <p>Right to equitable sharing of benefits arising from the use of the knowledge, innovations and practices</p>
<p><b>International Labor Organization Convention No. 169</b></p>	<p>Right to natural resources pertaining the peoples’ lands</p> <p>Right to participate in the use, management and conservation of resources</p>





## Case Study: The Hoodia Succulent

For hundreds of years, the San of Southern Africa collected and used the *Hoodia gordonii* succulent to eat less, slim down, and as an appetite suppressant and method to maintain their energy levels on their two to three-day hunting trips (*Hoodia* had the same effect on their hunting dogs). In 1995 the Council for Scientific and Industrial Research (CSIR), a parastatal research organization of South Africa, after years of research on the plant, obtained the approval for a patent on the active ingredient of *Hoodia*. This patent gave the CSIR exclusive rights over the sale, production and use of the active ingredient of *Hoodia* for staving off hunger. International pharmaceutical companies Phytopharm in the UK and Pfizer in the USA expressed interest to commercialise this active ingredient as an anti-obesity drug. In 2001, WIMSA (Working Group of Indigenous Minorities in Southern Africa), a San-owned regional networking organization, learnt about the CSIR patent and the international commercialization possibilities. Despite the patent, the knowledge of the potential use of *Hoodia* spread across the globe, and people started to make *Hoodia* pills in developed countries. These people are making a lot of money. What should the San do? Do they have any rights over the *Hoodia* succulent?

(See the box on the Reference page regarding the actual result of this case)



# EXAMINING AGRICULTURAL RESOURCES

## Overview

In order for Intellectual Property Rights to be examined for their efficacy over knowledge systems, one must first identify what the knowledge or innovation is. The most basic form of knowledge that can be applicable to intellectual property rights is defined as a knowledge “claim.” A claim is a **process** or **unique characteristic** that either **creates something new** or **adds value to an existing product**. See the chart below for sample claims.

## Sample Knowledge Claims

Process Claim	Biological Resource	Plus Process <i>(Cultivation, Preparation and/or administration)</i>	Equals Product
The process of chewing a slice of the <i>Hoodia succulent</i> to stave off hunger.	<i>Hoodia gordonii</i>	Chewing on Stem	Staves off hunger

Unique Characteristic Claim	Biological Resource	Plus Environmental Physical Characteristics	Adds Value/Makes Unique
Growing basmati rice in particular regions of India and Pakistan to improve quality and taste.	Basmati Rice	When grown in regions of India and Pakistan	Has higher quality and taste

With agricultural goods, the best place to start in identifying knowledge claims is at the end, with the final product. The final product, the product which goes to market, should be clearly identified. Next, a process should occur in which the stakeholders in the product determine the unique characteristics of the final product as well as the processes and knowledge that are involved in its production. In developing a list of processes and knowledge, a timeline should be used to assess cultivation and preparation of the agricultural resource in creating a final product for market as well as any uses and methods of use of the final product.

### **Activity 6: Identifying Knowledge Claims for Agricultural Products**

This exercise aims to develop a comprehensive list of knowledge claims based on the agricultural product, product characteristics and the inputs used in the development of the final agricultural product for potential intellectual property protection

This exercise will require a lot of brainstorming and group participation. The knowledge, know-how and information presented by the groups at the end of this activity will be vital to examining the potential of intellectual property options for the knowledge.

#### **Group exercise: 1 hour: Instructions**

1. Form 4 groups. Do this by having participants arrange themselves in groups that contain at least one person wearing glasses, one person wearing anything white, and one person over forty and one person under thirty. The group can contain more than four people. When participants feel correctly organised, they should move to a group work table or area to undertake this exercise.
2. When in groups, elect a scribe, time-keeper and reporter as before.

3. All the groups will do the first step of the exercise together (Steps a and b below). Once the agricultural product is clearly defined, then the groups will each work further on that product. (If more than one agricultural product is defined, decide whether different groups will work on the same or each on different agricultural products. If the groups work on the same products it can be a source of interesting debate and comparison. If the groups work on different agricultural products, more ground will be covered in the one day workshop).
4. Using the steps illustrated in the worksheets over the following four pages, identify and describe a knowledge claim related to the Agricultural Product to be examined during the workshop.
  - a. Identify the final agricultural product. Do a brainstorm regarding the agricultural product under discussion here today.
  - b. Describe the **final product** by addressing the following questions:
    - i. What is this product?
    - ii. What is it used for? What benefits would a consumer of this product experience?
    - iii. Does this product have any variability?
    - iv. How is this product sold? Are there any place-names, insignia or slogans used in its sale?
    - v. Are there other similar products? What makes this product unique?
  - c. Develop a timeline of the **cultivation and preparation** of this product, starting with the first thing the community does to produce the final agricultural product.
  - d. As the timeline is developed, identify any special characteristics and steps involved. At each step determine whether a degree of specificity exists. For example, if a participant says “We sow the seeds on the hillside,” question why on the hillside as opposed to the valley or top of the hill. This will bring out very relevant processes for the development of knowledge claims.
  - e. While developing the timeline, be sure to identify and capture any special steps, inputs, or human factors (skills, history, culture, breed selection criteria, cultivar propagation techniques, recipes or trade secrets) used in the development of the agricultural product.
  - f. Once the timeline is complete, identify the area of production, defining all geographic boundaries. Then comment on any geographically distinctive features (including climate, topography, soil, water, vegetation, etc.) of this area.
  - g. When the time is finished each reporter will present the results of their group’s findings to the rest of the group. If more than one group worked on the same knowledge claim, this is an excellent opportunity to share the results and debate the differing group’s results. The information may be able to be combined to create a more sturdy knowledge claim. Post the combined development of this knowledge claim on a wall for the entire workshop to see. If different knowledge claims were developed, post the different knowledge claims around the workshop for later reference.
  - h. Move on to the next section.

*My Notes*

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<b>CULTIVATION TIMELINE</b>	
	<b>NOTES:</b>
	<b>SKILLS</b>
	<b>HISTORY</b>
	<b>CULTURE</b>
	<b>BREED SELECTION CRITERIA</b>
	<b>CULTIVAR PROPAGATION TECHNIQUES</b>
	<b>RECIPES</b>
	<b>TRADE SECRETS</b>
<b>FINAL PRODUCT</b>	

## **GEOGRAPHIC BOUNDARIES OF PRODUCTION**

*Draw a map depicting the geographical region where this product is produced*

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### **NOTES:**

**CLIMATE**

**WATER**

**TOPOGRAPHY**

**VEGETATION**

**SOIL**

<b>KNOWLEDGE CLAIMS</b>	
<p><i>Resource + Process = Product</i></p> <p>or</p> <p><i>Resource + Environmental/Physical Characteristic = Added Value</i></p>	<p><b>NOTES:</b></p> <p>Who knows about this claim(s)?</p>
<p><b>Claims</b></p>	

# COMMUNITY MAPPING: WHO ARE WE BENEFITING

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## Overview

An important aspect of Intellectual Property is to determine who the knowledge holders and stakeholders are, and what the resource means to them. The knowledge holders are the people who hold and/or use the knowledge; the stakeholders are the people in the community with a direct interest in the knowledge. Knowledge can originate within a community or enter the community from the outside. If the knowledge is not originally from within the community in question, then it may not be subject to Intellectual Property Rights, and may already be part of the public domain. If the knowledge is from within the community, then it needs to be determined whether it originates from an individual, multiple individuals or the community as a whole. It is further necessary to determine who uses or has access to the knowledge. Knowledge can be used by no one, an individual, multiple individuals, a community, or people outside the community.

Any Intellectual Property Rights option will depend on how many people are aware of this knowledge and who these people are. It should be determined clearly who owns or knows about each knowledge claim. Disclosure of knowledge is very relevant in determining the level of intellectual property protections available to the community. For instance, if know-how used in the production of an agricultural resource is public knowledge known outside of the community, it will not be possible to claim a sole proprietary right over the knowledge in the intellectual property system.

### **Activity 7: Identifying the knowledge claim stakeholders**

#### **Group exercise: 15 minutes: Instructions**

##### **Phase 1**

1. Form 4 groups. Do this by forming a long line by having participants self-arrange A to Z using their first names. Speaking is permitted. When participants are correctly organised the facilitator will break the line up into four roughly equal groups and assign each group a number. Move to a group work table or area to undertake this exercise.
2. When in groups, elect a scribe, time-keeper and reporter as before.
3. Using the knowledge claim(s) developed in the previous exercise, each group must determine the answers to the following questions for each knowledge claim:
  - a. Who are the knowledge holders regarding this knowledge claim? Identify them clearly.
  - b. Who are the stakeholders regarding this knowledge claim? Identify them all.
  - c. Are the knowledge holders a defined community? Are there different communities within the group of knowledge holders?
  - d. Is the community a legal entity or organisation formally recognized by the government (Co-operative, Trust, company, etc.)?
  - e. Is the knowledge owned and known to only an individual, a group of individuals, or the entire community (as defined in questions a through d, above)?
  - f. Did the knowledge claim originate from within the community or from without?
  - g. By whom is the knowledge claim used? To whom is the knowledge claim accessible?
  - h. When the time is finished each group shares the results of their discussions with the rest of the workshop.

#### *My Notes*

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# MATCHING COMMUNITY VALUES AND AGRICULTURAL KNOWLEDGE CLAIMS

## Overview

In this section of the guidebook, knowledge holders can assess their knowledge claims against their community's cultural and goal-oriented interests. For each knowledge claim, there will be several categories of interests that the community will have to explore. These categories of interests examine the cultural underpinning and goals of the community for the claim.

Each of these community interests have been cross-referenced with intellectual property options and rated as to whether the intellectual property option is supportive, neutral or detrimental to the cultural and goal-oriented aspects of the claim. There are six cultural categories and six goal-oriented categories.

After identifying the potential options, the next section of the guidebook will allow agricultural communities to assess the positive and negative aspects of each option and make decisions toward seeking intellectual property protections.

## Cultural Categories

*The cultural categories look at the use and context of the knowledge claims relating to the community's well-being and tradition.*



*Spiritual Importance:* This category asks whether the knowledge claim is of any spiritual significance or importance to the community. If so, are there certain degrees of reverence which should be associated with this knowledge claim, especially as regards to claiming it as property or using it in a manner associated with sales and distribution.

*My Own Examples*

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*Necessary for Sustainability:* This category asks whether the knowledge claim is of importance for the sustainability of a community. In this regard, the community should determine if the preservation of this claim is vital for the community's survival. Would the impact be significant if this knowledge claim did not exist in the community?

*My Own Examples*

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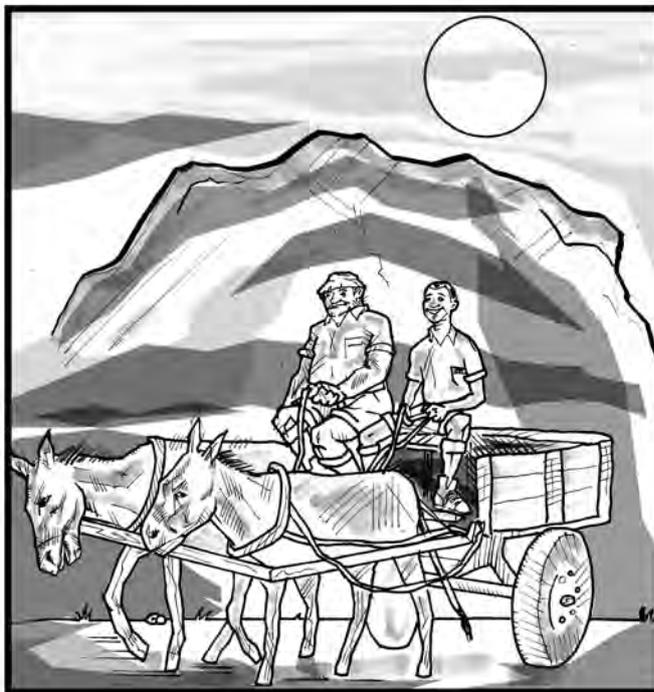
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*Traditional Secret:* This category refers to the type of knowledge and its relationship to its historical and cultural context. The category asks whether this knowledge is secret, known by one or a few and not disclosed outside of the community.

*My Own Examples*

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*Economic Dependency:* This category specifically refers to the degree to which the knowledge claim fuels the community with income to promote well-being. Is the community dependent upon this knowledge claim for income generation?

*My Own Examples*

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*Medicinal Property:* This category looks at the use of the knowledge claim in the community, specifically asking whether the knowledge claim is used for medicinal purposes to cure or ease illness, and if so, if it is important for the community to maintain this medicinal use.

*My Own Examples*

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*Historical Significance:* This category asks the community to consider the context of the knowledge and determine whether it is of historical importance to the community through its roots in tradition and practice.

*My Own Examples*

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## Goal-Oriented Categories

The goal-oriented categories ask the community to think about what they would like to use the knowledge claim for and what ultimate purposes the use of this knowledge could serve for the community.

*Increase Profit:* This goal-oriented category is purely economic in nature, asking the community if generating more profit for the community is a primary goal.

*My Own Examples*

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*Avoid Exploitation:* This category is environmental in nature, asking the community to consider if a main goal is to avoid exploitation of the community with regards to this knowledge claim. Would the community like to avoid the entrance into the community of outsiders seeking to use the knowledge related to the agricultural product? Specifically, is the community opposed to outsiders using the natural resources associated with the knowledge claim?

*My Own Examples*

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*Dissemination for Public Good:* This category asks the community to consider whether a primary goal would be to disseminate the knowledge claim so that others outside of the community can benefit. This category does not consider income to be of primary importance.

*My Own Examples*

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*Avoid Piracy:* This category is concerned with the duplication of this knowledge by others, potentially to profit, without the prior consent of the community. Is the community opposed to having others take and use this knowledge claim freely without giving credit to the community?

*My Own Examples*

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*Privacy:* This category specifically targets the question of to what degree the community is comfortable with the spread of the knowledge. Does the community want to maintain the knowledge within the community or is it acceptable for the knowledge to be spread to others outside the community?

*My Own Examples*

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*Preservation:* For agricultural products, does the community want to preserve the biological resources associated with these products? This category asks the community to decide if preserving biological resources and diversity is a primary goal.

*My Own Examples*

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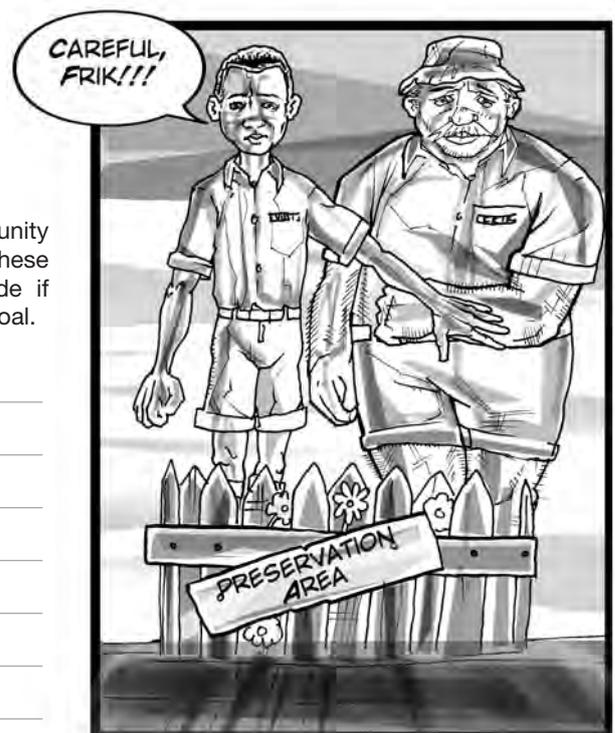
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# DETERMINING THE MOST SUITABLE INTELLECTUAL PROPERTY OPTION

Once the knowledge claim, the knowledge holders and the interests of the knowledge holders regarding the knowledge claim has been defined, it is possible to determine the most suitable Intellectual Property option that may be useful for a particular knowledge claim.

## **Activity 9: Matching the claim and its owners to Intellectual Property options**

### **Group exercise: 15 minutes: Instructions**

1. The facilitator will assist the group to identify a single knowledge claim that will be used for this exercise.
2. Once the knowledge claim has been decided, review who owns or knows about the knowledge claim (community, individual or public). Choose the relevant worksheet from the Appendices A through F.
3. Using the results from the previous exercise determine the cultural category and goal-oriented category that is relevant to the knowledge claim. If it is relevant, highlight the category vertically. If the participants deem the category not relevant, do not mark anything.
4. Once the six cultural categories and six goal-oriented categories have been reviewed, horizontally tally the number of black, grey and white boxes in the **categories selected as relevant**. Be sure only to count the highlighted categories, not all of the categories.
5. Compare the results of each option, noting that black indicates that an option could be potentially detrimental. Grey indicates that an option is neutral and does not support nor hinder the community's realization of goals and cultural values while white indicates that the intellectual property option could support the cultural or goal-oriented category.
6. Based on the tally, the more black squares, the less likely the option is relevant and the more white squares, the more likely the intellectual property option is of potential benefit to the community.
7. Determine which of the intellectual property options the community would like to consider for the knowledge claim based on the tally. In doing so, consider:
  - a. What is the overall community goal in selecting this option?
  - b. How does this option relate to the values of the community?
  - c. Can this goal somehow support the needs identified by the stakeholder community in the previous exercise? (E.g. if a need identified was funding for education fees, does the option provide for the potential to profit, whereas profits could support an educational trust?)
  - d. Evaluate anticipated impact of the option in the immediate and long-term (both pros and cons).
8. This exercise can then be repeated for each knowledge claim.
9. The next section of the manual examines the pros and cons of each potential option.

### *My Notes*

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# ASSESSING IP

## Introduction

This section of the guidebook will allow communities to assess intellectual property options identified as potential options for their knowledge claims and determine whether the option appears to meet the community needs outlined in the community mapping exercise as well as the cultural and goal-oriented aspects related to the knowledge claim. This section gives an overview of each intellectual property option as well as the benefits and cautions that should be considered when making a final decision about pursuing the option.

## Access and Benefit Sharing

*Access and benefit sharing* is not an intellectual property protection, but instead a means to arrive at potential intellectual property rights protection and/or market access. By pursuing this option, the community will have to develop an agreement with an outside company or research institute which allows the outside entity access to the biological resources in question to perform further research, sampling, testing and/or market analysis to achieve market access for the good and/or intellectual property protections. This option is forming a partnership with another entity, in which this entity adds additional value to the knowledge claim beyond the capacity of the community. This entity may also share in the moral and material benefits related to the knowledge. Essentially, with access and benefit sharing, there are two options:

1. The community licenses its knowledge to a second party or
2. The community enters into an agreement with a second party to further develop the knowledge.

While this option has the potential to generate much profit for the community, it also involves a deal of risk in disclosing knowledge and resources to an outside entity. For this, it is important that a lawyer represent the community and develop a contract with the outside company or organization that articulates the rights of the community in line with the goal and cultural dimensions of the knowledge. For this option to exist, the community must first identify an outside partner and convince this partner of the potential benefit. Contractual arrangements are very important in access and benefit sharing agreements and should be carefully crafted to protect the community's interest by a legal authority. The South African Biodiversity Act of 2004 includes specific guidelines for access and benefit sharing. The community may be required to obtain a permit from the government to engage in bio-prospecting or engage in a materials transfer with a party outside of the Republic.

Keep in mind the benefits and cautions related to this option:

### *Benefits:*

- Potential for profit, market access and intellectual property protections are high
- An additional value-added will be applied to the knowledge claim by partnering with an outside company or organization

### *Cautions:*

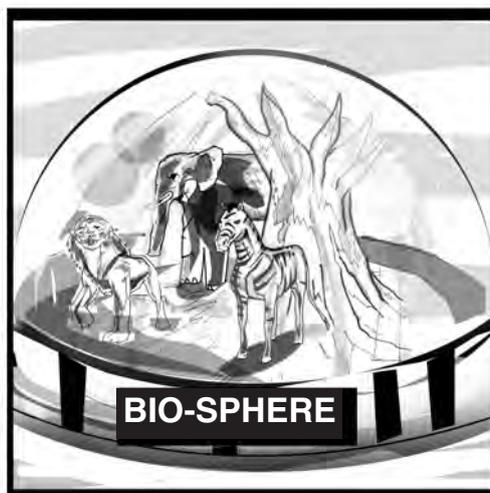
- A contractual agreement should be determined that is in the best interest of the community and mutually beneficial for both parties
- The benefits arising from the knowledge claim must be shared between the community and company or organization involved in the agreement
- The knowledge claim must be shared with an outside entity and no longer remains solely within the community.



## Conservation Area (Only available in South Africa)

*Conservation areas* are geographical regions established with particular protections for natural resources, biological diversity and cultural resources related to the biological resources and management. This is a legal protection granted by the government of South Africa which can prevent commercial exploitation of a region while protecting the community, culture and resources within the area. The guidelines for establishing a conservation area fall under the South Africa Biodiversity Act of 2004 and the South African Protected Areas Act of 2003. There are four types of protected areas recognized in South Africa:

1. Special nature reserves, nature reserves (including wilderness areas) and protected environments;
2. World heritage sites;
3. Specially protected forest areas, forest nature reserves and forest wilderness areas declared in terms of the National Forests Act, 1998 (Act No. 84 of 1998); and
4. Mountain catchment areas declared in terms of the Mountain Catchment Areas Act, 1970.



While the conservation area option relies on the community's ability to meet the stipulations set forth by the Minister for national environmental management, there are several key benefits and cautions.

### *Benefits:*

- Protects biological resources and cultural activity related to biological resources within a geographical region
- Sets forth limitations for bio-prospecting and safeguards against exploitation and environmental degradation

### *Cautions:*

- Does not protect against the misappropriation of knowledge claims associated with the biological resources

## Geographical Indications: Registered Collective Mark

*Geographical indications* are used to establish the reputation of an agricultural product based on the territory or locality within which it is grown. The special attributes of this territory, such as climate, topography, soil, water, vegetation, history and cultural know-how all can distinguish a good though the use of geographical indications. The geographical indication is a form of trademark (see below) and in South African and Namibian law can be filed as a registered collective mark under the Trade Marks Act. **A specific section later in this guidebook places further emphasis on the geographical indication and explains more about its uses to link farmers to markets.** There are a few key benefits and cautions to keep in mind.

### *Benefits*

- Distinguishes a product by its location as being superior in quality, primarily for marketing purposes
- Controlled by a group or an association of stakeholders, determining membership and resource use and standards

### *Cautions*

- Does not protect against the use of the knowledge claim under a different name not associated with the region in the geographical indication.



## Patent

A *patent* is the grant of a monopolistic right for the use and sale of an invention over a specific period of time. The patent provides the holder with a legal monopoly preventing others from using or benefit materially from the knowledge. In South Africa, a patent lasts for 20 years, and is granted if an invention is:

- new,
- involves an inventive step, and
- Can be applied in trade, agriculture or industry.

In order for an invention to be considered new, it must not have been made available to the general public in oral or written form.

Patents in Namibia last for 14 years and can be granted for inventions that are:

- new,
- useful, and
- Applicable for trade/industry.

In order for an invention to be considered new in Namibia, it cannot have been known or used by others or for sale for two years outside of Namibia. While the monopolies of patents can protect the material and moral interests over innovations, there are several benefits and cautions that should be considered.

### Benefits

- Provides the holder with a monopoly over the production, use and sale of an invention for a predetermined period of time.

### Cautions

- The knowledge claim must be disclosed to the public

Σ Once the patent expires, the holder no longer has sole right over its production, use and sale.

Both South Africa and Namibia have joined the Patent Cooperation Treaty, which means that by filing a single patent application, the filer can designate up to 128 countries that are member to the treaty to apply for the patent.

## Trademark

A *trademark* is any name, word, symbol or device used by a manufacturer or merchant to identify his or her goods and distinguish them from goods manufactured or sold by others. Trademarks are used to distinguish goods from one another for consumers, allowing a manufacturer or producer to build a reputation to accompany a product. Manufacturers must be careful not to use the same name, words or symbols to distinguish their products as their competitors; it can be deemed unfair competition if it has the potential to confuse consumers. In both South Africa and Namibia, trademarks are valid for ten years and then can be renewed for additional ten year periods. In both countries, in order to be granted a trademark, the applicant must:

- have a name, word or symbol capable of distinguishing a product,
- have the intention to use the mark, and
- Use the mark in the course of trade.

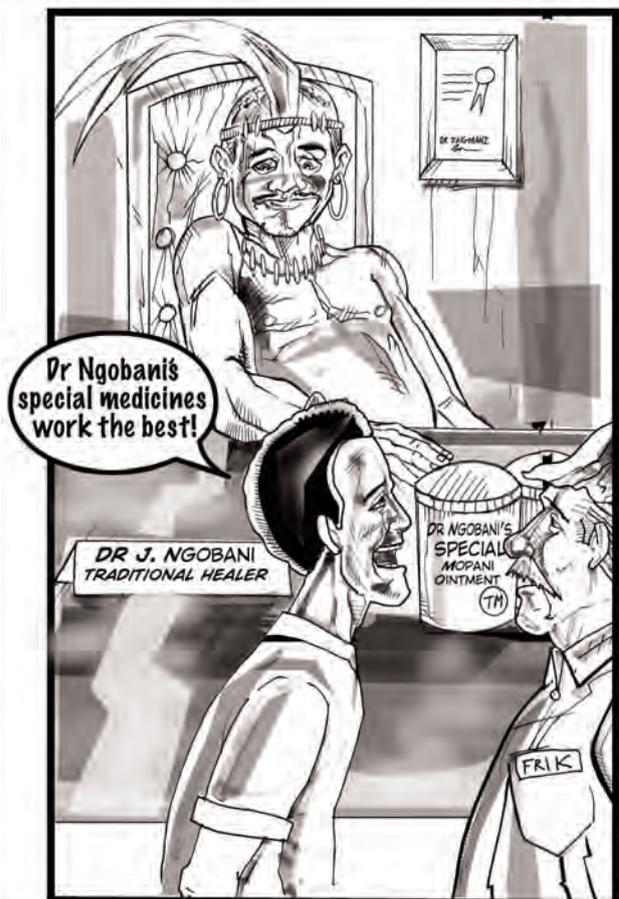
A collective mark can be registered using a geographical place name through the Trade Marks Act as a geographical indication (see GI above). There are several benefits and cautions for trademark use.

### Benefits

- Distinguishes an agricultural product from others in the marketplace
- Adds value to a product

### Caution

- Does not protect the knowledge-claim from use or sale by others



## Trade Secret

Under common law in South Africa and Namibia, a *trade secret* is any formula, pattern, machine or process used in a business to give the user an advantage over competitors who do not know about the secret. With a trade secret, the benefit arises from owning the knowledge claim and not allowing anyone else to have access to the claim. In order for this to happen, the community must make a strict effort to maintain the secrecy of the knowledge claim. Communities having a trade secret can do two things:

- use the secret to have a benefit over competitors, or
- License the secret to another entity with a contract giving benefits to the community where the secret originates.

If a trade secret were to become known by an outside entity, the holder of the trade secret could seek injunction to stop its use or seek damages if the knowledge-holding community can prove that efforts were maintained to keep the knowledge claim a secret and that the information was obtained through fraud or unfair means. Once the knowledge of a trade secret is discovered by another entity, the discoverer is free to use the knowledge claim to his or her advantage.

### Benefits

- Use of the knowledge claim gives the community an advantage over competitors
- The trade secret has no time limitation and is valid as long as the community can manage to maintain secrecy over the claim.

### Caution

- Trade secrets have no legal protection maintaining secrecy or rights over the knowledge claim to the community
- Once the secret is in the public domain, it can be use by others without permission



## Registered Design

A *registered design* grants a temporary monopoly right to an individual for disclosing a design to the public. A registered design relates to the shape or appearance of an article irrespective of whether it is patentable or not. A registered design is based on drawings, photographs or other pictures which illustrate the shape or appearance of the relevant object. There are two types of registered designs applicable in Southern Africa: aesthetic designs and functional designs.

*Aesthetic designs* are granted to provide a monopoly over the use of the visual appearance of an object. Examples include artisan work, the shape of pottery or the pattern on a print or in fabric. This type of registered design is not for a design based on functionality, but instead, based on appearance. The design must have a stylish element such as shape, pattern or ornamentation.

A *functional design* is a temporary monopoly to an individual based on an object whose design is dictated by its function. Examples of functional designs would be a water well pulley system or bridge trusses. Functional designs do not have to have an element of visual appeal. At the same time, functional designs can also be registered as aesthetic designs if they meet criteria for protection based on their appearance unrelated to function.



In South Africa, registered aesthetic designs are valid for a maximum of 15 years and registered functional designs are valid for a maximum of 10 years. Both require the completion of an annual renewal process after three years.

While absolute novelty is not required for registered designs, it is advisable to register a design before disclosure to maximally protect the rights of the knowledge-holder. The right is not valid until it has been approved by the proper government agency; therefore disclosure of the design prior to its registration can result in a loss of monopolistic privileges.

Keep in mind the benefits and cautions related to registered designs:

### *Benefits:*

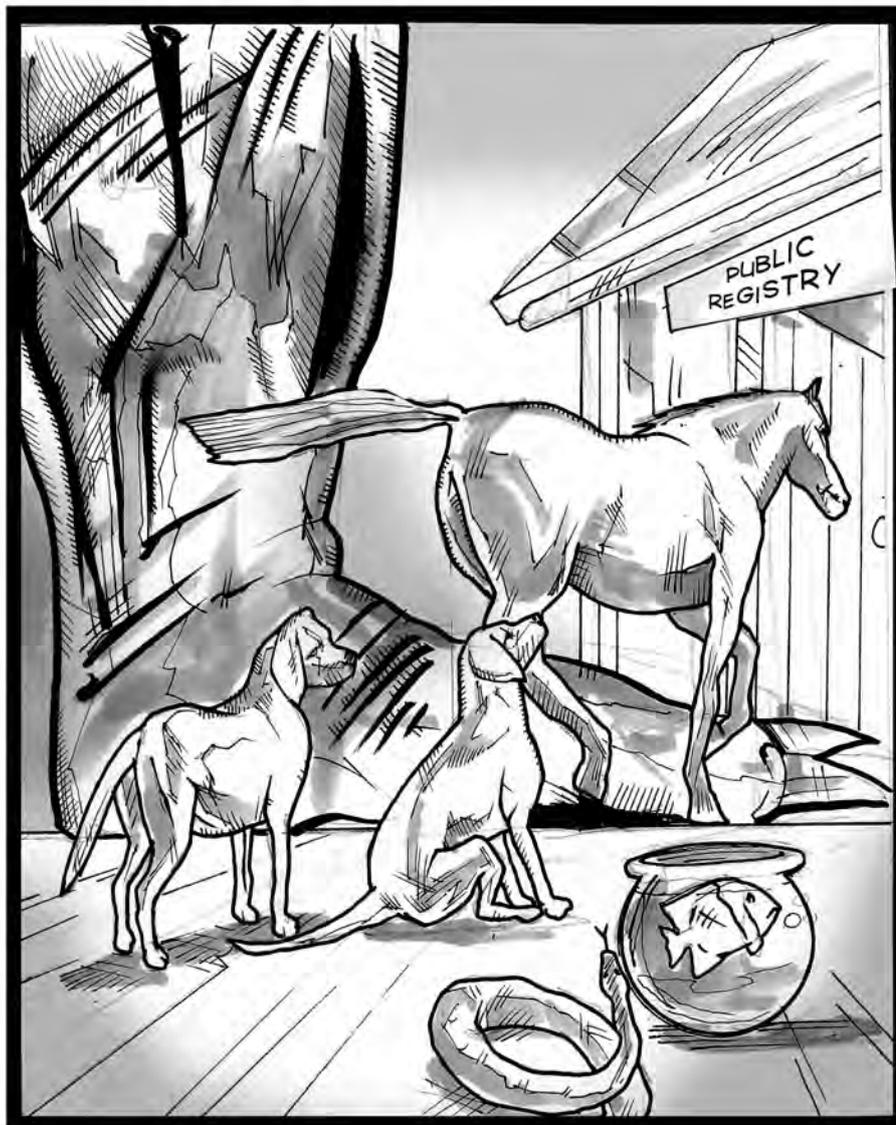
- Provides a temporary monopoly over the use of a design
- Protects visual elements of knowledge not falling under copyright or patent protections
- Can protect functional designs related to patentable knowledge

### *Cautions:*

- The design must be released to the public
- Once the registered design period of protection expires, the design is free for public use without royalty payments

## Public Registry

Because novelty is a requirement for the patenting of knowledge, a public registry is one of the best ways to prevent knowledge misappropriation by documenting it in the public domain to disprove other claims of novelty. Disclosing knowledge in the public domain causes a community to lose sole rights to material benefits from its novelty but at the same time can secure the moral rights over a knowledge claim. By documenting a knowledge claim in a public registry, the knowledge is placed in the public domain, known and used by everyone. In doing so, the community cedes any proprietary, monopolistic rights over the knowledge claim and allows anyone to use the knowledge freely for his or her own benefit. By documenting knowledge in the public domain through a public registry, the community is establishing prior art through defensive disclosure. *Prior art* is the establishment of knowledge, disproving novelty so that others cannot patent or claim rights over the knowledge. While South Africa and Namibia have broad definitions of what constitutes prior art, including oral description of the knowledge, it is best to document the knowledge claim in a public registry in a written format to avoid any potential complications in preventing misappropriation. The more accessible the knowledge is to the public, the less likely misappropriation will occur. Consider any public registries maintained by the governments of South Africa or Namibia, published journals or the Traditional Ecological Knowledge Prior Art Database (TEK\*PAD) administered by the American Association for the Advancement of Science as potential locations to publish the knowledge claim.



While South Africa and Namibia have broad definitions of what constitutes prior art, including oral description of the knowledge, it is best to document the knowledge claim in a public registry in a written format to avoid any potential complications in preventing misappropriation. The more accessible the knowledge is to the public, the less likely misappropriation will occur. Consider any public registries maintained by the governments of South Africa or Namibia, published journals or the Traditional Ecological Knowledge Prior Art Database (TEK\*PAD) administered by the American Association for the Advancement of Science as potential locations to publish the knowledge claim.

### Benefits

- Knowledge claim is in the public domain and can be used or modified by anyone
- Moral rights are recognized through disclosing use
- Disproves novelty making it difficult for others to claim a patent on the knowledge

### Caution

- The community loses any proprietary rights over the knowledge claim, especially patent rights.
- Any research performed on the knowledge claim placed in the public domain resulting in additional discoveries or inventions can be claimed through intellectual property rights and the benefits do not have to be directed to the community placing the information in the public registry

## Copyright

A copyright is the protection of the work of authors or artists giving them the exclusive right to publish their work or determine who may publish the work. Typical works falling under copyright protection include literary works, music, art, photographs, sound recordings and broadcasts. In South Africa and Namibia, copyrights last for different periods of time dependent upon the type of work being protected:

Work	Duration of Copyright
Literary, musical or artistic work (not photographs)	Life of author plus 50 years
Cinematograph films, photographs and computer programs	Fifty years from the end of the year the work was made available to the public
Sound recording	Fifty years from end of first publishing the recording
Broadcasts	Fifty years from the end of the year the broadcast takes place

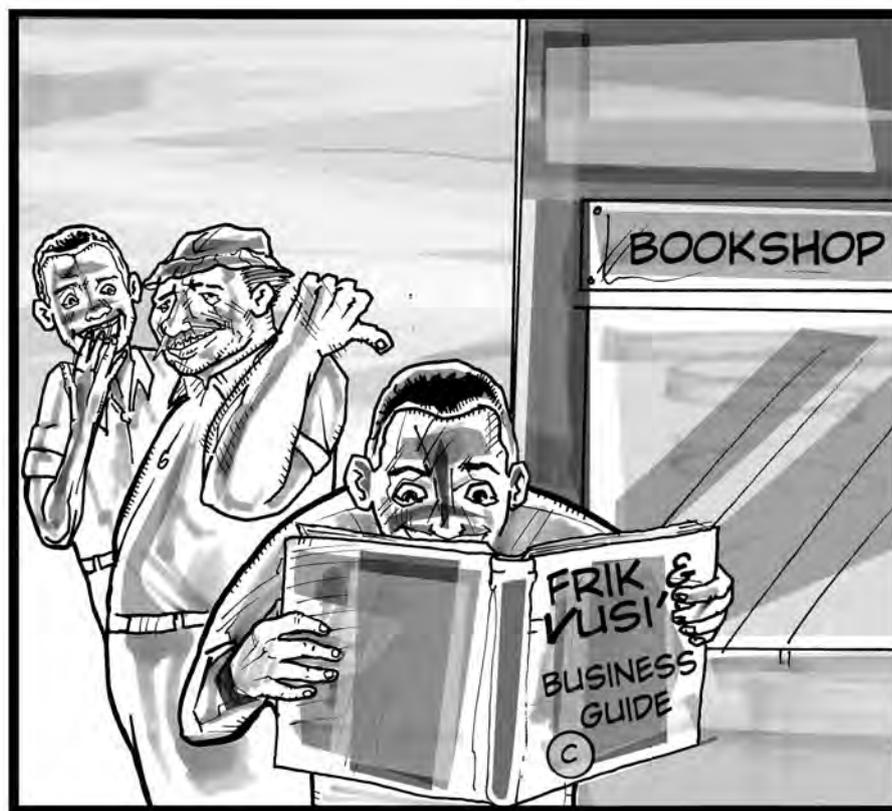
While a copyright may seem difficult to use for agricultural products, it may be feasible to obtain a copyright over any written instructions, diagrams or audio/visual productions related to the production of the agricultural product. Cultural elements of the knowledge claim may be able to be copyrighted. While the copyright gives the community ownership over the right to publish the work, the work is exploitable by others in terms of the thoughts, facts, experiences or general ideas expressed in the work given that they are not directly copied.

### Benefits

- Provides ownership over the exclusive right to publish a work
- Protects written and audio/visual performance related to the production of an agricultural product

### Cautions

- Copyrights eventually expire
- Copyrights may not protect the entirety of the knowledge claim
- Elements of the works protected by copyright can be exploitable if not directly copied



## Patent: Biological Process/Product (South Africa Only)

While Namibia and South Africa do not have plant patents, there is a protection *in South Africa*, allowing for the patenting of microbiological processes or products. These processes and products may be very relevant in the agricultural sector and have the same requirements as a South African patent. The microbiological processes and products must be:

- novel
- involve an Inventive step, and
- Have the ability to be applied in trade, agriculture or industry.

These patents have a duration of twenty years.

### Benefits

- Provides the holder with a monopoly over the production, use and sale of an invention for a predetermined period of time.

### Cautions

- The knowledge claim must be disclosed to the public
- Once the patent expires, the holder no longer has sole right over its production, use and sale.



## Plant Variety Certificate (South African Only)

The plant variety certificate gives breeders' rights over a plant. This option is only available in South Africa and not in Namibia. Plant variety certificates provide a limited monopoly over the production, use and sale of a plant; they have the duration of 25 years for vines and trees and 20 years for all other classes of plants. In order for a plant to qualify for this certificate, it must be:

- new,
- distinctive,
- uniform and
- Stable.

Failure to demonstrate any of these claims makes the plant not eligible for a certificate.

### Benefits

- Limited monopoly over the production, use and sale of a plant

### Cautions

- Full disclosure of the plant is required and the knowledge is placed in the public domain
- The plant can be used by others for research during the protections of the plant variety certificate





## FURTHER EXPLORATION OF GI'S

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As mentioned in the previous section, geographical indications are used to establish the reputation of an agricultural product based on the territory or locality within which it is grown. In Southern Africa, this intellectual property right can be accomplished through registration of one of two distinct types of marks: collective marks and certification marks. This guidebook will focus primarily on the use of collective marks: marks in which the geographical indication is based on place name. For geographical indications not utilizing a place name, a certification mark may apply. The guidebook will address the additional criteria for certification marks at the end of this section.

Using a collective mark to protect a geographical indication based on place name requires the establishment of an association of persons; the members of this association have the right to use the geographical indication. If considering a geographical indication, the association should initially consist of the knowledge-holding community: people identified as “knowing about the knowledge claim” in the knowledge claim identification steps. These people are stakeholders in the knowledge. All existing ownership structures relating to the product should be considered when finalizing the association.

To apply for a collective mark, an association of producers must first be formed. In forming the association, community members must develop the rules for the use of the collective mark as well as rules for membership. The association must apply to the proper government agency (Register of Trade Marks) in order to register the mark. All enforcement, quality control, use and membership criteria are determined privately by the associations' members; there are no general legal frameworks prescribing the use of a geographical indication.

Because of the association's control over the geographical indication, it is very flexible in nature and allows for community-based control. The community sets the standards of the indication and dictates its use. As mentioned earlier, a geographical indication is comprised of one or many elements related to the geographical production of the agricultural product causing the product to be of unique or distinct quality. Other intellectual property rights can be utilized to protect specific elements contributing to the overall geographical indication.

Geographical indications take into account the human, cultural and geographical dimensions of the agricultural product. The association should consider the following elements of the agricultural product when determining the scope of the geographical indication:

- Uniqueness
- Specific species
- Product use and variability of use
- Human factors of production
- Production practices, production systems and processes
- Geographical references and other indications (slogans, etc.)
- Physical area of production
- Environmental characteristics contributing to production
- History
- Association with culture
- Existing reputation of product in relationship to its geographical origins

Geographical indications not utilizing a place name for the product in question are not eligible for collective marks, but instead certification marks. *Certification marks* must be registered by a certifying body and approved by the relevant government agency. Once approved, the certifying body controls the use and quality control of the mark, however the certifying body *cannot engage in the trade of products using the certification mark*. The certifying body is an independent agency. Producers wishing to utilize the certification mark must apply to the certifying body, and pending their approval, may use the mark. Most geographical indications have a place name and the certification mark will not be as relevant as control of the mark does not reside within the community but instead with an independent body.

# TAKING ACTION AS A COMMUNITY: PLAN FOR THE POTENTIAL USE OF IP SYSTEM

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By this point, the community should have:

- completed a community map detailing the goals of the community,
- determined a list of knowledge claims relating to an agricultural product,
- evaluated the cultural and goal-oriented aspects of the knowledge claims,
- determined preliminary intellectual property options as well as red flags associated with the option and
- Selected the best-fitting option after considering both the general benefits and cautions associated with the option.

As the community pursues the potential option(s) it has identified, this section asks a series of questions allowing the community to develop a “to-do” list and action plan to pursue intellectual property protection. Communities are reminded that once this process is complete, they should seek legal counsel to ensure that their interpretations and plans to utilize intellectual property are consistent with the legal requirements and stipulations relating to the option the community has selected.

## **Step 1: Confirm the Community Definition**

- How is the community defined?
- Are all of the stakeholders in the knowledge represented in the discussions over its use? If not, what should be done to solicit their input and/or approval?
- Is there a need for a legal definition of the community? How should this be established?

## **Step 2: Assign Roles**

- Who will manage the day-to-day activities in the solicitation of intellectual property protection?
- Has the community outlined the roles and responsibilities needed to pursue intellectual property protection?
- Does the legal definition of the community include by-laws dictating specific roles and responsibilities which must be filled?

## **Step 3: Reinforce Community Goals**

- Returning to the community mapping exercise, what are the community’s overall goals? Reinforce the community’s goals and keep them at the forefront of all discussions.

## **Step 4: Address Any Pending Red Flags**

- Returning to the matrices, were any red flags raised as a result of cross examining cultural and goal-oriented aspects of the knowledge with the selected intellectual property right (these are determined by black boxes at the intersection of the selected category and selected intellectual property right)?
- How will these cautions be remedied?
- Is there a need for additional protections not provided for in the intellectual property system to adequately protect the knowledge?

## **Step 5: Determine Any Pending Questions or Concerns**

- Does the community feel comfortable pursuing this option?
- What other information is needed before proceeding (legal questions, etc.)
- Who is needed to answer/address these questions and concerns?

## **Step 6: Protect Against Disclosure**

- Based on the intellectual property option the community has selected, be sure to protect against any knowledge disclosure to outside entities while soliciting further information and pursuing the option. Disclosure could result in knowledge piracy!

**Step 7: Determine Additional Resources**

- Aside from legal counsel, who else will be needed to make the implementation of an intellectual property right successful? Marketing experts? Economists? Business partners? Scientists?

**Step 8: Follow IP-Option Specific Guidelines****Access and Benefit Sharing**

- Determine scope of knowledge to be shared.
- Determine specific community-desired outcomes.
- Pursue any other relevant intellectual property options before disclosing the knowledge to a third party to prevent against piracy.
- Assess requirements for a permit through the Biodiversity Act.
- Determine the type of contractual agreement in the best interest of the community.
- Determine and approach likely partners.

**Conservation Area**

- Determine region/type of area based on the South African Protected Areas Act
- Solicit protection from state

**Geographical Indication: Registered Collective Mark**

- Determine if the knowledge claim is suitable for a collective or certification mark.
- Determine the scope of the geographical indication.
- Establish the association.
- Apply for protection.

**Patent**

- Determine patentability criteria: novelty, non-obviousness/inventive step and industrial application.
- Determine countries where patent protection should be sought (Country, Region, international with PCT). Remember, you can use the Patent Cooperation Treaty to file in up to 128 countries with one application (although you must pay fees for each country).
- Apply for protection in relevant countries through the patent offices.
- Do not disclose the knowledge claim until it is officially patented.

**Trademark**

- Determine the good which will be distinguished with a trademark.
- Develop a name, word, symbol or device to brand the good.
- Verify that an existing trademark is not being used.
- Apply for the trademark.

**Trade Secret**

- Make a concerted effort not to disclose the knowledge claim.
- Develop tactics and strategies for how the trade secret can be beneficial in marketing the product.
- Consider licensing the trade secret but be very careful not to disclose the knowledge claim.





## APPENDIX B: SOUTH AFRICA: INDIVIDUAL KNOWLEDGE

Individual Knowledge	Potential Option	Poor	Neutral	Possible	Preservation	Privacy	Avoid Privacy	Avoid Exploitation for Public Good	Dissemination for Profit	Increase Profit	Historical Significance	Historical Properties	Medical Secret	Traditional Secret	Economic Dependency	Necessary for Sustainability	Spiritual Importance
		Access/Benefit Sharing															
GI: Registered Collective Mark																	
Patent																	
Trademark																	
Trade Secret																	
Registered Design																	
Public Registry																	
Copyright																	
<b>Specifically for Biological Resources:</b>																	
Patent: Biological Process/Product																	
Plant Variety Certificate																	

## APPENDIX C: SOUTH AFRICA: PUBLIC KNOWLEDGE

Public Knowledge	Potential Option	Poor Neutral Possible Preservation Privacy Avoid Piracy Avoid Exploitation for Public Good Dissemination for Profit Increase Profit Historical Significance Historical Properties Medicinal Secret Traditional Secret Economic Dependency Necessary for Sustainability Spiritual Importance				
		1	2	3	4	5
	Access/Benefit Sharing	■				
	Conservation Area					
	GI: Registered Collective Mark		■			
	Trademark					
	Public Registry					





## APPENDIX F: NAMIBIA: PUBLIC KNOWLEDGE

Public Knowledge	Potential Option				
Spiritual Importance	Access/Benefit Sharing				
Necessary for Sustainability	GI: Registered Collective Mark				
Economic Dependency	Trademark				
Traditional Secret	Public Registry				
Medicinal Properties					
Historical Significance					
Increase Profit					
Dissemination for Public Good					
Avoid Piracy					
Avoid Piracy					
Privacy					
Preservation					
Possible					
Neutral					
Poor					

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## San and the Hoodia case study.

It was important to the San that the CSIR acknowledged that the original source of the knowledge regarding Hoodia was the San traditional knowledge. The San delegates then appointed the South African San Council to negotiate with the CSIR on behalf of all San in the region. These negotiations led to the signing of a memorandum of understanding in which the CSIR acknowledged the San's prior intellectual property rights in respect of Hoodia. The CSIR also agreed to negotiate a benefit-sharing agreement to take effect if the plant reaped success in the marketplace.

The General Assembly of WIMSA agreed that future benefits deriving from Hoodia would be shared by the San in all countries in which they live (A trust was established). The San also agreed that they would not want to threaten the viability of the planned commercial undertaking between the CSIR and the international commercial partners. It was also agreed that the relationship between the San and the CSIR should not only involve monetary "sharing" but also knowledge sharing. The Department of Science and Technology (DST) would provide information to the San on any international patenting of South African plants, and the San would share their traditional knowledge regarding their use of South African plants.

It was further recommended that the Government of South Africa should direct more attention and resources to support indigenous communities who are directly responsible for the creation, maintenance, custodianship and development of their own indigenous knowledge. The need for vigorous formal consultation with indigenous people in South Africa regarding laws on biodiversity and benefit-sharing was requested and that DST should support regional awareness-raising on IP issues.