

ETHIOPIAN PUBLIC HEALTH INSTITUTE (EPHI) TECHNOLOGY TRANSFER AND RESEARCH TRANSLATION DIRECTORATE

HEALTH TECHNOLOGY TRANSFER GUIDELINE (TTG)

Amanuel Dibaba (M.Sc) Mamuye Hadis (PhD)

January 2014 Addis Ababa Ethiopia

TABLE OF CONTENT

1.	BACKGROUND						
	1.1. The Technology Transfer & Research Translation Directorate at EPHI						
	1.1.1. Mission of the Directorate	1					
	1.1.2. Objective of the guideline	1					
	1.1.3. Scope of the guideline	2					
	1.2. Overview of Technology Transfer						
	1.2.1. The need for Technology Transfer						
	1.2.2. Benefit of Technology Transfer	3					
2.	TECHNOLOGY TRANSFER PROCESS AT EPHI						
	2.1. Identifying Inventions						
	2.1.1. Inventions identified through invention disclosure						
	2.1.2. Inventions identified by TTRTD						
	2.2. Invention / technology assessment (TA)						
	2.3. Intellectual property protection						
	2.4. Marketing to find a licensee						
	2.4.1. Technology transfer marketing techniques						
	2.4.2. Start-Up Company	11					
	2.5. Licensing Intellectual Property (Invention)						
	2.6. Commercialization						
	2.7. Post-transfer activities						
	2.8. Revenue distribution						
	2.8.1. License Fees	13					
	2.8.2. Revenue Distribution Systems	13					
3.	TECHNOLOGY TRANSFR FROM ABROAD						
	3.1. Need assessment and identifying suitable technology						
	3.2. Conducting Technology Assessment						
	3.3. Preparing technology brief						
	REFERENCE						
	ANNEX						

LIST OF ACRONYMS

- EPHI Ethiopian Public Health Institute
- GTP Growth and Transformation Plan
- IP Intellectual Property
- LMICs Low and Middle Income Countries
- MDG Millennium Development Goal
- TA Technology Assessment
- TT Technology Transfer
- TTRTD Technology Transfer and Research Translation Directorate

INTRODUCTION

Technology Transfer is an important means by which developing countries gain access to technologies that are new to them.

Transfer of technology from either local research institutions and laboratories or from the developed nations to developing countries is vital to speed up the pace of economic development and modernization particularly in low and middle income countries (LMICs).

Ethiopia as a developing country has a plan to realize industry lead growth and transformation. Beyond local research inventions and technology innovations there are various foreign technologies which can be used to foster the industry lead growth and transformation.

In order for the health sector to play an important role in realizing the growth and transformation plan of the country and the millennium development goals the role of technology transfer (both indigenous and foreign technologies) cannot be over emphasized.

To speed up this process there is a need for technology transfer guideline to guide the transfer process. Therefore, based on the mandate given to Ethiopian Public Health Institute (EPHI) by the council of ministers regulation number 301/2013, this guide line is prepared by EPHI, TTRTD. To prepare this guideline existing technology transfer documents of different universities were reviewed. Beside this consultation of experts and peer review were undertaken.

Hence this guideline aims to help develop more effective mechanisms in health technology transfer. It is divided into two parts; the first part addresses issues of local technology transfer. While the second part (section 3) deals with foreign technology transfer. In addition this document also contains three annexes- annex I - invention disclosure form, annex II - Guidelines for Processing a New Invention Disclosure and annex III License Agreement.

It is worth noting that this guideline will be reviewed regularly and complemented with more specific provisions as the need arises.

1. BACKGROUND

1.1. THE TECHNOLOGY TRANSFER & RESEARCH TRANSLATION DIRECTORATE AT EPHI

Many companies, universities and governmental organizations nowadays have an "Office of Technology Transfer" dedicated to identifying findings which have potential commercial values to ultimately commercialize them. In light of this, EPHI's Technology Transfer and Research Translation Directorate (TTRTD) was established in 2009 to contribute to the improvement of the health of Ethiopians through technology transfer and research translation.

1.1.1. Mission of the Directorate

• To contribute to the improvement of the health of Ethiopians through technology transfer and research translation.

In line with this mission the following are some of the objectives of TTRTD

- Initiating and promoting of technology transfer in the health sector make potential partners aware of the technology and technical capabilities available
- Identifying and assessing innovations/technologies that may have potential commercial applications
- Identifying potential markets and partners
- Identifying and evaluating transfer method that best suit to the technology, the market, and the partners involved
- Negotiating technology transfer agreements
- Participate in programs designed to facilitate or stimulate the transfer of technology for the benefit of the public.

1.1.2. Objective of the Guideline

1.1.2.1. The General Objective:

The general objective of this guideline is to provide directions about technology transfer process and services available for inventors/innovators/researchers by addressing the basic considerations needed for a successful technology transfer in the health sector of the country.

1.1.2.2. The Specific Objectives include:

- To describe the technology transfer process at TTRTD
- To describe issues in technology assessment
- To describe licensing, commercialization and revenue distribution

1.1.3. Scope of the Guideline

Though the basic elements of TT are the same for any field this guideline will restrict itself to health technology transfer. It provides general directions on the necessary activities that should be addressed to conduct a successful transfer of technology in the health sector.

1.2. OVERVIEW OF TECHNOLOGY TRANSFER

Technology transfer is possibly misunderstood by many as mere introduction of a new product like a diagnostic tool to a country or an organization to help a health system. The term 'technology transfer' itself might have contributed to the confusion as it might not seem to have other meaning other than just introducing a new technology.

There are quite a number of definitions of Technology Transfer by many experts of the field. The following are some:

- The process of converting scientific findings from research laboratories into useful products by the commercial sector.
- A process for converting research into economic development
- The movement of new technology from its creator or researcher to a user, especially as products or publications
- The movement of new technology from developed areas to less-developed areas.

The first three definitions are in essence the same since they are talking about converting scientific findings into commercial products to reach the users or consumers. However, the fourth definition is different since it involves transfer of an already commercialized technology from developed countries to less-developed countries.

For the purpose of this guideline, however, technology transfer refers to the formal licensing of technology, either indigenous or foreign to a third party.

Technology is typically transferred through a license agreement in which the owner of the invention (the licensor) grants its rights on the technology to a third party for a period of years, often limited to a particular field of use and/or region of the country. The licensee (the party who has been granted a license licensing the technology) may be an established company or a new business start-up. Licenses are contracts that include terms requiring the licensee to meet certain performance requirements and to make financial payments to licensor. After the legal and marketing costs associated with the licensed technology have been returned (deducted), remaining portion of the license fee is shared with the inventor(s) and/or department(s). Other portions of the license fee received is used to provide support for further research, education, and participation in the technology transfer process.

1.2.1. The need for Technology Transfer

There are various reasons that drive the need for Technology Transfer. One possible reason is lack of manufacturing capacity; where the inventor/developer of the technology may only have manufacturing equipment that is suitable for laboratories and small scale operations, and therefore, must partner with another organization to do larger scale manufacturing.

Another reason is lack of resources to launch product commercially. The original inventor of technology may only have the resource to conduct early-stage research.

Lack of marketing and distribution capability can also be another reason. The developer of the technology may have fully developed the technology and even have obtained regulatory approvals and product registrations, but it may not have the marketing and distribution channels and must collaborate with another organization that does have that capability.

Furthermore, the need for Technology Transfer requires technology alliance to exploit each other's strength. Each partner may only have half of the solution to the problem. For example, medical devices manufacturers may want to collaborate with researchers who have deep expertise on certain health problem to further extend application of their existing technology

1.2.2. Benefit of Technology Transfer

Technology transfer ultimately benefits the society by availing the results of research to meet societal needs. Some benefits of technology transfer are highlighted below.

1.2.2.1. Benefits to the Country

The benefits of technology transfer to the nation can be seen from two perspectives; from the perspective of transferring domestic or local invention/technology to local industries and from the perspective of licensing of foreign invention/technologies for domestic use. The former has the following benefits:

- Encourages researchers/inventors for further research and innovation
- Generates wealth
- Serve as an alternative source of employment opportunities as it results in new jobs creation.
- Promotes the development of science and technology in the country.
- Strengthen self reliance
- It results in better products, improved quality of life, and a more positive future for citizens.

On the other hand licensing of foreign technologies benefit in:

- Alleviating dependence on imported technologies and thereby saving foreign exchanges through substitution of imports, stimulating exports and fostering the development of new domestic industries.
- Technology Transfer from developed nations also modernizes the economy and transforms the way existing products are produced. As a result local industries become more efficient and productive.

1.2.2.2. Benefits to Industry

For the industry, involvement in technology transfer projects can provide:

- Strategic means for combating challenges posed by the globalization of business making existing industries more competitive
- Bring about change in price by lowering their production cost
- Capacitates the industry by the new skill and knowledge gained through technology transfer.

1.2.2.3. Benefits to Researchers/Research Institutions

Benefits to researchers/research institutions resulting from technology transfer to industry are not and should not be expected to be primarily financial, even though any revenues resulting from technology transfer can help fund additional research activities, in addition to the knowledge transfer activities themselves. Instead, the main benefits are indirect and should be considered in the long term. To mention some of them:

- It helps develop mutual trust between the researchers/research institution and industry.
- It helps establish long-term strategic partnerships (as opposed to one-off contracts);
- It helps build researchers/research institutions
- Help access to state of the art industrial equipment, complementing the researchers/research institution competence by new skills and techniques developed in industry, improved understanding of market needs and of industry problems;
- Helps gain status and prestige (resulting from successful partnerships and products);
- Help identify potential new clients or partners for further research;
- These benefits will have further positive consequences, such as facilitating exchanges of staff between the research institution and industry.

2. TECHNOLOGY TRANSFER PROCESS AT EPHI

The process of technology transfer at EPHI is summarized below. It has to be noted that these steps may vary in sequence and often occur simultaneously. Although any two technology transfer opportunities rarely follow a similar development process, this section provides steps or phases for the general technology transfer process. The process might be subjected to minor modifications as the need arises.

The TT process typically includes:

- Identifying available inventions/innovations/technologies.
- Assessing the technologies identified
- Intellectual property protection
- Marketing to find Licensee
- Licensing Intellectual Property
- Commercialization
- Revenue Distribution

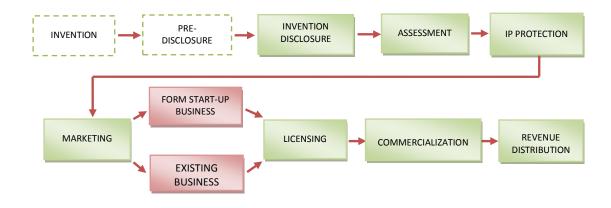


Fig. 1 Local Inventions Transfer Model at TTRTD

2.1. IDENTIFYING INVENTIONS

New inventions, technologies or research findings can be identified in a couple of ways. One way is through an assessment conducted by the TTRTD so as to locate the available and potentially useful inventions. Another way is via invention disclosure submitted by inventors themselves. This guide line addresses steps involved in both of these two cases. Steps involved in foreign invention/technology identification and commercialization is described under section 3 of this guideline.

2.1.1. Inventions identified through invention disclosure submitted 2.1.1.1. Pre-Disclosure

This is an early contact between the inventor and the TTRTD office in which the inventor describes the invention and TTRTD offer guidance related to the invention disclosure process that follows.

2.1.1.2. Invention Disclosure Step:

This is the first formal step where a written notice of invention is submitted to TTRTD to begin the formal TTRTD intake process. A completed Invention Disclosure Form should fully document the invention so that the options for commercialization can be evaluated and pursued.

It is obvious that use of the term "Invention" or "innovation" in this context might seem to reflect more of patentable inventions in technology transfer, but should be taken to mean any discovery or creation that might improve the health of the community and have commercial value.

An Invention Disclosure is a description of invention or development that is provided to the TTRTD. (Annex - I)

The Invention Disclosure Form lists information necessary to begin pursuing protection and commercialization activities. The process of technology transfer will be initiated when an inventor submits the invention disclosure form to TTRTD.

The Invention disclosure form can be obtained from TTRTD or alternatively from the website of the institute <u>www.ephi.gov.et</u>.

2.1.2. Inventions identified by TTRTD

In the identification of available inventions/technologies, the TTRTD utilizes various techniques:

2.1.2.1. Assessing (knowing) the capabilities of the institute

To identify discoveries/inventions that have transfer potential, it is necessary to have a detailed understanding of the researches being conducted in the research institute, the institute's capabilities, and its specialized facilities. Therefore the TTRTD should concentrate on developing an in-depth understanding related to the institute's:

- Research projects undergoing
- Core competencies
- Areas of technical excellence
- Patented products and processes so far available and planned for future.

2.1.2.2. Identifying existing foreign technologies suitable for transfer

As there are many similar technologies available in the international technology market, looking for appropriate technology which best suits the country is vital.

In doing so, the office of TTRTD shall continuously engages in:

- Identifying needs and conducting need assessment
 - Through consulting
 - relevant policy documents, reviews and reports
 - key informants
- Following up publications (like journals, newsletters, magazines....)
- Browsing the web
- Attending professional meetings and conferences
- Browsing EIPO's health technology database
- Participating in health and development related exhibitions.

Once the inventions or technologies are identified in any of the above mentioned techniques i.e via invention disclosure submitted by inventors or through the effort of the TTRTD the next step is invention or technology assessment.

2.2. INVENTION / TECHNOLOGY ASSESSMENT (TA)

A critical phase in the technology transfer process is the formal assessment of technologies or discoveries which have transfer potential and the types of resources available for technology transfer. An assessment of inventions/technologies and resources can be conducted internally by TTRTD, externally by outside sources (relevant experts related to the technology/invention), or a combination of both.

The first step in TA is to determine the potential of candidate technologies for commercialization and usefulness to the community's health. Not all innovations for which invention disclosures or patent applications have been filed or for which patents have been issued can be commercialized. Because a technology may be commercialized for purposes very different from the original intent, it is imperative to consider the commercial potential from diverse viewpoints. One way to do this is by convening a multidisciplinary team with diverse technical backgrounds to broadly consider the technology's potential. A multidisciplinary team could:

- Define the technology in sufficient detail so all team members have an adequate understanding of it.
- Use brainstorming techniques to encourage divergent and creative thinking about possible uses of the technology.
- Select the most promising ideas for further discussion and identification of potential markets.

Some areas that should be explored may include:

- Potential of other forms of IP protection
- Whether the invention is based on evidence
- Competitive advantage possibilities
- Market niches¹

• Possible field-of-use licenses (Patents can be licensed for more than one field of use. For example, a patent can be licensed for both medical and electronics applications.)

Other considerations include:

- Public health importance
- Assessing feasibility
- Compatibility with government polices
- Potential markets and development partners for the technology
- Presence or absence of competing or complementing technologies

After completing the assessments, the TTRTD may consider preparing formal or informal technology commercialization plans for each candidate invention/technology that is seriously being considered. Such plans would provide the inventor with critical information regarding the invention's potential and the steps necessary to accomplish transfer.

¹ Market niche is a small segment of a market suitable for focused attention by a marketer. Do not exist by themselves, but are created by identifying needs or wants that are not being addressed by competitors, and by offering products that satisfy them.

2.3. INTELLECTUAL PROPERTY PROTECTION

Once TA is conducted and a particular invention is found to have transfer potential the next step will be processing protection of the invention.

Various forms of intellectual property protections are available, and the protection steps refer to the process (or in some cases, multiple processes) in which protection for an invention is pursued.

- *Patent*: is title granted to protect inventions; the invention may relate to a product, a procedure or a process.
- *Copy Right*: is a form of protection provided by the laws to the authors of "original works of authorship." This includes literary, artistic, and certain other intellectual works as well as computer software.
- *Trade Mark*: is any word, name, symbol, device, or combination, that is used in commerce to identify and distinguish the goods of one manufacturer or seller from those manufactured or sold by others, and also to indicate the source of the goods. In short, a trademark is a brand name.

As the subject of intellectual property is broad and requires considerable legal expertise, this guideline will not cover details of intellectual property, but it does provide basic information, so appropriate legal advice can be sought when the need arises.

Application for registration

In order to acquire rights granted by a patent title and be binding on third parties, application must be filled to the Ethiopian Intellectual Property Office (EIPO). The application should be made in writing and include a description of the invention and clearly define the matter for which protection is sought.

The TTRTD represents the inventor during the patent process and in meetings with EIPO. At this stage with the active involvement of inventors the TTRTD will gather protection requirements from IP office, prepare patent application and review the application if certain formalities need to be cleared up before the application is filed.

The TTRTD will be in charge of following up the protection process until the issuance of protection certificate from EIPO.

2.4. MARKETING TO FIND A LICENSEE

Once the patent is granted the next step is to look for companies (start-up or existing) and negotiate for licensing the invention with the ultimate goal of commercializing the invention.

If agreeing with a startup company appears to be optimal path for commercialization, the TTRTD will work with inventors to identify entrepreneurs and investors to assist or take the lead in planning, creating and funding the start up.

On the other hand if an appropriate and interested existing business is selected as a potential licensee, the TTRTD will identify mutual interest, goal and plans to fully commercialize the invention.

2.4.1. Technology Transfer Marketing Techniques

Some of the techniques that can be used to effectively inform existing companies about inventions/technologies ready for transfer (i.e opportunities available) include:

- *Innovator's contact with peers*—the direct contacts that inventors have with their peers is a highly effective method for creating interest in specific innovations.
- *Technology briefs*—Short written or video summaries of technologies and their potential commercial uses can be distributed to targeted populations via mail, e-mail, or a website. (See technology brief form annexed).
- *Presentation at professional and trade associations*—these associations bring together professionals with similar interests and can provide a forum to discuss inventions ready for transfer.
- Advertisements in professional magazines.
- *Technology roundtables*—Discussion forums can be organized around a particular technology area.
- Advertisements and articles in Research Development (R&D) magazines—Targeted exposure of available inventions/technologies in R&D magazines can provide effective connections among parties with similar interests.
- *Web posting*–Potential partners search for partnership or licensing opportunities on research institutes websites, technology transfer search engines, and social networking groups.

In addition a targeted direct mailing or emailing or telephone campaign is a good way to reach the specific people who are most likely to become technology transfer partners. This requires building a list of organizations and people being targeted and producing (directly or indirectly) the material to be sent out, e.g., brochures, newsletters, articles, press releases, technology abstracts, etc.

2.4.2. Start-Up Company

A start-up company is a new business entity formed to commercialize one or more related intellectual properties. Start-up companies are formed only when TTRTD beliefs that it is a viable commercialization rout. In such situation the TTRTD will work with the inventor to try to identify qualified entrepreneurs and investors interested in creating and funding the start-up company.

A few key factors when considering a start-up company are:

- development costs versus investment return (can the investors obtain their needed rates of return)
- potential for multiple products or services from the same technology (few companies survive on one product alone)
- sufficiently large competitive advantage and target market
- potential revenues sufficient to sustain and grow a company

2.5. LICENSING INTELLECTUAL PROPERTY (INVENTION)

A license is permission granted by the owner of intellectual property that allows another party to act under all or some of the owner's right, usually under a written license agreement.

In transferring invention/technology a license agreement describes the rights and the responsibilities related to the use and exploitation of intellectual property. (Annex -)

Before the license is granted, the licensee (industry partner) must satisfy a number of conditions available within the license agreement presented by the TTRTD. The licensee (industry partner) must supply with a satisfactory development or marketing plan, as well as information about its ability to implement the plan to the TTRTD.

The company (industry partner) must commercialize the invention within a specified period of time and must continue to make the benefits of the invention reasonably accessible to the public.

Licenses can be nonexclusive, partially exclusive, or exclusive licenses. Nonexclusive licenses are granted when participation by several companies offers better opportunities for the broad development and use of an invention or when an invention has already been substantially developed for commercial sale.

An exclusive or partially exclusive (e.g., limited to a field of use or geographic area) license grants the licensee the sole right to use, manufacture, and sell a patented article. (Note: A partially exclusive license that is granted for a specific field of use (e.g., medicine) or for a particular geographic area which allows granting more than one license for that invention.)

2.6. COMMERCIALIZATION

Once a license agreement is received, the licensee will continue the advancement of the technology and make other business investments to develop the product or service. This can involve:

- additional testing
- prototyping for manufacturability, durability and integrity
- and further development to improve performance and other characteristics

Benchmarking tests are often required to demonstrate the product/service advantages and to position the product in the market.

2.7. POST-TRANSFER ACTIVITIES

The post-transfer phase occurs after all negotiations are complete. During this phase the TTRTD monitors the performance of the party/parties (licensee/s) involved and ensures that the agreements of the transfer are implemented.

The TTRTD's role does not end when an agreement is successfully received. Follow-up activities include:

- Maintaining a liaison role to ensure that the agreement is being successfully executed
- Resolving problems that arise
- Renegotiating agreements if situations demand.
- Ensuring that the technology is being commercialized successfully
- Maintaining records of activities and sharing "lessons learned"

2.8. REVENUE DISTRIBUTION

2.8.1. License Fees

Licensing fees are determined based on the type of license awarded and its value to the development of the commercial product. They represent compensation for the use of intellectual property.

In arriving at a reasonable license fee, criteria to be considered by the office of TTRTD include:

- the type of license being granted,
- the investment of the licensee,
- the associated risks,
- the markets to be exploited and
- the value of the potential products.

Apart from this many other factors may be weighted by the TTRTD office in license fee rate negotiations; including

- the need for post-sales support of the product,
- whether or not a long-term market exists,
- and the perceived effects of the terms and conditions of the license.

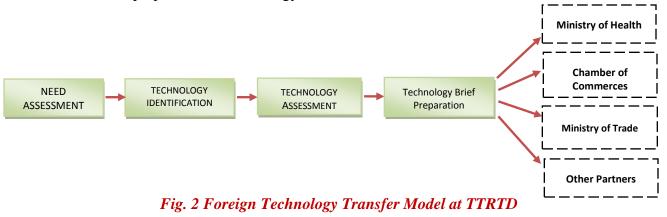
2.8.2. Revenue Distribution System

The revenue distribution will be guided based on the institute's intellectual property policy.

Royalty and license fees are payments for the authorized use of proprietary rights (such as patents, copyrights, trademarks, industrial processes, and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts). (http://data.worldbank.org)

3. TECHNOLOGY TRANSFR FROM ABROAD

This section of the guide line deals with technology transfer from abroad. Technology transfer from abroad mainly involves need assessment, identification of suitable technology, technology assessment, and preparation of technology briefs.



3.1. NEED ASSESSMENT AND IDENTIFYING SUITABLE TECHNOLOGY

Need assessment can be conducted by:

- Reviewing, evaluating and synthesizing available information
- Holding dialogues with stakeholders and technical experts

Technology identification deals with finding appropriate technology which best suites the countries current need. For considerations and techniques required in the identification of technologies/inventions please refer to section 2.1.4 of this guideline.

3.2. CONDUCTING TECHNOLOGY ASSESSMENT

A number of points have to be considered to ensure that the technology chosen is the best available, appropriate to domestic conditions and it will not result in unnecessary transfer of foreign technology. In addition to points mentioned under section 2.2 of this guideline the following are some of the aspects to be considered while conducting assessment on foreign technology to be transferred:

- Analyzing cost of importing the finished product or service from abroad viz-a-viz importing the technology and producing in-house.
- Suitability of the technology with the country's policy (need), socio-economic priorities and culture.
- Availability of trained personnel in the area or availability of training and technical support for local producers, availability and ease of access to row materials required, maintenance system and usage period of the technology (durability).

- Possibility to change (modify) the technology being transferred to improve the chances of optimal performance in the new situation.
- Conditions for transfer such as support offered during and after transfer in absorbing and adapting the new technology or rights over improvements or adaptations.
- Impacts of the technology on community health and the environment.
- Benefits and problems encountered in other countries while using the technology.
- Compatibility with all relevant rules and regulations of the country.

3.3. PREPARING TECHNOLOGY BRIEF

Once the technology is assessed and found to have potential for transfer a technology brief will be prepared and distributed to relevant bodies (see the annexed technology brief form).

- Ministry of health
- Ministry of trade
- Chamber of commerces and
- Other partners

The brief shall address:

- The types of people (target community) who will benefit the most from the technology/invention under consideration.
- Reasons for why the TTRTD believes the invention identified is important.
 - Scientific evidences (list of recent statistics, industry studies, surveys and other documentation) or academic evidence that supports the importance of the invention/technology.
- Other important points

REFERENCE

- 1. ቴክኖሎጂን ስማፈሳስግ ስመዳሰስና ስመምረጥ ሥራን የሚያሳልጥ መመሪያ/ደንብ የኢፌዴሪ ሳይንስና ቴክኖሎጂ ሚኒስቴር
- A comprehensive Approach to purchasing technology. Sirindhorn International Institute of Technology, Thammasat University. ThMMsat International Journal of Science and technology. Vo. 2 No. 1 Jan. 1997
- A guide to technology transfer for creators of Intellectual property at Brandis University; Brandis University
- An Inventor's Guide to Technology Transfer at Massachusetts Institute of Technology; Technology Licensing Office
- Ethiopian Public Health Institute Establishment Council of Ministers Regulation No. 301/2013
- 6. International Technology Transfer to India: an Impedimenta and Impetuous P.Srinivas Subbarao January 2008. Indian Institute of Management AHMEDABAD India.
- 7. Proclamation Concerning Inventions, Minor Inventions and Industrial Designs PROCLAMATION NO. 123/1995 Federal Democratic Republic of Ethiopia
- Technology Transfer Desk Reference A comprehensive Guide to Technology Transfer. Federal Laboratory Consortium. April 2011
- Technology Transfer: Licensing Intellectual property from Universities Industries. Behfar Bastani; Evelyn Minitarno; Dinnis Fernandez and Associates LLP
- 10. The Inventor's Guide to Technology Transfer at Syracuse University

This form is used to report an initial discovery or invention made by inventors.

INVENTION

Inventions include new processes, products, compositions of matter or improvements to existing technology with commercial potential. This form is designed to help the office of TTRT begin to understand research or invention. The goal of the Technology Transfer and Research Translation Directorate (TTRTD) is to support and guide you through the process of disclosing a potential invention.

Most importantly, this is the beginning of a relationship between TTRTD and the inventor such that you are able to maximize the benefits of the services available within TTRTD. The more comprehensive the form is filled out, the better we will be able to work with the inventor through securing the appropriate protection. Upon submission of the invention disclosure, TTRTD will contact the inventor and arrange a meeting to discuss the disclosure process.

WHAT GOES IN TO A DISCLOSURE:

To best help you understand the invention, a manuscript or other detailed description of the technology should be included to help us fully appreciate your work. Please be aware that if the manuscript has been submitted for publication the timing of publication and disclosure may require immediate discussion so that we can determine what steps are necessary or available to us in order to properly protect your potential invention.

SUBMITTING A DISCLOSURE:

Please submit the completed disclosure and supporting material to:

Technology Transfer and Research Translation Directorate P.O. Box Tele. +251-112771499

Or electronically to: inventiondisclosure@ephi.gov.et

TTRTD EPHI INVENTION DISCLOSURE FORM

1. Title & Summary of Invention

• Title:

(The title should be broad and non-confidential, i.e. the general subject matter, but <u>not</u> the details.)

• Briefly describe the invention: The description should include enough detail so that a reasonably capable person could replicate your research results (manuscripts, theses and reports are examples of good starting points for technical descriptions). Please refer to the Guidelines section of the Appendix to help you think through each section more specifically.

Essence of the Invention: (A short Paragraph / Bullet Points)

• Describe what you consider to be the essence or heart of the invention in one short paragraph that captures the essential core concepts and results in the enabling description.

Description of the Invention: (A short Paragraph / Bullet Points)

Guidance: The invention or development must be described in adequate detail so that a skilled scientist or engineer can fully understand the invention.

- a. What was the problem(s) that you set out to solve?
- b. Describe the new process, method, or composition with enough information so that someone knowledgeable in the area could understand its key elements. Include all essential elements, an explanation of how they relate to one another, and how they solve the problem.

Novelty and major advantages: (A short Paragraph / Bullet Points)

• Discuss the uniqueness, novel or unusual features of the invention and explain how it differs from or improves upon existing technologies.

 \rightarrow Please attach additional supporting material \leftarrow

Inventor 1		Name (First)		Name(Last)		Citizenship:	
		Position:		Department:		Work Phone:	
		Work Address:				Email:	
		Home Address:					
	_						
7		Name (First)		Name(Last)		Citizenship:	
0 Г		Position:		Department:		Work Phone:	

Home Address:

Work Address:

ц Ц

l n v e

2. Inventors (List those thought to be inventors; see *Annex II* to add additional people)

3	Name (First)	Name(Last)	Citizenship:
t o r	Position:	Department:	Work Phone:
v e n	Work Address:		Email:
- u	Home Address:		

3. Internal Funding

(It none, prease sta

Identify the source of the internal funding used to make this invention

(If none, please state "NONE")

funding used to make any inventor

 1.

 2.

 3.

Email:

Sponsor Name, Grant/Contract Number and (%) contribution by Grant to your invention

4. List State/Federal Funding Source

Sponsor Name, Grant/Contract Number and (%) contribution by Grant to your invention

Sponsor Name, Grant/Contract Number and (%)

contribution by Grant to your invention

5. External Funding

Sponsor Name, Grant/Contract Number and (%) contribution by Grant to your invention (Name, Phone Number and e-mail, if different from above)

7. Principal Investigator

Sponsor Name, Grant/Contract Number and (%) contribution by Grant to your invention (If none, please state "NONE")

8. Events ("Public Disclosure")

Has a publication (abstract, website, ppt) submitted/presented in the past month or planned within the next month?

7. Principal Investigator

Sponsor Name, Grant/Contract Number and (%) contribution by Grant to your invention

Yes No No

(If none, please state "NONE")

9. Signatures

 Inventor 1 Signature
 Printed Name

 Inventor 2 Signature
 Printed Name

 Inventor 3 Signature
 Printed Name

Annex II

Guidelines for Processing a New Invention Disclosure

1. Overview

- Describe the process of how you arrived at your invention.
- Describe how the invention resolves the problem(s)
- List any additional advantages and features of the invention.

2. Details of the Invention

- Describe the individual components of the invention. Drawings, flow diagrams, and pseudo-code listings are always helpful, so feel free to attach as many as you like. If you use an unusual term or an ordinary term in an unusual way, please define or describe the term.
- Are any of these component parts new? If so, which ones?

3. Alternatives

- Could any processes be omitted changed or substituted with similar one without changing the overall invention? How?
- Can your invention be used for anything other than its intended application or environment?

4. Limitations: When will the invention not work?

- Are there any critical characteristics or ranges of size, weight, pressure, etc. for any of the parts of your invention?
- What other invention/technology compete with or work like the invention?

5. Invention Process

- When did you first begin to work on the invention? When did you come up with the idea for the invention?
- Has a description of the invention ever been published, by you or anyone else? If so, when and where?
- Has the invention ever been shown or used in public, or presented at a trade show, seminar, or in a technical presentation?
- If so, where and when?
- Has the invention ever been offered to a possible customer, for sale, testing, or evaluation? If so where and when?
- Has the invention ever been used experimentally or evaluated by a third party? If so, describe when and where?

Annex III

NON-DISCLOSURE AGREEMENT

	, (hereinafter called		" "CO	MPAN	Y NAME	").
	(COMPANY	NAME),	having	an	office	at
profit, research institution, having an	office at Addis Ababa	a, Ethiopia (h	ereinafter ca	alled "	ΓTRTD"),	and
This Agreement is entered into as of	("Ef	fective Date"	, between H	EPHI-T	TRTD, a	non-

WHEREAS, TTRTD and (**COMPANY NAME**) hereinafter referred to as the party and/or the parties, wish to have discussions on and explore possibilities for cooperation in the field of research and development of ______ and consequently will exchange certain proprietary information relating to their respective know-how, products and businesses for the purpose of evaluating a possible collaboration;

NOW, THEREFORE, in consideration of the promises recited herein, each party hereto agrees to disclose and to receive information as applicable in a manner consistent with the following provisions:

- 1. "Confidential Subject Matter" shall mean any and all information, know-how and data, technical or non-technical, disclosed or provided by one party to the other, whether disclosed or provided in oral, written, graphic, photographic, electronic or any other form, except for subject matter and information:
 - a. that is or becomes generally known or available to the public without breach of this Agreement;
 - b. that is known to the receiving party at the time of disclosure, or as evidenced by written records of the receiving party;
 - c. that is known or independently developed by the receiving party and can be proven as such through written records of the receiving party;
 - d. that is disclosed to the receiving party in good faith by a third party who has an independent right to such subject matter and information;
 - e. that is required to be disclosed by law.
- 2. Any information disclosed in oral or other intangible form under this Agreement shall be identified as "Confidential Subject Matter" at the time of disclosure and shall be confirmed in written summary form marked "Confidential Subject Matter" and transmitted to the receiving party within 30 days after its disclosure to the receiving party. Each party retains the right to refuse receipt of written material which it does not consider to be essential to the completion of the project or which it believes to be improperly designated as Confidential Subject Matter, or for any other reason.
- 3. The parties agree to hold in confidence and withhold from third parties any and all Confidential Subject Matter disclosed by one party to the other, on or after the Effective Date of this Agreement, and to use Confidential Subject Matter only for the purposes set forth in this Agreement, unless the originating party agrees in writing to a change of purpose.

- 4. Each receiving party agrees to take reasonable and appropriate measures to safeguard any Confidential Subject Matter received from the disclosing party from unauthorized use, publication or disclosure to others, and to limit access to Confidential Subject Matter to those employees within the receiving party's organization who reasonably require such access in order to accomplish the purposes stated above. The above obligations relating to use and disclosure shall be satisfied by the receiving party affording the Confidential Subject Matter the degree of care normally used by the receiving party in the protection of its own Confidential Subject Matter of like quality, but in any event, no less than reasonable care.
- 5. Unless otherwise specified in writing, all Confidential Subject Matter remains the disclosing party's property. Immediately upon request of the disclosing party or within thirty (30) days from the date of termination or expiration of this Agreement, the receiving party agrees to cease using the Confidential Subject Matter and to return or destroy all Confidential Subject Matter received from the disclosing party. Either party shall be permitted to retain one copy of the other party's written Confidential Subject Matter, which the receiving party may keep solely to monitor its obligation under this Agreement.
- 6. The term of this Agreement shall be for one (1) year from the Effective Date ("Expiration"). The receiving party shall hold all Confidential Subject Matter confidential for two (2) years from the date of Expiration.
- 7. Nothing contained in this Agreement shall be construed as an obligation to enter into any further agreement concerning the Confidential Subject Matter. No license, right or options under any patent, copyright, trademark, mask works, or equivalent rights are granted by this Agreement.
- 8. Each party agrees not to file any patent applications claiming any information, developments, discoveries, technologies, inventions and the like arising from the use of Confidential Subject Matter or that could not have been made, developed or discovered but for access to Confidential Subject Matter.
- 9. Neither party shall make use of this Agreement, or use the other's name or that of any member of the other's staff for publicity or advertising purposes without prior written approval of the other party.
- 10. Should any court of competent jurisdiction later consider any provisions of this Agreement to be invalid, illegal, or unenforceable, such provisions shall be considered severed from this Agreement. All other provisions, rights, and obligations shall continue without regard to the severed provision, provided that the remaining provisions of this Agreement are in accordance with the intentions of the parties.
- 11. The validity, interpretation and performance of this Agreement and any dispute connected herewith shall be governed and construed in accordance with the laws of the Country.

- 12. This Agreement contains the entire understanding between the parties with respect to the Confidential Subject Matter described herein and supersedes all prior understandings whether written or oral. Any modification, amendment or waiver of the terms of this Agreement shall require the written approval of authorized representatives of each party.
- 13. Both parties warrant and represent that they have the right to enter into this Agreement. The parties further warrant and represent that the terms of this Agreement are not inconsistent with other contractual obligations, expressed or implied, which they are bound.
- 14. Paragraphs 8 and 9, and that portion of paragraph 6 hereof dealing with the duration of the obligation of confidentiality, shall survive the termination or expiration of this Agreement.

The foregoing has been agreed to and accepted by authorized representatives of each party whose signatures appear below.

AGREED:

EPHI-TTRTD

_____ (Company Name)

Name/Title

Name/Title

Date

Date