TRAINING MANUAL FOR
PRACTISING TRADITIONAL
HEALTH PRACTITIONERS (THP's)
IN EAST AFRICA

KENYAN NETWORK ON MEDICINAL PLANTS AND TRADITIONAL MEDICINE (EASTERN AFRICA)

#### **ACKNOWLEDGMENTS**

The production of this manual has involved a lot of people. A few of those directly involved are mentioned below.

We are grateful to IDRC for providing funds through the Network project. We are particularly grateful for the technical support by Dr. F. Gasengayire Programme Administrator (IDRC) and Programme Administrators Ms. M. Male and I. Wasike.

We are grateful to the Directors of National Museums of Kenya (NMK), Kenya Medical Research Institute (KEMRI), Department of Culture, Kenya Industrial Property Institute (KIPI), PROMETRA Kenya and Vice Chancellors of Nairobi University and Egerton Universities for allowing members of the Taskforce time and moral support in drafting this manual.

Of particular mention are traditional health practitioners and researchers in Kenya, Tanzania and Uganda, who participated in the needs assessment work in the three countries.

We acknowledge comments from Dr. Mathiu Mbaabu, Staline Kibet and Dr. Esther Matu for the useful comments they made on the draft.

## LIST OF ACRONYMS

NMK	National Museums of Kenya
ABS	Access and Benefit Sharing
AIDS	Acquired Immune Deficiency Syndrome
AU	African Union
CIKSAP	Centre for Indigenous Knowledge Products
CITES	Convention on International Trade of Endangered Species of Fauna and Flora
HIV	Human Immunodeficiency Virus
IK	Indigenous Knowledge
IPRs	Intellectual Property Rights
KEMRI	Kenya Medical Research Institute
KENRIK	Kenya Resources of Indigenous Knowledge
KIPI	Kenya Industrial Property Institute
MP	Medicinal Plants
MTCT	Mother To Child Transmission
PIC	Prior Informed Consent
PLWAs	People Living With AIDS
PROMETRA	Promotion of Traditional Medicine
SAMTECH	School of Alternative Medicine and Technology
THPs	Traditional Health Practitioners
TM	Traditional Medicine
UoN	University of Nairobi
WHO	World Health Organization
R & D	Research and Development
CBD	Centre for Biodiversity
BGCI	Botanical Gardens Conservation International
MAT'S	Mutually Agreed Terms
IP	International Policy
MTAs	Material Transfer Agreements

# TABLE OF CONTENTS

#### SECTION ONE

- Summary of the training programme
- Taskforce
- Objectives of the training programme
- Introduction to traditional medicine

SECTION TWO: CONSERVATION AND SUSTAINABLE USE OF TRADITIONAL MEDICINE AND MEDICINAL PLANTS

- Taxonomy made simple
- Conservation sustainable use of medicinal plants in-situ and , ex-situ approaches
- Indigenous knowledge Documentation

#### SECTION THREE: HEALTH ISSUES

- Manufacture of herbal products
- Ethical Conduct of traditional health practitioners
- Home based care and nutrition

# SECTION FOUR: POLICY AND LEGAL ASPECTS OF TRADITIONAL MEDICINE AND MEDICINAL PLANTS

- Kenyan Policy issues in medical practice
- Intellectual Property Rights (IPR) and Access and Benefit Sharing (ABS)
- International policy on TM/MP
- WHO code of ethics
- Library/information management
- Collaboration/ networking / professional associations of THPs

#### SECTION FIVE: APPENDICES

- References
- Names, Contacts and Institutional Affiliation of taskforce members

#### SECTION ONE:

#### SUMMARY OF THE TRAINING PROGRAMME

The aim of the training programme is to improve the service delivery of traditional health practitioners in East Africa, with the aim of strengthening their practices through capacity building. The focus of the training manual is traditional health practitioners (THPs) already practicing traditional medicine.

#### The Network Project

This manual is an activity within an ongoing project with the Network on Medicinal Plants and Traditional Medicine (Eastern Africa), whose overall aim is to promote the conservation and sustainable, safe, and effective use of medicinal plants and herbal products, as well as the integration of traditional medicine in public health services, through effective collaboration among all stakeholders. The specific objective under which this activity falls within, is to strengthen the capacity of traditional health practitioner associations and collaboration between them and health workers, researchers and policy/decision makers, in order to support integration of traditional medicine in public health care.

#### Justification

The following documents were referred to during the writing of the manual: Country reports of the traditional health practitioners needs assessment in Kenya, Uganda and Tanzania; World Health Organisation guidelines on Ethics: Theta Training manual: and Prometra Curriculum for traditional healers.

#### Task force

A task force of ten (10) professionals was constituted and mandated with the task of developing the training manual. These are Dr. Jennifer Orwa, Prof. Julius Mwangi, Mr. Ndua Chege, Dr. S.T. Kariuki, Ms. Peris Kariuki, Dr. Jack Githae, Mr. Stanely Atsali, Ms. Peris Kamau and Ms. Martha Njama.

It is hoped that this manual will form a baseline that can be referred to in future when training traditional health practitioners (THPs).

#### Objectives

The broad objective of developing a training manual is to add value of traditional health practice in health care in Kenya, Uganda and Tanzania, and improve on the conservation and sustainable use of medicinal plants.

#### Specific objectives are:

- a) To equip THPs with basic knowledge on human anatomy and physiology
- b) To familiarize THPs with conventional health practices so as to open bilateral consultation
- c) To acquaint THPs of their professional limitations, medical ethics and general public health regulations
- d) To create awareness among THPs on quality services
- e) To familiarize THPs with policy and legal issues on the health care, TM and MP issues





### INTRODUCTION TO TRADITIONAL MEDICINE

Topic	Aims/Object ives	Content	Method/Mate rial
Traditional Medicine	To give a clear understandin g of traditional medicine as a profession	Philosophy and history of traditional systems of medicines; An overview to history and philosophy, status and prospects of traditional TM; Commonly used terminologies within the TM profession of indigenous Africa THP; Other forms of traditional medicine including: Chinese medicine, Unani Homeopathy	Lecture and Discussions
Constituent s/ materials used in TM	Plants, minerals and animals/anim al products used in TM. Their conservation status/ threats availability and threats on these resources	General Practitioners also known as herbalists; Traditional Birth attendants, Bone-setters and dentists Psychotherapists; Surgeons (circumcisers and brain surgeons)	Lectures and Group work
TM Today/ Current status	To inform THPS of the current trend of TM	Growth and development of traditional medicine: WHO: Alma Atta Declaration OAU- (now African Union: Decade for Traditional Medicine (2001-2010); -What is the contribution of TM to modern health care in Africa and globally; -How TM contradict and integrate with conventional medicine? -How can TM be integrated or coexist with conventional medicine;	Lectures and discussions

Future of TM	To help THPs project into the future of traditional medicine	-The government's attitude and strategy to TM?  -The future of TM; -Following emergence of new diseases, how is TM coping? andto respond? -What gaps are left by conventional medicine which TM covers? How the renaissance and awakening in Africa will influence TM	
Herbal medicine versus conventional medicine	Comparing and contrasting the two medical practices	Complementary roles; Divergencies and discrepancies; What the implications are; the way forward	



THPs training workshop field trip Nyeri



# SECTION TWO CONSERVATION AND SUSTAINBLE USE OF TRADITIONAL MEDICINE AND MEDICINAL PLANTS

TAXONOMY MADE SIMPLE (HERBARIUM TECHNIQUES)

Topic	Aims and Objectives	Content	Method/Material
The Herbarium	At the end of the course the participants will be able to appreciate and understand the functions and roles of the herbarium	What is a Herbarium; Role of the herbaria; Different types of herbaria; Development of small herbaria (village herbaria); Basic plants curation	Lecture, Posters, Photos, and Demonstrations
Plant Collection	At the end of the course the participants will learn the basic requirement on field plants' collection and methods of preservation, pressing and seasons of collections	Techniques, methods and procedures of plants collection and preservation; Equipments used for plants collection and preservation; Making notes, pressing and drying specimens; Changing paper on pressed specimens; Preservation methods for collected plant specimen for future reference; Types of collections e.g. Monocots, spirit, carpological collection etc	Lecture, Field work, Demonstration and posters
Identificatio n	To enable THPs to identify plants correctly (plants names) and on their own	Basic identification (use of keys, matching with voucher specimen, morphological features, etc); correct handling and labeling of plants; visual difference between a monocot and dicot angiosperm and gymnosperms and other groups of plants e.g ferns, algae, fungi etc	Lecture and Field work
Mounting	To learn how to mount specimens for permanent records	Purpose of mounting plant specimens, Procedures of mounting plant specimens; and tools and equipments used in mounting	Demonstrations

Pest control	To learn how to	Methods of minimizing	Lecture and
	handle the	infestation in herbarium; types	Discussions
	problems of	of infestation in the herbarium	
	infestation on the	(past experiences), handling	
	herbarium	pests in herbarium e.g.	
	specimens	fumigation, deep freezing etc,	
	-	structural	
		requirements/minimum	
		condition of a herbarium	

#### CONSERVATION /SUSTAINABLE USE OF MEDICINAL PLANTS

Topic	Aims and Objectives	Content	Method/Material
Introduction to plant conservation	The main objective is to understand the need for resource conservation -To define development, conservation and sustainable resource utilization	Definitions; Development, biosphere, living and non-living resources; Conservation, preservation, sustainable development biodiversity and essential ecology processes	Lecture
Conservation approaches	To understand different options of plant conservation and their advantages	Conservation options: (in-situ, ex-situ strategies, their advantages and limitations and how to choose either or both.) Community woodlots; contour planting: Alley or hedgerow; Linear planting: Shelterbelts; silvopastoral systems; Land rehabilitation; reclamation and plantations. Plants under CITES list and what it means	Lecture, field visits and demonstration
Plant propagation	To understand different methods of plant propagation	Propagation; Seed Collection; Nursery site selection; Nursery preparation and management, Propagation from seeds to include pre-germination treatment vegetative propagation us eof stem cuttings tubers suckers etc	Lecture and Demonstrations

Agro forestry	To familiarize participants with the	Records of all planting activities e.g. species date of sowing, date of germination, germination percentage etc.  Definition of agroforestry and why it is is important; Species	Lecture and field tours
	concept of growing trees in association with crops and livestock	and their features	
Home/Herbal gardens and sustainable harvesting	To train THPS on how to develop and manage a herbal garden	Demonstration of strip barking and selective root harvesting and other parts Development of Botanic Gardens as resource centers for education, research	Field demonstration, lecture notes and posters
		conservation and recreation Plant labeling and records of uses	
Trade in medicinal plants	To understand the role of local and international trade of medicinal plants; restrictions if any	Trade in medical plants; Need for standardized prices by a central body. Discuss plant materials sold, prices and destination and a list of the most sourced plants	Lecture, specimens of plant materials exported publications, newspaper cuttings

### UNIT TWO: INDIGENOUS KNOWLEDGE DOCUMENTATION

Topic	Aims and Objectives	Content	Method/Material
Indigenous knowledge	To introduce THPs on the importance of Traditional knowledge, indigenous knowledge and its relevance in development	Introduction to indigenous knowledge; What indigenous, community, and common knowledge is; What the various indigenous knowledge systems are	Lecture, group discussions
Documentatio n of IK	To help THPs understand the value of documenting indigenous knowledge. To inform participants and help them appreciate the values and methods of documenting IK	Indigenous knowledge for posterity and as part of our cultural and natural heritage, basis for national development: and asset: To protect ourselves against bio-piracy nationally and internationally The use of local languages in preserving indigenous knowledge; Word of mouth publications e.g. a National pharmacopia: Databases: and audio visual material	Lecture, Group discussions and Case Studies
Institutions Dealing with IK	To introduce THPs to the local and international Institutions which are useful in relation to traditional Knowledge	Institutions dealing with documentation of indigenous knowledge; community groups; Case studies of IK communities; Biopiracy and bioprospecting	
Ethnobotany	To familiarize participants with the data collected during ethno botanical surveys	Local name; scientific name English names; habitat; what the plant look; like, height; flowers; seeds. plant parts used; medicines preparation, dosage and any known side effects /contraindications	Lecture and Ethno botany Manual
Traditional Technologies	To enable THPs appreciate the importance and role of traditional technologies in TM	Technologies in propagation: preparation; and preservation and use of TM from different communities.	

### SECTION THREE

THEME:
HEALTH TRAINING UNITS

Topic	Aims and	Content	Method/Material
_	Objectives		
Collection/ Post harvesting/ Storage	At the end of this sub-unit the participants will be able to describe how to collect, process, store and preserve TMs in a sanitary manner	Teach appropriate methods of collection/harvesting, processing, storage and preservation of TM.	Lecture and Demonstrations field
Record keeping	At the end of this sub- unit, participants will be able to: Describe the usefulness of record keeping; Know how to keep the records; Acquaint themselves with all records and information on herbs; Prepare documentations to facilitate efficient recording of information Keep all relevant records and information on herbs and label them from the source	Advantages of record keeping; Basic records management; TM records documentation procedures; Patient records documentation procedures; Information collecting methods; Environmental/climatic conditions appropriate for storage	Lectures/Demonstrat ions and Display of sample materials from MoH
Record	Learnt the	Uses of records; Planning,	Lectures
keeping II	importance of record keeping and	Follow up; Teaching; Research; Feedback Common tools for keeping	
	Familiarize with common tools used	records: Daily facility records; Patient registers drug registers;	

	for record keeping	referral forms to and from various healers, e.g.; monthly reports e.g.	
Manufacturin g Herbal Medicines	At the end of this sub-unit the participants will be able to: -Describe hygienic methods of preparing herbal medicines; & Describe appropriate environmental conditions for storage of herbs.		Lectures and demonstrations
Preparing herbal medicines	To enable THPs to make herbal preparations using well recognized hygienic methods	Safety and efficacy in manufacturing herbal remedies; recognition of dried plant material materials; quality record keeping in herbal manufacturing equipment required for manufacturing water-based preparations, herbal compresses.  Dosage in herbal medicine; how to set up a small dispensary; how to dispense herbs accurately; route administration principle of herbal medicine	Demonstration and lectures
Herbal Pharmacology	To create an understanding of the role of plants chemicals (Phytochemistry) in clinical use of herbal medicine and its toxicity.	An overview of plant chemistry major groups of plant chemicals and their pharmacological effects. Diseases and side effects in herbal medicine.	Lectures and reference materials
Safety and efficacy of traditional medicine	At the end of this sub-unit the participants will be able to appreciate the benefits of ascertaining scientific evidence of	Strategies for promoting the use of traditional medicines in contemporary health care delivery systems that include research and development	Lectures and Discussions

Drug Administratio n	the safety and efficacy of TMs  Describe rational TM use and administration concepts, categories of irrational TM administration and interventions for promoting appropriate use of TMs	Route administration of TM administration: definition and principles of parenteral administration; Sterile preparations / eye preparation problems associated with parenteral administration of TMs; Irrational drug use; Categories of irrational TM use; Intervention strategies to improve TM use;	Lectures
Referral systems to laboratories/ conventional doctors Use of simple modern equipment	Appreciate the importance of and describe cases for referral  To familiarize the THPs with the use of simple equipment in diagnosis	Discuss the prescription process  Teach participants on the values of referral and aim at recognizing symptoms for diseases they cannot manage	Lectures and role plays  Lecture and Demonstrations

#### SECTION FOUR

TOPIC: ETHICAL CONDUCT OF TRADITIONAL HEALTH PRACTITIONERS (DOCTOR PATIENT RELATIONSHIP)

Topic	Aims and Objectives	Content	Method/Mate rial
Handling of patients	At the end of this sub-unit the participants will be able to listen and identify with patients, obtain information about people's concerns and needs, and to counsel and give advice.	<ul> <li>How to create a climate of trust, respect and positive regard for patients</li> <li>How to listen with full attention to what others are saying</li> <li>How to acknowledge and be supportive of others</li> <li>How to identify with and understand people's concerns, problems and views</li> <li>How to speak clearly and in a manner that others can understand</li> </ul>	Lectures and role plays
Diagnosis I	Inform THPs on how to take the history of the patient	Components of history, general examination vital signs and symptoms per system and tools of examination; Examine and make diagnosis; Physical examination and diagnostic signs; Symptoms following regions and systems; pediatric and gynecological examination; psychiatric assessment; referral protocol; Medical tests, blood sputum, urine stool, x-rays and radiographic procedures	Lecture and role play

Introduce the THPs	General pathology, definitions,	Lectures and
to the fundamental	classifications of disease and	demonstrations
principles of	disorders wounds tumors,	
pathology in order to	inflammations, disturbance of	
make a diagnosis;	cellular nutrition growth,	
and Enable	disorders of blood and blood	
participants to	circulation; Introduction to	
recognize signs and	systematic pathology and; How	
symptoms of	to recognize symptoms of	
common diseases	common diseases, such as	
	diarrhoea and malnutrition,	
	and then proceed to introduce	
	HIV/AIDS.	
	to the fundamental principles of pathology in order to make a diagnosis; and Enable participants to recognize signs and symptoms of	to the fundamental principles of pathology in order to make a diagnosis; and Enable participants to recognize signs and symptoms of common diseases  to the fundamental principles of disorders wounds tumors, inflammations, disturbance of cellular nutrition growth, disorders of blood and blood circulation; Introduction to systematic pathology and; How to recognize symptoms of common diseases, such as diarrhoea and malnutrition, and then proceed to introduce more complex ones, such as

### SECTION FIVE:

### CROSSCUTTING ISSUES

TOPICS: HOME BASED HEALTH CARE AND FAMILY PLANNING

Topic	Aims and	Content	Method/Mat	
Topic	Objectives		erial	
Home based care	To teach THPs on caring for patients at home and train caretakers on how to do the same	Define home based health care; Discuss the aspects of care that can be provided at home;Discuss the importance of caring for PLWAs at home;Discuss the role of the traditional healers in Home Based Health Care;Who can provide home based health care; Safety requirements; Importance of home based health care; Relevance of traditional medicine to home base health care	Lectures , brain storming, video demonstration, role plays, posters discussions, field visits and question and answers	
HIV/AIDS	To enable THPs to educate and advice the community members on issues on HIV/AIDS	The HIV/AIDS pandemic; Transmission, prevention Voluntary testing and counseling services And care of HIV/AIDS patients	Lecture and skit	
Family Planning	Teach THPs on how to advice clients on the importance of Family Planning	Different methods of family planning: (traditional, natural and conventional)	Lectures and personal experiences by participants	
Business skills	To enable THPs run clinics / home pharmacies	Pricing of services/goods in traditional medicine; importance of farming associations for better bargaining	Lecture	
Professional Groups	To enable THPs see the value joining in THP associations and how to manage them	Constitutions and code of ethics; registration procedures	Lecture and Specimen constitutions	

# TOPICS: POLICY AND LEGAL MATTERS/ POLICY ISSUES

Topic	Aims & Objective	Content	Method/Mate
			rial
Policy	To familiarize THPs	National guidelines for	Lecture and
issues in	with national health	diagnosis treatment and	reference
medical	policies adopted by	prevention of Malaria;	documents
practice	the government to	Reproductive health/family	
	achieve health care	planning policy guidelines and	
	goals	standards for health care	
		providers; Clinical guidelines	
		for management of HIV	
		infected pregnant women and	
		prevention of MTCT of HIV in	
		Kenya.	
	To inform THPs on	Cap 242 Public health Act; Cap	Lecture and
	the regulation and	243 Radiation Protection Act;	reference
	enforcement of	Cap 244 Pharmacy and Poisons	documents
	policies	Act; Cap 245 Dangerous Drug	
		Act; Cap 246 Malaria	
		Prevention Act; Cap 248	
		Mental Health Act (1989)	
		Cap 253 Medical Practitioners	
		and Dentists Act ; Narcotic and	
		psychotropic Act among others	
Access and	Prepare THPs to be	Domestication of international	Lecture and
Benefit	able to participate	tools on ABS; Content of	Group work
sharing issues	effectively in the	various ABS tools; Sample of a	
	development of a	local ABS tool; Presentation of	
	local ABS system in	a prototype ABS tool	
	their country		
International	Implementation of	Bonn-Guidelines, Akwe: kon	Lectures
policy	the convention,	guidelines and Addis Ababa	
touching on	including the three	principles and guidelines; for	
TM/MP	goals and specifically	the sustainable use of	
	goal three, through	biodiversityA Guide to using	
	building capacity for	the working draft ABS	
	THPs to participate	Management tool; (Prior	
	effectively in the	informed consent and Mutually	
	development of an	agreed terms) Material transfer	
	ABS system; Policy	agreements MTAs : Patenting	
	development	of herbal products ( Patents ,	
	(TMMP);	trade marks, geographical	
	Participants to:	indications, utility models:	
	Appreciate their role	Intellectual Property Rights	

	in the policy development process, understand their role in enabling access to traditional knowledge of the related genetic resources, negotiate for benefits with R&D value adding institutions and partners and appreciate their role in PIC and MATs, and key agreements.	(IPRs): Access and benefit sharing (ABS): Rights and responsibilities and an enabling environment in relation to the above: Development of institutional IP agreements: Relevant IPs (Convention on Biological Diversity, National Patent Laws etc) Guide participants through the Boon-Guidelines, Akwe-kon guidelines Addis Ababa sustainability guidelines and ABS Management tool: Introduce the TMMP draft policy, and its relevance to THP and samples of Research agreements; PIC forms, Benefits sharing mechanisms; Case studies of where ABS has been applied	
Collaboration and networking in TM& MP issues	To promote collaboration and networking between traditional healers, local communities, researchers national research institutions, policy makers in research on TM and TM.	<ul> <li>Benefits of networking and collaboration;</li> <li>Formation of Community groups;</li> <li>How researchers can help THPs in various aspects</li> </ul>	Lectures and case studies

# TOPIC: WHO THPS CODE OF ETHICS & LIBRARY/INFORMATION MANAGEMENT)

Topic	Aims and	Content	Method/Mate
_	Objectives		rial
Code of	To inform THPs on	The WHO Traditional Health	Model Code of
ethics for	the WHO set	Practice Code of Ethics	Ethics for THPs
THPs	guidelines for TM	Guidelines for world health	in the WHO
	and encourage them	organization and member	African Region
	to come up with their	Countries	for reference
	own national		
	guidelines		
Library	To sensitize THPs on	Compulsory books for THPs;	Lectures and
Information	the importance of	link between herbarium library	Demonstration
Managemen	referencing	and Traditional healer; various	
t	especially	databases	
	documented	Access to various libraries in	
	information. e.g	Kenya	
	Herbarium houses a	THPS home library	
	unique botanical	;Translation of hard science to	
	library with wide	soft science for THPs ; Use of	
	collection of books	' 1 J	
	and journals from all	messages and; How THPs can	
	the over the world.	publish their knowledge;	
		Use of the internet	
	m 11 mrrp		
THPs	To enable THPs to	Newsletter/bulletin for THPS Lecture	
Bulletin/	share / and publish		
Newsletter	pieces of information		

#### APPENDIX 1

# NAMES, CONTACTS AND INSTITUTIONAL AFFILIATION OF TASKFORCE MEMBERS

No.	Names	Institution at Affiliation	Telephone	Email
1	Dr. Jennifer Orwa	Kenya Medical Research Institute (KEMRI)	0722700864	jorwa@kemri.org
2	Prof. J. Mwangi	University of Nairobi (UoN), School of Pharmacy	0722825966	mupal02@yahoo.com
3	Ms. Peris Kariuki	National Museums of Kenya (NMK) - KENRIK	0722615259	pmweru@yahoo.com pkariuki@kenrik.org
4	Dr. Jack Githae	SAMTECH-WHO	0722442501	kaguugithae@yahoo.com
5	Ms. Martha Njama	PROMETRA	0721549006	nyambugu@yahoo.com
6	Mr. Ndua Chege	Department of Culture, Central Province	0722606201	chegendua2005@yahoo.com
7	Dr. S.T. Kariuki	Egerton Univeristy	0722922454	stkabuito@yahoo.com
8	Ms Peris Kamau	National Museums of Kenya (NMK) E.A.Herbarium	0722449312	periskamau2@yahoo.com
9	Mr. Stanley Atsali	KIPI	0733516615	satsali@yahoo.com kipi@swiftkenya.com
10	Ms. Stella Simiyu	NMK/CBD/BGCI	0721364289	stella.simiyu@iucn.org

### **REFERENCES:**

WHO Regional Office for Africa, Model Code of Ethics for Traditional Health Practitioners in the WHO African Region.