Report on Community Training on Gums and Resins Production, Post harvest handling and Marketing in Meru North District, 25th-28th May 2011.

By

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ABBREVIATIONS AND ACRONYMS

ASALS	Arid and Semi-Arid Lands
CBOs	Community Based Organizations
GARA	Gum Arabic and Resin Association of Kenya
GOK	Government of Kenya
KEFRI	Kenya Forestry Research Institute
KEPHIS	Kenya Plants Health Inspectorate Services
KFS	Kenya Forest Service
MOU	Memorandum of Understanding
MT	Metric Tonnes
NGARA	Network for Natural Gums and Resins in Africa
TORs	Terms of References

1.0 INTRODUCTION

1.1 Overview

Kenya occupies a total land surface area of 582 644 km^2. Of this, the arid and semi arid lands (ASALS) cover an estimated 80% of total land mass. About 25% of the human population and slightly more than 50% of the national livestock is in the ASALS. They also account for more than 80% of eco-tourism interests in the country. These dry land ecosystems are endowed with a rich diversity of flora and fauna that the local people have depended upon for several generations. Despite their high development potential, the ASALS have the lowest development indicators and highest poverty incidence amongst all areas in Kenya.

More than 60 percent of ASAL inhabitants, for instance, live in conditions of abject poverty subsisting on less than one US dollar per day. Reinforcing this endemic poverty is a cycle involving environmental degradation, insecurity, droughts, climatic shocks, diseases and general despondency. Due to historical reasons, communities in these areas continue to rely heavily on pastoral livestock production systems. There is lack of diversity in commercialization of other dry land forest based natural resources found in the area for development of alternative livelihoods.

The future for sustainable development of the dry lands lies in the rational use of natural resources. This entails recognizing and developing the potential that exists in the vegetation resources for production of economically valuable products. A commitment by the government to address ASAL challenges has been made in the National Policy for the Sustainable Development of the Arid and Semi Arid Lands (Draft), Strategy for Revitalisation of Agriculture (SRA), Vision 2030 and Forest Policy, among others. Key amongst dry land commodities are gum resins i.e. myrrh, (hagar and opoponax) and frankincense, Aloes and high value dry land timber tree species such as *Melia volkensii* and *Prosopis juliflora* among others.

Plant gums and resins from the drylands of Kenya are among key natural resources with potential to improve livelihoods of rural communities in terms of food security, income generation and foreign exchange earnings. These

resources include gum arabic from *Acacia senegal* (L.) Willd. or *Acacia seyal* Del. and commercial gum resins such as Myrrh from *Commiphora myrrha*, Hagar from *Commiphora holtziana* and Frankincense from *Boswellia neglecta* S. Moore. Currently, gums and resins are produced in at least 8 ASAL Counties namely: Marsabit, Wajir, Garissa, Moyale, Mandera, Turkana and Samburu and Isiolo.

Gums and resins have potential to generate wealth and uplift the living standards of the local communities in the dry lands. They are renewable resources that can be sustainably exploited for household income and still conserve biological diversity and ecosystem functions while increasing overall productivity of the land. They can also serve as raw materials for enterprise development thus providing opportunities for trade and employment generation thereby uplifting the socio-economic status of the local communities. This is especially important for Kenya's drylands which have few options for alternative sources of livelihood due to the difficult environmental conditions, resulting from scant and erratic rainfall and poor soils. These resources are very unique and important to the local communities as they produce gums and gum resins in the dry season when forage is scarce, thereby allowing the communities to be occupied in a meaningful economic activity during the hard times.

Both gums (gum arabic) and resins (myrrh, hagar and frankincense), are articles of commerce both locally and internationally. The current annual world demand for gum Arabic is about 100,000 MT against a current supply of about 70,000 MT which is projected to reach 150,000 MT by 2020 (Muller and Okoro, 2005). The annual world demand for gum resins is estimated at around 2500 MT. Globally the resource potential of gums and resins far exceeds current levels of production. In Kenya the situation is similar where the potential for gum arabic production in Kenya is 3,000 MT against an average production of 400-500 MT while for resins (myrrh, hagar, frankincense) the potential is 3500 MT against an average production of around 1000 MT. Both cultural and conventional markets exist for these products. However, exports of gum arabic from Kenya are still very small relative to the resource potential. Annual exports have only been a few 100 tonnes which reached a peak of 460 MT in 1995 (Chikamai *et al,* 2010). Kenya is a major exporter of resins (myrrh, hagar and frankincense) being number three after Ethiopia and Somalia. Export volumes reached a peak of 1130 MT worth about US$ 2.6 million in 2000 (Chikamai and Casadei, 2005). Profit margins for local traders and producers are quite low making them to rely on

selling groceries, and hides and skins to break-even. This explains why investment by such local dealers in marketing infrastructure is low.

The key constraints of the sub-sector include**:** poor production practices and post harvest handling, lack of primary value addition and storage facilities, lack of clear policy on the development of gums and resins, poorly developed markets and marketing systems, poor prices and benefits along the value chain, access to adequate capital, harsh and difficult terrain, frequent droughts, insecurity, famine and poverty, land and tenure issues and lack of adequate data on the resources.

There is room for increased production and marketing of gums and gum resins through intervention of the above constraints and diversification of the sub-sector. These resources have been exploited and traded in cartel like businesses with very little benefits to the local communities who are the main producers. The need to build capacity of local communities from Meru North for sound production, value addition and trade with the ultimate objective of providing an alternative source of livelihood (income generation) was therefore identified as important activity by ENNDA hence the need to organize a training program.

KEFRI through its drylands research programme and the Network for Natural Gums and Resins in Africa (NGARA) is implementing various activities in the drylands of Kenya that are focusing on alternative livelihoods in mitigating rural poverty and environmental degradation.

1.2 Background to the training

ENNDA is currently executing the Ewaso Ng'iro North Natural Resources Conservation Project, which is funded by the African Development Bank (ADB) and the Government of Kenya. The objective of the Project is to reduce poverty through sustainable natural resources conservation and management. Among the resources to be conserved are range land plants especially those with economic value like the gums and resins producing plants. This initiative is going to improve the esteem of the community on rangeland resources and assist in their conservation. For this purpose the Project has set aside resources to improve the production of gums and resins within the Project area.

Considering that gum arabic and gum resins production and trade has been going on in the ASALs of northern Kenya since 1990 albeit in a discontinuous manner, and that local communities have some idea about the activity, the

need to develop the capacity of technical officers from relevant line ministries and local communities for sound production and trade was identified as an important activity of the project. KEFRI/NGARA was therefore contracted by ENNDA (in the spirit of strengthening the current KEFRI-ENNDA MoU) to train practitioners and local communities in the production and marketing of gum arabic and gum resins with the ultimate objective of providing an alternative source of livelihood (income generation) for the local community.

The training was organized at two levels; Training of Trainers (ToTs) and training of local communities. Between July and November 2007, a total of four training workshops were held for the ToTs (2 in Isiolo, 1 in Marsabit and 1 in Wajir). A total of 84 participants from 9 districts were trained. The 9 districts were: Laikipia, Isiolo, North Meru, Samburu, Marsabit, Moyale, Samburu, Garissa, Wajir and Mandera. These resource persons were used in the second phase of the training (training of the communities in the respective districts). Community training was conducted in all the districts except for Meru North, hence the need for this.

1.3 Objectives of the Training

The overall objective of the Training was to:

To empower the community with knowledge on production, post harvest handling and marketing of gums and resins for sustainable livelihoods.

The specific objectives were to:

1. To highlight the challenges, opportunities and potential of gums and resins production and trade
2. To train the participants on the identification of gum arabic and gum resins producing species
3. To equip collectors with adequate knowledge and skills to produce, collect, store, package and trade in gum arabic and gum resins
4. To equip the collectors with the procedures for formation of producer associations
5. To facilitate the process of formation of producer associations where these do not exist

1.4 Terms of Reference (TORs)

The TORs for the facilitators were:

1. Provide facilitation services for 4 days for gum and resins production in Kangeta Location.
2. Ensure quality facilitation services for the period of engagement
3. Link the groups to relevant markets and traders.
4. Prepare and submit quality training report at the end of the training workshop.

1.5 Scope

The training covered the following topics:

1. Major challenges in drylands/ opportunities in gum and resins production and trade
2. Gum and gum resin producing species
3. Methods of tapping, storage, sorting, grading and transportation for improved quality management
4. Marketing of gums and gum resins
5. Producer association formation/strengthening
6. Field visit

1.6 Target Group

Local community members who are potential collectors and traders.

1.7 Outputs

At the end of the training, participants were expected to:

- Understand the main challenges posed by the dry lands and the opportunities arising from the rich biodiversity for supporting alternative livelihoods
- Identify the main gum Arabic and resins producing species in the field as well as possible adulterants
- Know the physical nature of the major gums and resins as well as their uses (local and commercial)
- Understand the entire process from tapping to packaging

- Have a good idea about the national and international markets for gums and resins,
- Understand the procedures for establishing of the Commodity based Producer Associations within area (s) of operation

1.8 Implementation

Community mobilization was carried out by Abdi Kullu from ENNDA. The training was carried out from 26th to 28th May, 2011 by KEFRI, KFS and GARA staff as per the programme given in **Annex 1.** The teaching was rated very good by the participants with a rating of 90.5 %. There were a total of 30 participants all from Kangeta area. A full list of participants who attended the trainings is given in **Annex 2**. The training was held at Kalimbene centre. The training was rated by the participants as a good and interactive with participation of all members. The field visits which were carried out in Gambela along Isiolo – Wajir road were rated by the participants as good since it exposed them to practical knowledge of Identification, tapping, collection and quality control of gums and resins. Meals and transport logistics were supported by ENNDA.

1.9 Participants Expectations and Workshop Norms

The participants expectations were: -

- Acquire more knowledge on gums and resins.
- Know the markets for these commodities and how to access them.
- Learn the gum and gum resins producing species.
- Learn how to tap and collect gums from the trees.
- Learn the right species that produce commercial gum.
- Know the general importance of trees.
- Understand the government policy guidelines on trade of forest products.
- Get the position of Mariara borehole project.

Workshop norms included: -

1. Time must be observed by all.
2. Avoid repetition of questions asked by others.
3. Cooperation and silence.
4. Respect and commitment to each individual.
5. Participation by all
6. Phones in silent mode or switched off.

2.0 OPENING SESSION

The Regional Coordinator, Isiolo welcomed the participants and opened the training session. A word of prayer was offered by Mr. Kambuthu, thereafter self introduction was done. The coordinator took the participants through ENNDA profile and ENNNRCP Project as follows:

The Ewaso Ngiro North Development Authority (ENNDA) is a corporate body established under an Act of Parliament. CAP 448 Laws of Kenya in 1989 and started operations in 1992. ENNDA covers an area of 209,576 km2 (36% of the national territory) encompass the entire Ewaso Ngiro North River (ENNR) Catchment and covers 12 administrative districts in four (4) provinces. These are Garissa, Mandera, and Wajir in North Eastern Province; Marsabit, Isiolo, Meru Central, Meru North, and Moyale in Eastern Province; Nyandarua and Nyeri in Central Province and Laikipia and Samburu in Rift Valley province.

Mandate

- To provide leadership in utilization of natural resources in the basin.
- Coordinating and Planning activities in the basin
- To initiate and implement programmes and projects in the basin.
- Management and sustainable Development of natural resources
- To Develop up to date long-term plans

Vision

- To be the leading organisation in providing sustainable and equitable development for all within the Ewaso Ng'iro north river basin.

Mission

- To contribute to development in the Ewaso Ng'iro North River Basin area through promotion of agro-industry development, creation of employment, resource conservation, sustainable exploitation and management of natural resources, promotion of tourism and sustainable utilization of the environment to alleviate poverty and enhancement of food self sufficiency.

The Ewaso Ng'iro North Natural Resources Conservation Project (ENNNRCP)

This is funded by Government of Kenya and Africa Development Bank.

The Project Objective

- The project's specific objective is to alleviate poverty in the Ewaso Ng'iro North project area through enhanced resource conservation with specific focus on improving the availability of water.

Project Components

(a) Water Resource Development and Management
(b) Participatory Catchment Conservation
(c) Coordination and Capacity Building,

In addition, the Project will provide financing for project coordination and management, including setting up of coordination office at ENNDA and decentralized district project teams in 12 districts. The strategies for implementing the component include: training and institutional strengthening and participatory processes involving community-based demand-driven initiatives.

She then introduced the trainees to the participants and encouraged them to be cooperative with them in-order to benefit maximally from the seminar.

3.0 TRAINING SESSION

The training covered the following topics:

The training notes are attached in Annex 3. The facilitators made their presentations in a participatory way and a number of issues emerged during each presentation and these are summarized for each session.

3.1 Challenges and opportunities in dry lands

The following issues emerged from this discussion:

i. Challenges mentioned by participants

- Overstocking resulting over grazing and destruction of vegetation
- Water scarcity and salty water
- Unreliable and poorly distributed rainfall (< 500 mm)
- Food insecurity
- Shortage of pasture
- Recurrent droughts
- Soil erosion leading to poor soils
- Poor infrastructure
- Poor communication networks
- Insecurity
- Deforestation leading to desertification
- Poor marketing of dry land products
- Conflict over resource use
- Human-wildlife conflicts
- High average number of children per household due to lack of family planning
- High levels of illiteracy-more than 80 % illiterate
- Inadequate skills

ii. Opportunities mentioned by participants

There are many diversified tree types in this area as indicated in Table 1 below:

Table 3.1: Tree Products in Igembe South

Product	Tree species Scientific name	Local name (Meru)
Gum arabic	*Acacia senegal*	*Lingithuu*
Gum Tahla	*Acacia seyal*	*Leera*
Hagar	*Commiphora holtiziana*	*Itunguluu*
Frankincense	*Boswellia neglecta*	Lubani (Somali) –not available in the area

Other available natural resources

- Construction materials-Sand, stones
- *Khat (miraa)*
- Wild life
- Thatching materials
- Tannins and dyes
- Carvings
- Hides/ skins
- Wind
- Solar energy

3.2 Gums and resins producing species

The participants were guided through this lesson in a participatory manner. It was evident that the community members were not familiar with *Acacia senegal* var. kerensis, *Acacia seyal* that produces gum arabic and all gum resin producing species such as *Boswellia neglecta, Commiphora myhrra, Commiphora holtziana* that are available in abundance in the locality. *A. senegal, A. seyal* and *Commiphora holtziana* (Hagar) are the most abundant trees. The participants were warned of the dangers and risks of mixing the gums and resins from different trees.

3.3 Harvesting (Collection and Tapping), Storage, packaging and transportation

The participants were also taught the procedures for sustainable tapping and collection of gum and gum resins, primary value addition techniques and storage and the considerations while packaging and transporting the commodities. The key emerging issues from this discussion were:

- Participants have never tapped trees for gum production. Gums and resins that exude naturally are collected from trees
- There is need for tapping tools.
- Need to clean the gum at the site before packing the same into bags.
- Igembe South has a lot of potential for gum arabic and hagar.
- ENNDA should consider constructing a store for gums and resins in the area for assisting in bulking the commodity for ease of marketing.

3.4 Local and commercial uses of gums and resins

The participants were guided through the commercial uses of gums and resins. They were quite amazed at the diversified and important uses of these commodities and were able to appreciate and value the commodities. The following local uses were pointed out by the participants:

<u>Gum Arabic</u>

- Eaten by locals
- Used as medication for joint pain

<u>Hagar</u>

- Tick repellent
- Eye treatment
- Treatment of scabbies (applied on skin)
- Applied on camel with back pain

<u>Myrrh</u>

- Applied in broken areas
- Antibiotic
- Ink in Kuranic school (mixed with milk, water+ charcoal)
- Spiritual use (applied to the face on special occasions)
- Part of mixture (myrrh + water) given to a child at birth

<u>Frankincense (Lubadin)</u>

- Spiritual application (burnt as incense)
- Chewing gum

3.5 Role of NGARA and GARA and procedures for formation of Producer Associations

The participants were guided through the mandate and roles of the Network for Natural Gums and Resins in Africa (NGARA) and Gums and Resins Association of Kenya (GARA) and the procedures of formation and registration of a group, a CBO and an association and the requirements for joining GARA. The participants appreciated the role of NGARA, GARA and Producer Associations. The participants were urged to form a Gums and Resins Producer Association and have it registered in the Department of Culture and Social Services.

3.6 Marketing of Gums and Resins

The global demand and supply situation was highlighted. The current demand which stands at 100,000 MT and projected to reach 150,000 MT by 2020 far exceeds the current supply estimated at 70,000 MT. The global and local prices for gums and resins were also highlighted. Factors affecting local and international markets were also mention. Some key issues that emerged were:

- There is local demand for gums and resins but the supply is low. Abdi, one of the facilitators, who is also a gum trader and exporter, has about 20 tonnes of gum to supply every month and most of the time he does not meet the target due to low supply of the commodities.
- Meru North has a potential for gum production but this is yet to be estimated and exploited.
- The current prices of gums were quoted by the trader to be Kshs. 50 and Kshs 40 for Duka owners and collectors respectively.
- The current prices of Hagar (resin) were quoted by the trader to be Kshs. 80 and Kshs 100 for collectors and Duka owners respectively.
- The ability to do bulking and quality control were cited to be of major importance for success in marketing of gums and resins.

3.7 Field visit

Field visit was made to a nearby wood land with the main objective of identification of the key gums and resins producing species and demonstrating sustainable tapping methods. All the gum and gum resin producing species were shown to the participants and tapping of gum demonstrated **(Plate 1).**

Plate 3.1: Demonstration of tapping of gums and resins

Tools for tapping gums and resins

The tools for tapping of gums and resins were displayed to the community. Their use was demonstrated in the field visit. The community evaluated the possibility of fabricating the tools using the *Jua-kali t*echnology and found it possible.
The tools include: *Sonke* and *Mingaf* for gums and resins tapping respectively.

3.8 Action plan and Way forward

The trainees had an opportunity to develop their action plans. Though the assistant of a ToT Mr. Kobia, the community agreed to form a producer association called: Kalimbene Gums and Resins Producer Association. An interim committee of two (2) ladies and three (3) men was formed to steer the work of livelihood diversification through gums and resins. It was agreed that elections will be done after development of a constitution and register the group just like other community groups in the offices of culture and social services.

The members appointed an interim committee to steer the activities of the group to meet the requirements of registration before a full office is elected. The following were appointed:

1. Hellen Kinya
2. Hellen Kagwiria
3. Julius Mindru
4. Ezekiel Nkuja
5. David Maore

They were urged to run the affairs of the Association and hold elections once all the requirements are met for it to become operational.

4.0 CLOSING SESSION

The workshop was officially closed by the Regional Coordinator of ENNDA; Isiolo region. She had the following comments for the community:

- She thanked the participants for finding time to attend the training and mentioned that it was only Meru South that was not trained on alternative livelihoods through exploitation of gums and resins.
- Thanked KEFRI and GARA for coming to backstop the training program however under short notice.
- She believed that after the training, the participants would be able to appreciate the importance of gums and resins.
- She urged them not to sleep on the knowledge that they acquired but that they should spread the good news to the others.
- He also urged the participants to be conscious about conservation of the environment.
- He requested the partners to assist the groups to access gums and resins market
- He also requested that the group formed i.e. Kalimbene Gums and Resins Association to be strengthened and supported as they are still in their infancy stages.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The participants from Meru North were happy with the training programme and appreciated the knowledge passed on to them. They did not have any knowledge on the gums and resin producing species in their locality. However, the collectors have never tapped the trees for gum and resins production. There are also a number of opportunities that were highlighted in the area that needs to be exploited. It is recommended that:

- ENNDA to consider constructing a warehouse for bulking, storage and primary value addition of gums and resins at a location to be agreed later depending on the efforts made by the group in the production.
- Further capacity building activities should be organized for other groups in order to strengthen their capacity and increase production.
- One or two members of the group to be considered for an exchange visit to be done in Sudan and Ethiopia for gums and resins respectively.

6.0 ANNEXES

Annex 1: Participants on gum arabic and gum resins Community Training in Meru North 25th – 28th May 2011

No.	NAME	GROUP	ID NO.	TEL/ADDRESS
1	Joshua Kaumbugo	Marira Wind Mill	4438605	0726054465
2	Nathan Muruki	Mariara Wind Mill	11059912	0710219485
3	M'mwithia Jacob	Laikumumu SHG	2488135	0720615193
4	Julias M' Murithi	Laikumumu SHG	2499987	0725912600
5	Janet Mwothina	Laikumumu SHG	7750772	-
6	David Maore	Mariara Wind Mill	8699183	0723922302
7	Benson Kinyua	Mariara Wind Mill	10253394	0713199690
8	Nicolas Mweria	Mariara Wind Mill	2510398	0712158824
9	Hellen Kagwiria	Mariara Wind Mill	7750751	0700892732
10	Stephen Marangu	Mariara Wind Mill	8610432	0727108165
11	John Mwing'eria	Mariara Wind Mill	24814039	0700892732
12	Jacob M'withia	Mariara Wind Mill	2488135	0735581867
13	Stanley Gitonga	Mariara Wind Mill	10612189	0738258116
14	Hezekiah Mkumja	Laikumumu SHG	21362077	0723280667
15	Stephen Mbaabu	Laikumumu SHG	7452353	0726774720
16	David Gitonga	Mariara Wind Mill	4593171	0710444622
17	Susan Kamenkethe	Laikumumu SHG	2499021	0700892732
18	Hellen Kinya	Mariara Wind Mill	-	0717387889
19	Kawira Agnes	Laikumumu SHG	-	-
20	Nkirote Ann	Laikumumu	-	-
21	Jerusha Kayuki	Laikumumu SHG	-	-
22	Rael Gatitukarurur	Laikumumu SHG	-	-
23	Isiah Kubai	Mariara Wind Mill	10612023	0736325222
24	Muthee Bruno	Mariara Wind Mill	13174178	0710200266
25	Adrew Meme	Mariara Wind Mill	2391653	0723966768
26	Daniel Karati	Laikumumu SHG	23918845	-
27	Moses Marura	Mariara Wind Mill	96903012	-
28	Peter M'murira	Mariara Wind Mil	12619248	0723439591
29	Josheph Mwika	Mariara Wind Mill	-	0724673030
30	Janet Mwothoiba	Mariara Wind Mill	-	-

Annex 2: Programme for training at Meru North 25th – 28th May 2011.

Day	Time	Activity	Responsibility
Day 1	Evening	Arrival at Venue	**ENNDA**
Day 2	0800-0830 0830-0900 0900-0915 0915-0930 0930-0940 0940-1000	➢ Registration of Participants ➢ Introduction/Welcome Remarks ➢ Overview of the Programme ➢ Objectives, Scope and Outputs ➢ Official Opening ➢ Expectations/Norms/Roles	Abdi Kullu Batulla Ambia Muga Batulla Kobia (ToT)
	1000-1030	**Tea/Coffee Break**	**ENNDA**
	1030-1100	Challenges in the Drylands	Ambia
	1100-1130	Getting feed back on Relevant Policies	Mutunga
	1130-1300	Description, Local and Commercial uses of Acacia gum and resins; Challenges and Opportunities.	Muga
	1300-1400	**LUNCH BREAK**	**ENNDA**
	1400-1600	Main Acacia gum producing species and Potential Adulterants Species (Taxonomy/Ecology)	Abdi Somo/ Mutunga
	1600-1630	**Tea/Coffee Break**	
	1630-1730	Group work	Mutunga/Kobia
Day 3	0830-0900	Recap of previous day's Activities	Mutunga
	0900-1030	Marketing of gums and resins	Abdi Somo
	1030-1100	**Tea/Coffee Break**	**ENNDA**
	1100-1200	Description, Local and Commercial uses of Acacia gum and resins; Challenges and Opportunities	Muga
	1200-1300	Sorting/Grading, Storage and Packaging	Abdi Somo
	1300-1400	**Lunch Break**	**ENNDA**
	1400-1700	Establishment of Producer Associations, Networking and the Role of GARA/NGARA	Muga/Abdi Somo
Day 4	**0830-0840**	**Tea/ coffee**	**ENNDA**
	0840-1200	Field work; Demonstration Tapping, Collection and Transportation	Abdi Somo/Muga/ Mutunga
	1200-1300	**Lunch Break**	**ENNDA**
	1300-1330	Way forward and Action Planning	Kobia (ToT)
	1330-1345	Closing Remarks	Ambia/Muga
	1345-1355	Official Closing	Batulla
	1355-1400	Closing Prayer	Participant

Annex 3: Technical Reports

Topic 1: Challenges and Opportunities in the Drylands of Kenya

1.1 Introduction

- 80% of land area, 30% human pop, 70% livestock and 90% wildlife
- Climate – hot and dry; agro-climatic zones iv-vii (dry sub-humid to hyper arid)
- Rainfall (150 mm – 750 mm) – low, erratic and poorly distributed; potential evapo transpiration exceeds precipitation.
- Soils – poor/poorly developed, high sand content, poor surface structure due to erosion, often saline, low organic matter and microbiological activity

1.2 The People and Lifestyle

- Nomadic Pastoralists – dominant group, pastoralism mainstay of the economy; natural vegetation and water important resources (sometime source of conflict); zones vi and vii,
- Agro-pastoralists – pastoralists (in transition, farming communities and immigrants); zones iv and v. Agriculture – early maturing crops during rains or along rivers
- Commercial ranches – well endowed people, high capital outlay and advanced technology in resource management and use, derive benefits from wildlife (ecotourism and licensed hunting)

1.3 Challenges Facing the Drylands

- The major challenge – desertification
- *Challenges Related to the Physical Environment*
- Scarce and unreliable rainfall and poor/poorly developed soils – low productivity and fragile nature of the dryland ecosystem, if disturbed,
- Frequent droughts – major threat and pose challenge to survival in drylands
- Droughts – enhance food deficiencies, affect quality/quantity of water resources, result in poverty; accelerate land degradation; severe drought – loss of life

1.4 Factors responsible for the accelerated forms of desertification

- Population increase – 3% annually; internal and external; consequences;

- Displacement/migration of local communities resulting in over-exploitation of resources,
- Introduction of inappropriate practices – accelerated degradation, crop failures and hence famine/poverty,
- Land use conflicts – pastoralists/agriculturalists, human/wildlife
- Changing Lifestyle – sedentarization and emerging challenges associated with it.
- Land Tenure – communal, group and private

1.5 Opportunities in the Dry lands

- Dry lands are endowed with a rich biodiversity, which if developed can spur economic development.
- Major resources include:
- Plant gums and resins – gum Arabic, myrrh, incense, Hagar
- Medicinal plants – e.g. aloe
- Indigenous fruit trees
- Production of bee products (honey, bees wax, propolis)
- Consumptive and non-consumptive use of wildlife
- Dyes and tannins
- Other activities like wood carving and allied handicrafts

Topic 2: A Review of Commercial Gum and Gum-Resin Resources in Kenya: Taxonomy, Ecology and Distribution.

2.1 Introduction

- Gums and resins are dried exudation from stems of Acacia, Commiphora and Boswellia species.
- Form a major component of the vegetation in dry lands, Acacia-Commiphora woodland
- Products of commerce, with potential to generate wealth and alternative livelihood in dry lands
- But quality of Kenyan gums and resins rated poorly in world markets because of:
    - Mixing with related gums or resins, ignorance of what is required,
    - Harvesting immature gums or resins, obtained from the wild in communal land.

- Need to give guidance to collectors on species identification, ecological preference and distribution of commercial gums and gum resins - posters

2.2 Commercial Gums and Gum-resins resources

1. Gum arabic — *Acacia Senegal and Acacia seyal*
2. Myrrh — *Commiphora myrrha*
3. Hagar (opoponax) — *Commiphora holtziana*
4. Frankincense — *Boswellia neglecta*

2.3 Recognition of *Acacia senegal*

There are three varities, namely:

- var. *senegal*
- var. *kerensis*
- var. *leiorhachis*

Acacia senegal* var. *senegal

- Tree – distinct stem (straight pole)
- Stem - flaking bark
- Produces Gum Arabic

Ecology, Distribution and local names of var. senegal

- Found in semi-humid to semi-arid areas > 1200 m
- Nakuru, West Pokot, Kajiado, Kitui, Baringo
- Ekunoit (Turkana), Edad, Adad (Somali), Idado (Borana), Ol-derekesi (Maasai), Lolderikesi (Samburu), Chemangayan (Pokot), Bura-dima (Orma), Mirgi (Rendile), Mung'ole (Kamba).

Acacia senegal* var. *kerensis

- The major gum arabic producing species in Kenya
- Shrub - branching from base
- Stem – peeling bark
- Produces Gum Arabic

Ecology, Distribution and local names of var. *kerensis*

- Rocky limestone hills, sandy plains 400-1130 m a.s.l with 300-550 mm rainfall
- Turkana, Samburu, Isiolo, Marsabit, Wajir, Garissa, Mandera
- Ekunoit (Turkana), Edad, Adad (Somali), Idado (Borana), Ol-derekesi (Maasai), Lolderikesi (Samburu), Chemangayan (Pokot), Bura-dima (Orma), Mirgi (Rendile), Mung'ole (Kamba).

Species likely to be confused with *A. senegal*

- *A.condyloclada* (Mandera District, around Ramu)
- *A.hamulosa* (Garissa and Tana River Districts)
- *A.ogadensis* (Mandera District, around Ramu)
- *A.thomasii* (Kajiado, Taita, Kitui, Meru, Tsavo)

Possible adulterants of gum arabic

A. paolii

A. mellifera

2.4 Recognition of Acacia seyal

- Bark whitish, greenish yellow or orange red
- Flowers are bright yellow in heads
- Pods, sickle shaped, constricted between seeds, dehiscent

Ecology and distribution of *A. seyal*

- Seasonally flooded flats of black cotton soils
- Along water courses
- On stony ground at the base of hills
- Occur in all districts except coastal
- Most common between 550-2000 m a.s.l.

2.5 Species likely to be confused with *A. seyal*

- *A. zanzibarica* (Wajir, Isiolo, Tana River Distr.)
- *A. xanthophloea* (Nairobi, Naivasha, Kajiado, Nakuru, Narok)
- *A. hockii* (Kajiado, Narok, Nakuru, Transnzoia, Tsavo)

2.6 Gum Resins

- *Commiphora myrrha* - Myrrh
- *Commiphora holtziana* - Hagar
- *Boswellia neglecta* – Frankincense

2.7 Possible adulterants of commercial gum-resins

- *Commiphora africana*
- *Commiphora confusa*
- *Commiphora schimperi*
- *Commiphora pseudopaolii*
- *Commiphora kua* var. *gowlello*
- *Commiphora incisa*

2.8 Conclusions and Recommendations

- Gums and resins are Non Wood Forest Products
- Sustainably exploited for household income in drylands
- Conserve biological diversity, increase overall productivity of land
- Create new jobs and livelihood opportunities
- Quality affected by adulteration with inferior gums
- Train local communities on species identification

Topic 3: Description and uses of commercial gums and gum resins

3.1 Introduction

Gums and Resins have a great potential for economic development of the drylands. They can contribute to improved livelihoods of rural communities and national governments in terms of food security, income generation and foreign exchange earnings

- Gums – mainly polysaccharides
    - ✓ Gum arabic
    - ✓ Gum karaya
- Resins – Oleo gum resin (Essential Oil, Water Soluble Gum and alcohol soluble resin)
    - ✓ Frankincense,
    - ✓ Myrrh
    - ✓ Hagar

3.2 Gum arabic

Dried exudate from stems or branches of *Acacia senegal* or *A. seyal*
Gum arabic from;

- *A. senegal* – various colours and sizes, Good grade – whole, round tears; colour – pale to orange, matt surface texture
- *Acacia seyal* – more friable, rarely found in whole lumps

Gum arabic is a polysaccharide made up of carbohydrates, protein and some minerals

- Its high solubility and yet low viscosity in water confers on Acacia Gum the highly valued emulsifying, stabilizing, thickening and suspending properties that have enabled it remain a major item of international trade despite competition from other natural gums and semi synthetic substitutes.

- Local uses - eaten as food by children and herdsmen and as medicine to ease joint and back pains

3.3 Commercial uses

- **Food and confectionery**

- As emulsifying, stabilizing and clouding agent in soft drink industries (it is a key secret additive in coca cola drink),
- Stabilizing foam in beer and soft drinks
- Prevent crystallization of sugar in ice creams or glazing agent in cakes, candies and dairy products,
- are also used as a glaze and as a component in various chewing gums (thickener and contributes a softer chew), cough drops and lozenges
- Concentrated source of soluble dietary fibre – used in diet and meal replacer drinks because of their low viscosity, bland flavor and high fibre content

**Used in KEFRI's Jam and Juice Production*

- **Pharmaceutical**

  Suspending and emulsifying agent in pharmaceutical products (syrups, shampoos) and as coating/binding agent in tablets,

- **Adhesive industry**

  Office glue

- **Paint Industry**

  As emulsifying agent and to increase viscosity,

- **Printing**

  Prevent oxidation of plates

3.4 Consumption of processed gum arabic.

- Survey revealed that in Nairobi alone consumption of gum arabic (mostly re exported) is in the order of 700 MT.
- Biggest consumption is in the paint industry (560 MT), followed by food industry (86 MT) and ink industry (20 MT)

3.5 Frankincense

Frankincense (Olibanum) is an aromatic gum resin from trees of the genus Boswellia.

Incense from *B. neglecta* is of two types (black and white), in the form of small droplets that harden on exposure to air to form nodules or large lumps.

Local uses – chewed as gum, ground into powder and burnt as incense, local perfumes, medicine for a wide range of ailments.
Gift for baby Jesus (Matt 2:11)

Commercial uses – essential oil used in perfumery, cosmetic industries as well as flavour industries.

3.6 Myrrh

Myrrh is an aromatic bitter tasting orange colored resin obtained from *Commiphora myrrha*. The gum resin exudate, drips and harden to form lumps of varying shapes and sizes. Color variable from red, brown to dark brown; red and brown – best grades

Local uses – Ink used in quranic schools, burning to repel snakes, offensive insects, medicine.
Egyptians used it for embalming mummies.
In the bible: Gift to baby Jesus (Matt 2:11), myrrh mixed with wine used as painkiller for Jesus (Mark 15:23) Anoint Jesus dead body for burial (John 19:39)

Commercial uses – Expensive and highly prized ingredient used in perfumes, cosmetic, flavors and medicines (tonics, stomach remedies, mouth washes) It is found combined with other ingredients in dental powders, mouthwash preparations, and toothpaste. Myrrh is used as fragrance in cosmetics, perfumes, and soaps, and as flavoring in foods.
It is used today in Chinese medicine to treat wounds and relieve painful swelling and bleeding

Myrrh is burned as incense and used to repel mosquitoes.

3.7 Hagar

- Oily gum resin exudate – various sizes and shapes; more oily than myrrh for fresh lumps
- Color – yellow to dark brown; black lumps common

Local uses – acaricide against ticks, dyes other ailments – snake bites, foot rot, mange.
Commercial uses – herbal medicine in China, Essential oil – medicines and cosmetics

Topic 4: Harvesting and post harvest handling and transportation of gums and resins

1. Tapping, Collection and Storage

i. Gum production

Gum is produced following injury to the tree. Production can be by;

- Natural exudation – prolonged drought and a lot of heat from the sun causes cracking of the bark causing the gum to ooze.
- Induced exudation – is produced following injury by wild animals, domestic animals, man, insects and birds.

Wild animals include: baboons, giraffes, antelopes, zebra, elephants, dik dik. Domestic animals include: donkeys, shoats (sheep and goats) and camels. Bastard birds also injure the trees in search for food through debarking. Insects also bore holes for food and lay eggs causing injury in the trees. Larvae are the most active stage in burrowing through the wood causing injury and hence oozing of gum.

Man has remained the greatest agent by cutting down the trees for making bomas for his domestic animals as well as manyattas.

ii. Tapping:

Is the deliberate injury on the tree to induce production of gum. Tapping is carried out shortly after the rains when the trees begin to shade the leaves. Tapping is carried using different tools. However, proper tapping tool has been developed in Sudan and is called "Sonke". A Sonke a tool which has several sharp edges is used to pierce between the bark and the cambium. It is used to remove a strip of bark about 8 CM long and 3 CM wide. Tapping is restricted to one branch per season and if a tree has more branches then each is tapped.

The first collection of gum takes 3-4 weeks but subsequent collections are carried out after about every 10 days. This is done until the next rains or until it is too dry for the tree to continue producing when it becomes too stressed.

The amount of gum produced varies, however, from 20g to 2000g depending on the tree species, age, site and season. Annual yields of Gum Acacia from young *A. senegal* trees are reported to range from 188 to 2856 g/tree (avg. 900 g) and from older trees, 379 to 6754 g/tree (average 2000 g) (Duke , 1983). Yield per ha per year ranges between 30 to 40 kg in case of open stands and as much as 100 kg in case of dense stands (ITC, 1983). The average annual gum yields range from 0.5-1 Kg in Sudan, 0.1-0.5 Kg in Nigeria (SSGCL, 2006), though studies on this are yet to done in Southern Sudan. On average, a tree yields 250g per season (ITC, 2008, Boer, 2002), implying about 500 g annually for a tree producing gum in two seasons. The age of the tree and ambient temperatures have been reported to affect the yield. The highest gum yields have been reported for trees between 7 and 15 years old in Nigeria and 10 to 15 years old in Sudan (SSGCL, 2006). Yields from cultivated trees are said to increase up to the age of 15 years, when they level off and then begin to decline after 20 years (Boer, 2002).

Other equipments used during tapping include secateurs for pruning to allow easy access to the tree and facilitate easier tapping. Helmets and gloves can be used as protective clothing where necessary.

For gum resins, the principle is the same except that a "mingaf" has been developed in Ethiopia as a special too for tapping. Most tapping is done during may-october dry season when the weather is cool.

In the case of myrrh tapping is done by "Malmaley" a Somali word for those who work in harvesting. They establish camps in the bush at the beginning of each season. Each malmaley is allocated an area with about 200-300 trees.

A good tapper begins from the base of the tree trunk and removes a small area of bark measuring about 3cm wide and 10cm long. After seven days the cut is cleaned and a fresh one made adjacent to the first. After another seven days the two cuts are cleaned and a third one made. The first harvest from a cut is made after 21 days. Mingaf is needed to remove the small nodules of myrrh which are hard and stuck to the bark.

Hagar is collected from exudation mostly caused by burrowing insect larvae. Some hagar is from collection of natural exudation or animal damage with few cases originating from tapping. Olibanum from Kenya is mostly from wild harvest

collected by hand from the trunk and branches of trees, sometimes from the ground.

iii. Harvesting

Harvesting of gum arabic must be done at the right time. The gum is collected after the rainy season. This depends whether there was heavy rainfall followed by a dry season,

- The gum should be dry. Wet gum should not be harvested from the tree. Slimming gum should not be harvested as it is immature

- Gum arabic should be kept away from any liquid form due to contamination when it is wet
- Gum Arabic should be placed in a good and cleaned bags or clothes
    - -Plastic bags should not be used since it forms moisture hence contamination.
- Dark gum or 100%impurities should not be harvested
- Pale, amber big lumps should be collected

For gum resins, the best grade the resins are those which are not adulterated.

- Hard plastic containers or polythene bags are used to collect the resin
- Hagar/Myrrh should not be mixed
- Unlike gum arabic breakages do not matter even when transporting

iv. Drying and Storage

Gum arabic is the only product that needs to be dried as it is used in food and beverages for human consumption.

- Right from the villages level the quality should be controlled in that it should be dry.
- It should be stored in a dry, clean and cool place
- It should not be over packed in a store and the ground raised. (The ground should be raised)
- Resins need to be stored separately in a different store (not to be mixed)

v. Cleaning, Sorting and Packaging

a. ***Cleaning and Sorting***

- **Gum Arabic**
  - The gum arabic must be sorted through sieve – table. The upper sieve –table restrict to 2 grades 1st and 2nd
    -1st grade again sorted and cleaned for export
    -2nd grade sold locally to the printing industries etc
  - The middle sieve table is for pellets graded into 1st grade and 2nd grade. 1st is sold for export while 2nd grade is sold locally.
  - The dust is also sold locally

- **Gum Resins** - Most of the resin is sold without sorting in Kenya though in Ethiopia myrrh and olibanum are sorted and graded in the basis of particle size and colour.

b. Packaging

Packaging is done according to the importers opening of L/C

- powdered gum arabic is packed in 50 kgs net wt bags
- 1st grade lumps is packed in 25kgs net wt

All packed consignment are labelled e.g.

Rangeland Resources (k) ltd
Address:
Product:
Net wt:

Transportation

Different modes of transportation are used for gums and resins from collection points to the stores and export points. These included human porterage, donkeys, bicycles, tractors and trucks. Human porterage is commonly applied during collection whereby collectors carry their collections on their backs and head to bulking sites before transportation to the market using donkeys, bicycles, tractors or trucks. Tractors and trucks are mainly used by traders or brokers and this no easily accessible to collectors because of the cost of hiring and that there are very few available tractors or trucks. Transportation of gums and resins should be such that they are not mixed with other goods that could adulterate the same.

Topic 5: Marketing of Gum arabic and Gum Resins in Kenya

5.1 General overview of gum and resins marketing situation

- Profit margins for local traders and producers are quite low making them to rely on selling groceries, and hides and skins to break-even. This explains why investment by such local dealers in marketing infrastructure is low.
- Both cultural and conventional markets exist for products.

5.2 Factors affecting market supply

- Season (July to October; January, February, June)
- Prices
- Distance to markets-(Transport is Ksh. 400/ton to Nairobi or Mombasa).
- Quantities collected
- Densities of resources
- Existence of alternative sources of livelihood and income levels.

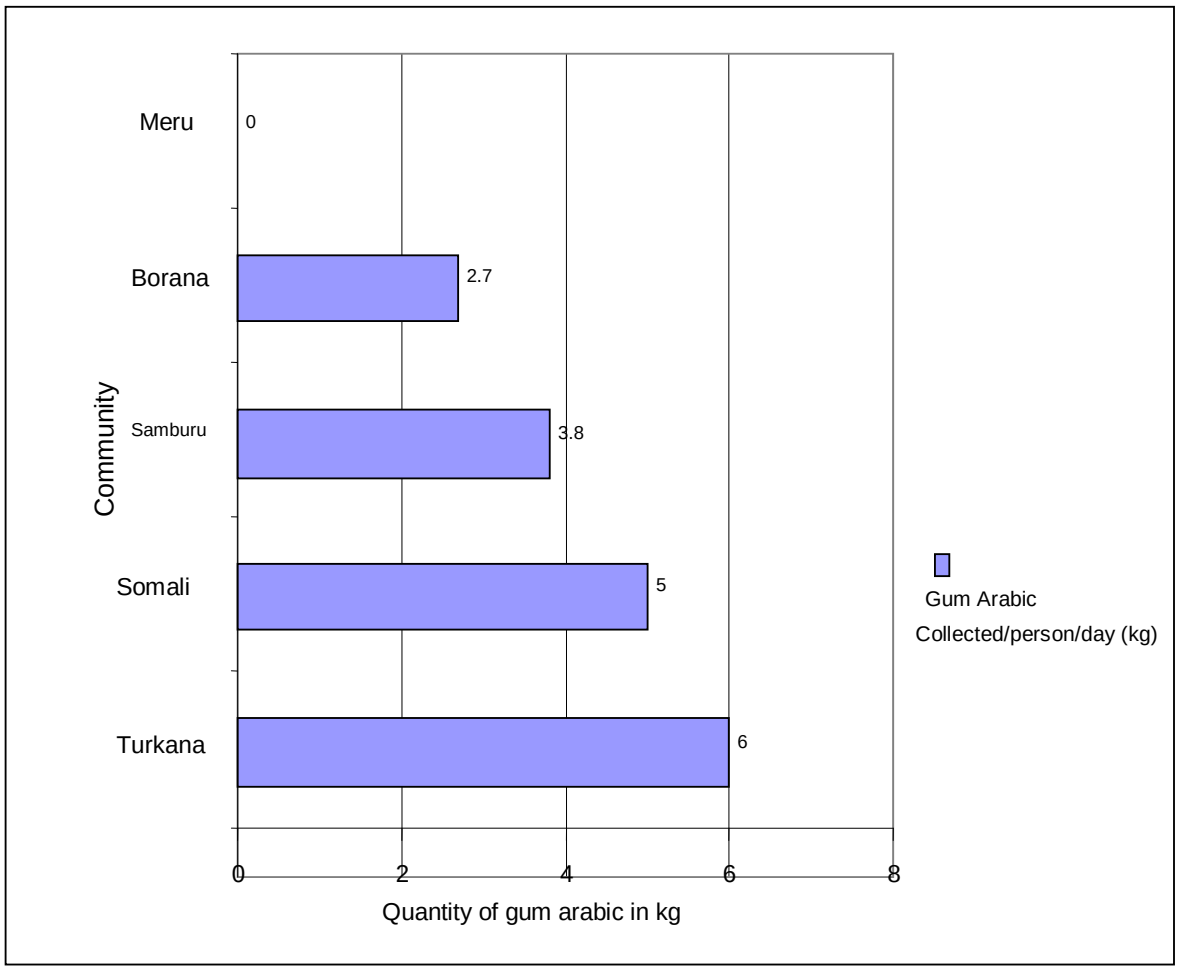

Figure 5.1: Rate of Gum Arabic collection by different communities in Isiolo District/person/day

5.3 Prices

- Prices for products variable in different outlets elucidating some form of market distortion.

Table 5.1 Prices of gums and resins by local and national dealers

Product	Sale Price (Kshs) by collectors to Local dealers/kg	Sale (Kshs) by local dealers to national dealers/kg
Gum arabic	30-40	35-50
Hagar	50-75	60-105
Myrrh	132-145	175-215
Frankinsense	20-50	35-75

5.4 Players in marketing chain of gums and resins in Kenya

- Collectors
- Local traders
- National dealers (distributors)
- Exporters (mostly of Asian or Somalis)
- Service providers e.g. KEFRI, KFS, KEPHIS

5.5 Community involvement in gums and resins

- Most of the buying agents are men (83.3%).
- Most of the agents (83.3%) are married men and women.
- The average age of the agents (traders) is about 38 years.
- 33.3% of the buying agents acknowledge the potential of gums and resins in the support of community livelihood.
- About 35% of the local community representing about 40 collectors in each site involved in the trade in gums and resins collection on full time basis.
- Each collector delivers an average of 5.4 kg of gums and/ resins to the buying agent.
- Each collector makes an average of six deliveries per month but this would increase depending on the demand.
- An average of two household members find employment in the marketing of gums and resins.
- About six people find employment at the market or retails level while three people find employment at the wholesale level in each market centre.

5.6 Major constraints

(i) Ongoing land degradation in ASALs
(ii) Lack of adequate data on the resources and commodities
(iii) Lack of sound production practices
(iv) Lack of effective quality control and certification
(v) Inadequate information on market characteristics and pricing
(vi) Poorly developed markets and marketing systems
(vii) Poor government involvement in the Sub-sector
(viii) Weak community institutions
(ix) Inadequate access to training opportunities for producers and traders
(x) Lack of operation capital
(xi) Lack of access to credit schemes
(xii) Harsh and difficult terrain
(xiii) The supply chain is currently under-developed
(xiv) Remoteness and poor marketing infrastructure /facilities
(xv) Insecurity.
(xvi) Poor perceptions of some communities on gums and resins.
(xvii) Recurrent droughts
(xviii) Poor record keeping by the agents (about 72.7% never keep the records)

5.7 Opportunities

- Casual labour and business for locals
- Jobs in end user industries.
- Gums and resins are viable livelihood options for resource poor farmers.
- Resources mostly located within territories for Somali and Oromo Groups who have a strong attachment to gums and resins enhancing both cultural and conventional markets.
- Research and development
- Sensitization of key players by GARA
- Various International conventions on environment, especially the Convention on Biological Diversity (CBD) and Convention on Combating Desertification (CCD), indirectly support development activities in the gums and resins sub-sector.
- Capacity building opportunities.

5.8 Conclusions and recommendations

- Gum arabic holds a lot of potential towards the support of livelihood among the local communities.
- The trade is constrained by a number of social, political and economic factors.
- There is need for concerted effort towards strengthening the producer associations, construction of storage facilities in strategic locations, capacity building, and provision information on prices and markets.
- There is room for increased collection and marketing of gums and gum resins through intervention of the identified constraints and diversification of the sub-sector.

5.9. International Trade in Gums and Resins
5.9.1 Introduction

- On the international market, gum arabic is subject to various trends and fluctuations.
- This is the result of several factors: a growing demand, a varying ability for African countries to stabilize supply, variability of quality and price and, finally, the threat posed by the emergence of substitute products in importing countries a factor that may negatively affect the demand for gum arabic.
- The international market remains currently polarized with the European Union and the United States of America on the one hand and the principal producing and exporting countries located in Africa, namely Sudan, Chad and Nigeria.
- The current world demand is about 100,000 MT against a current supply of about 70,000 MT, with a mean supply over 15 years)
- The demand is projected to reach 150,000 MT by 2020.
- Europe dominates, the global market of gum Arabic, marketing 83 % of the total amount (in tons) and representing close to 89 % of the business affairs between 2003 and 2007 (ITC, 2008).
- 80 % of gum arabic is consumed by 13 countries:
- USA, India, France, United Kingdom, Germany, Italy, Japan, China, Switzerland, Mexico, Sweden, Ireland and Brazil)
- France, United Kingdom and Germany are responsible for 70 % of re-exports

European commission consumed more than one third of available gum, between 2003 and 2007

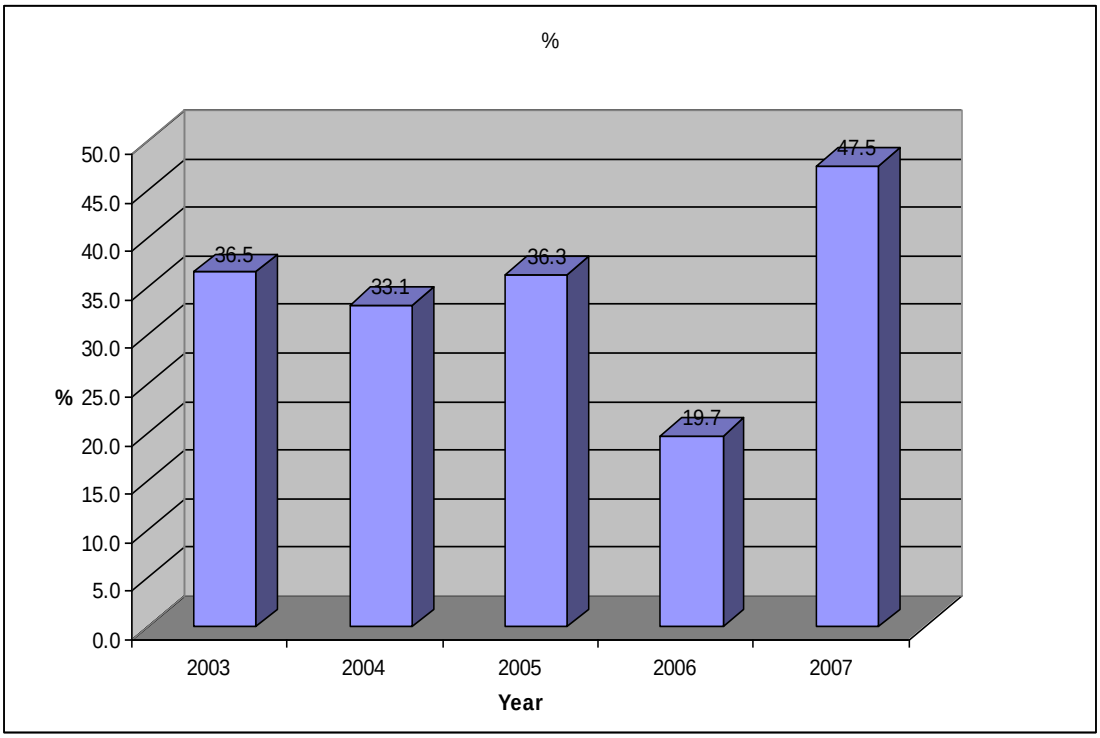

Figure 5.2: Consumption of gum arabic by European commission (2003 -2007) [Source: MSN/ITC]

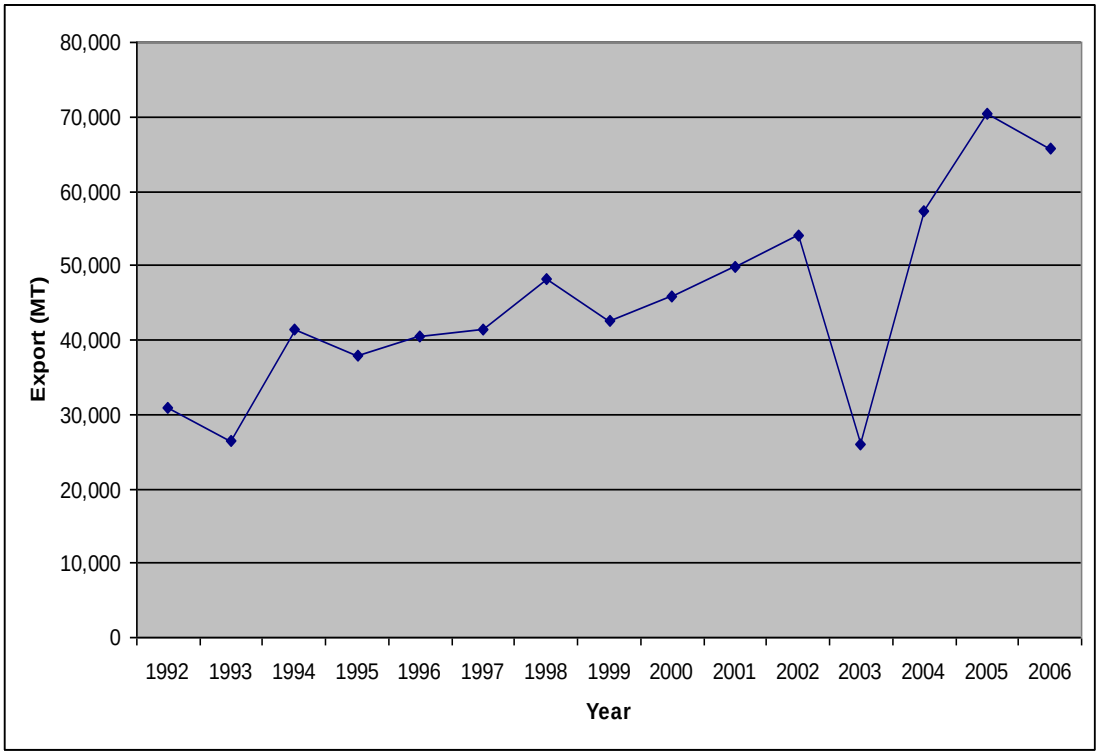

Figure 5-3: Export of raw gum arabic from Africa (1992-2006) [Source: MSN/ITC]

5.9.2 Main producers of gum arabic

- The main gum producing and exporting countries being Sudan, Chad and Nigeria, accounting for 96 % of total exports in 2007
- In the last 15 years, Sudan had the highest export of 34,162 MT in 2002, (about 63 % of the world exports).

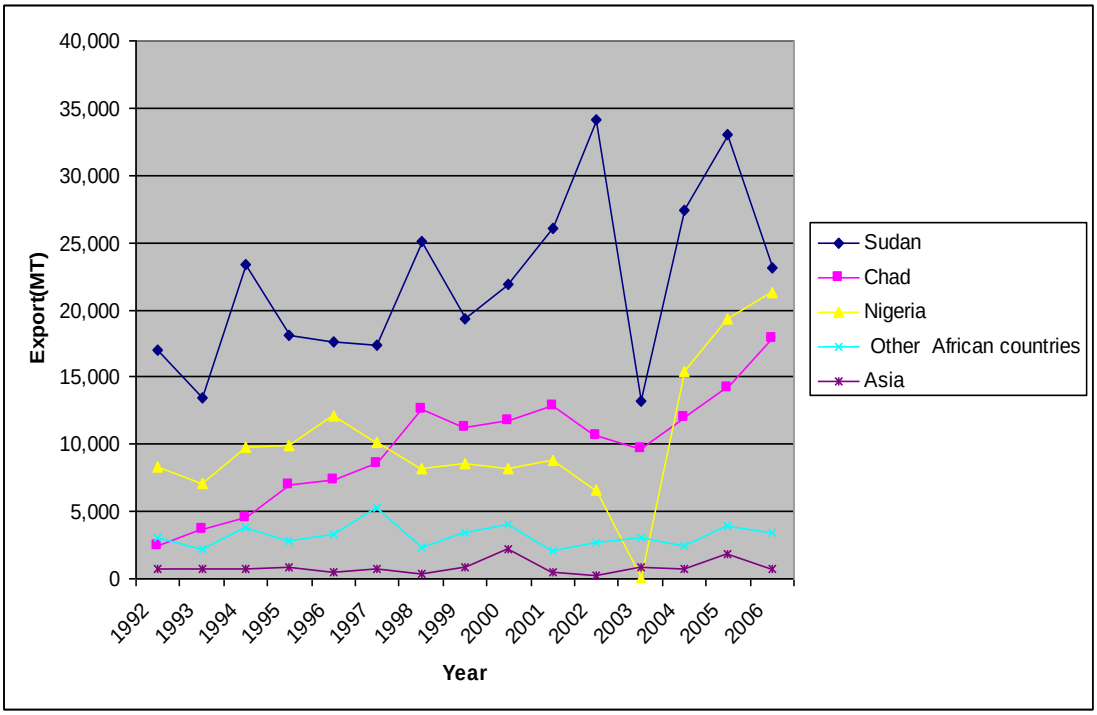

Figure 5-4: Export of Gum Arabic by country (1992-2006) [Source: MSN/ITC]

5.9.3 International Prices Of Gum Arabic

- The export value in 2008/9 for hand picked selected grade was about US $ 3400
- Grade 1- US $ 2500
- Grade 2- US $ 1300 (Pers. Com Prof. Abdel Nour-former Managing Director, GAC).

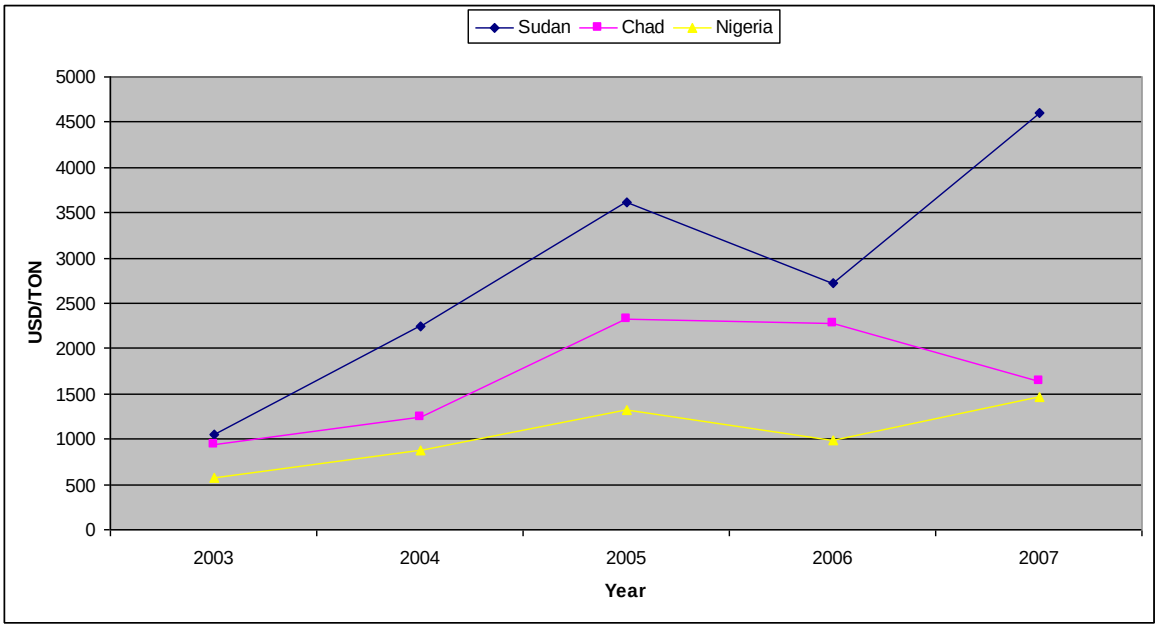

Figure 5.5: Changes in export rates in major African countries, all grades combined 2003-2007 (Source: MSN/ITC)

5.9.4 Prices

- The figure illustrates that the prices of gum arabic are subject to trade policies and strategies established by importing countries.
- This therefore causes differences between the well established rates and those used by countries when dealing with trade partners.

5.9.5 Marketing of Gum Resins

- Total world demand is estimated at around 2500 tonnes/year
- China and Europe are the largest markets but the Middle East, North Africa and (to a lesser degree) the US also imports significant amounts directly from source

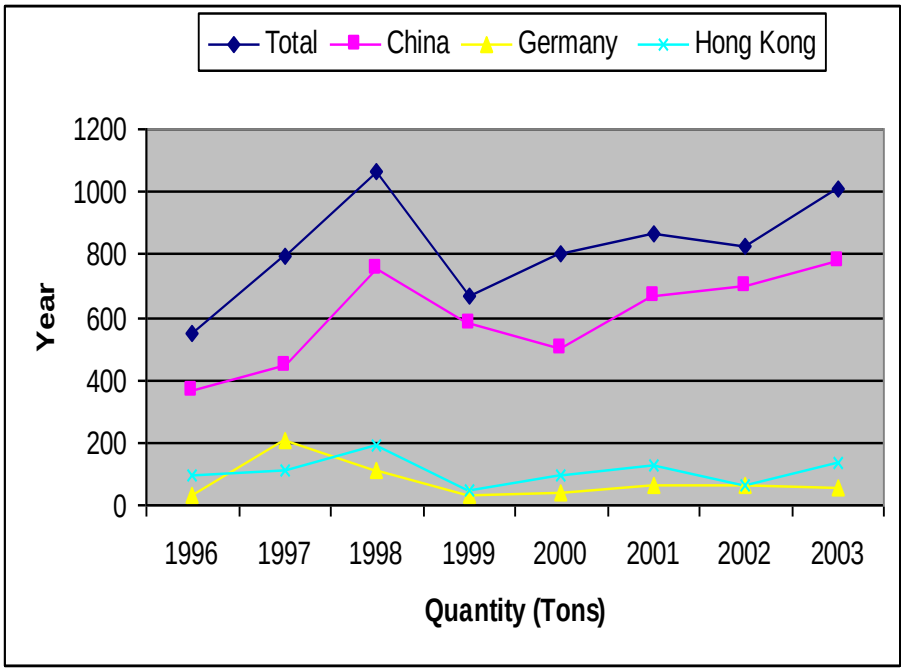

Figure 5.6: Export of Gum resins from Kenya [Source: MSN/ITC]

5.9.6 Marketing of Gum Resins

- Within Europe Germany is the biggest importer (and re-exporter) of the resins. For these particular types of resins prices appear to be stable.
- Myrrh, the highest priced resin, reaches US$3.50-4.00/kg but present prices are significantly lower than they were a decade ago.
- Although demand for opoponax appears to have declined considerably, overall demand is fairly stable.

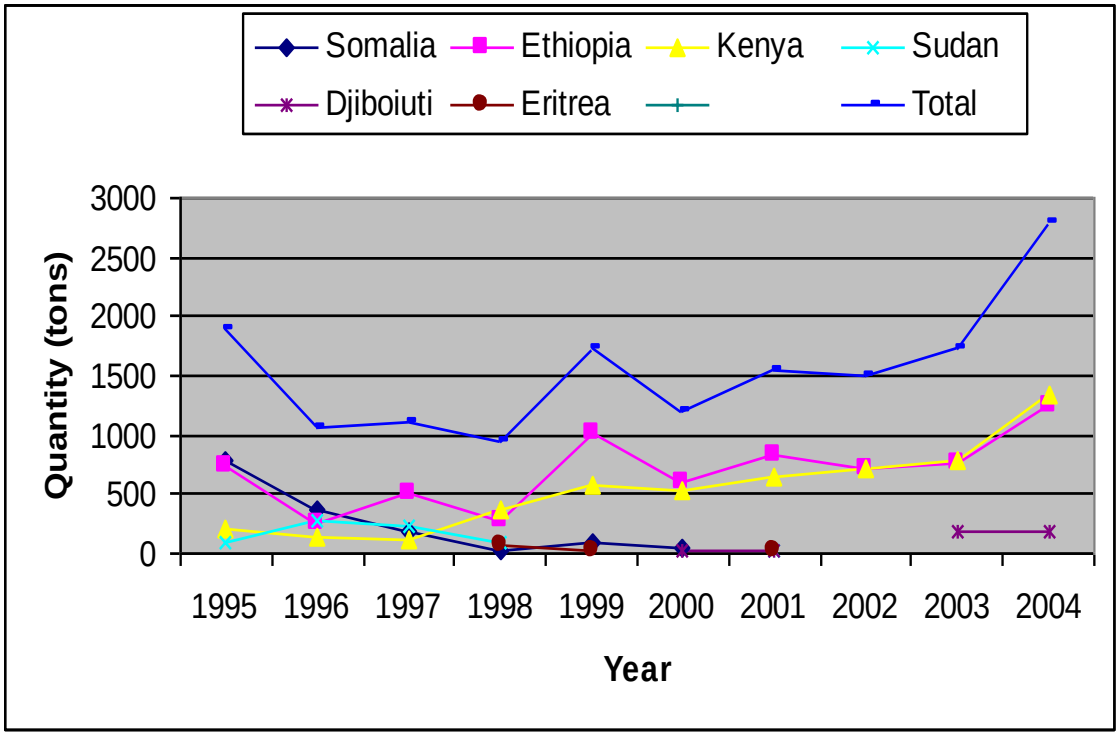

Figure 5.7: Imports of gum resins to China 1996-2004 (Source: MSN/ITC)

Topic 6: Overview on NGARA, GARA and establishment of Producer associations

6.1. The Network for Natural Gums and Resins in Africa (NGARA)

- A Regional Network initiated in 2000 and working closely with African producing countries and partners in formulating a coordinated strategy for the sustainable development of their gums and resins resources in order to improve livelihood and environmental protection.
- NGARA has a membership of 15 countries namely; Burkina Faso, Cameroon, Chad, Ethiopia, Eritrea, Kenya, Mauritania, Mali, Niger, Nigeria, Senegal, Sudan, Somalia, Tanzania and Uganda

6.1.2 NGARA Mission and Objectives

Mission

To position African producer countries and partners as major global players in the production, processing and marketing of gums and resins

Objectives

- To promote exchange of information on production, processing, quality control and marketing to enhance the participation of member countries in international trade
- To facilitate access to technological development and training in all areas of gum/resin business.
- To support relevant research in key areas of the sector.

To promote strong links among primary producers, processors and end users.

6.1.3 Gums and Resins Association of Kenya (GARA)

- GARA is an umbrella corporate body registered under the Societies act in 1997.
- The main objective of GARA is act as a voice for the stakeholders in the gums and resins sub-sector with a common interest to improve the production, quality and marketing of gums and gum resins for the domestic and export markets.
- At national level current membership drawn from 8 organizations comprising 2 NGOs, 1 processor, 3 national merchants and 2 government organizations
- Recently finalized developing a strategic and operational plan and is actively involved in the establishment of producer associations in the country

6.1.4 Establishment of Producer Associations (PA)

- Grass root based organizations established to empower local communities to participate effectively in the production and marketing of gum arabic and gum resins.
- Comprises collectors and/or tappers but can include duka owners
- PAs permit;
  - Training of members in aspects of sound production and post harvest handling,
  - Development of credit facilities for members,
  - Streamlining the supply chain and thus fair trade and sharing of benefits
  - Development of infrastructure and other facilities identified by the group.

6.1.5 Procedures for the Formation and Operation of Producer Associations

(a) Registering a CBO with the Ministry of Gender, Sports, Culture and Social Services

Get a registration form form the Community Development Assistance (CDA) office at the Divisional headquarters. Fill the form and return it to the same office. The CDA will forward the form to the District Development Office (DDO).

To qualify for registration one will need:

- The name, address and locality of the group
- A list of members of the group (at least 25 members)
- The names of the Chairman, Secretary and Treasurer
- The names of ten committee members (the decision –making members)
- The proposed activities of the group
- The proposed days in the week when the group will meet
- The major goals and objectives of the group and future plans
- Sources of money expected to carry out goals and objectives
- A constitution or rules for the group
- The registration fee

(b) Registering an Association with the Registrar of Societies

The Forest Act, 2005 has a provision for working with local communities. Under Part IV Section 46 the Act states:

(1) A member of the forest community may, together with other members resident in the same area, register a community forest association under the societies Act

(b) Are registered an association or another organization engaged in forest conservation or

(c) Live within five kilometers from the edge of the forest

A Forest Community Association is usually larger than the community-based organization. Several CBOs and Forest Users' groups can join together to form a Forest Community Association. It is suggested that an association should include people from at least 50 households living near the forest.

Application for Registration of Societies or Associations

- Get the Societies Rules (Rule 2) forms A and B. These are Application for Registration or Exemption from registration of a society. (An Association is like a society)

- Get forms A and B from the registrar of societies in the Attorney Generals office .The registrar's offices in Nairobi and Mombasa only. There are no offices at district level.
- Ask the registrars for a sample of a constitution to guide you in drafting your groups constitution
- Fill out the application and return to the officer of Registrar of Societies.
- The application must be submitted in duplicate and must be type written.
- The form must be signed by three office bearers (usually Chairman, Secretary, Treasurer)
- The application must be accompanied by two copies of the constitution or rules of the association
- Also include two copies of a notification of the Association's registered office and postal address on form B
- Also include two copies of a notification
- The application must be accompanied by a filing fee (Kshs2000 at the time of writing)
- The money is paid to the Registrar of Societies
- The law requires that the association should have a minimum of ten members. In the case of a Forest Community Association, we recommend members from at least 50 forest-adjacent households.
- The following are some of the matters that must be included in the constitution or rules of the association. They are listed in detail at the back of form A. The sample constitution will help you to fill out these items.

1. The name of the Association or Society and the logo or stamp if any.
2. The number of members and the number of people on the decision-making executive committee.
3. The objectives and planned activities of the Association, including fundraising.
4. Who can become a member (is it open to all or just people living near the forest?
5. Entrance and subscription fees (if any) for membership; and rules for suspending members if needed.
6. The titles of officers, trustees and auditors, how they are elected, for how long, and how they may be dismissed if necessary.
7. The composition of committees (if any) of the Society, the terms of office of members of such committees and the method of their election, appointment, dismissal and suspension.

8. Provisions for periodic reporting to members, annual general meetings and other public meetings.
9. Rules for financial management, including how money will be raised, managed, spent and audited.
10. Other regulations for the smooth running of the Association.
11. Provisions for community action for the management, utilization and conservation of the forest. Who else is interested in using, managing or conserving the forest? Is there a local Planning Committee and other relevant stakeholders.

    Once you send your application to the registrar, it may take several months to get a reply so follow up by office bearers is necessary.