



This project is funded by the European Union



Issue 22 | January 2022

## Sandalwood trafficking in Kenya

#### Deforestation and the exploitation of local communities

Willis Okumu

#### Summary

Sandalwood trafficking in Kenya is a multi-million dollar trade that exploits local communities and leads to deforestation. The illegal trade in sandalwood has been sustained by a network of actors, from the community level to international markets. This has resulted in the devastation of community forests and has placed the sandalwood tree at risk of extinction. Meanwhile, middle- and upper-tier actors in this criminal network continue to enrich themselves. While the mandate to protect sandalwood in the wild belongs to the Kenya Forest Services, weaknesses in the Forest Conservation and Management Act No. 34 of 2016 has enabled the prosecution of sandalwood trafficking cases though the Wildlife Conservation and Management Act of 2013. The confusion that has emanated from lack of clarity on enforcement jurisdiction has emboldened sandalwood traffickers when presented in court. Further, lack of harmony in East African conservation laws has further facilitated the protection of Kenyan sandalwood smuggled into Uganda and Tanzania.

#### Key findings

- Sandalwood trafficking is an environmental crime that leads to a loss of biodiversity, which has a negative impact on the ability of communities to produce enough food to ensure their livelihoods.
- Women seem to control the sandalwood trafficking network in Samburu County, first as harvesters at the community level and then as the traders coordinating linkages between local communities, police officers and other members of state agencies.
- Sandalwood trafficking in Kenya seems to rely on state officials who protect this organised crime network.
- A multi-agency approach to tackling sandalwood trafficking has had some success since 2020 and should be continued.
- Through the support of state and community agencies, sandalwood trees can be propagated in order to enable their sustainable harvesting and the commercialisation of the trade in northern Kenya.

### Introduction

The East African sandalwood tree<sup>1</sup> (*Osyris lanceolata*) is an evergreen shrub species in the *Santalaceae* family.<sup>2</sup> Like other sandalwood varieties – found in Australia, India and the Pacific – it is the source of a valuable essential oil<sup>3</sup> used mainly in perfume.

In Kenya, the sandalwood tree grows up to 6 m<sup>4</sup> in height. It is a slow-growing tree,<sup>5</sup> with maturation taking place at 15-45 years, and is found in arid and semi-arid<sup>6</sup> parts of Kenya such as Laikipia, Samburu and Baringo counties.<sup>7</sup> Sandalwood has both female and male trees, with male plants often found in more visible areas. Female specimens are more parasitic and tend to be located among other trees.

The tree is known as *losesiai* among the Samburu of northern Kenya, as *ndonga* among the Akamba people of eastern Kenya, and as *muthithi* among the Agikuyu people of central Kenya. In Kiswahili it is called *msandili* or *mti wa marashi*.

In Samburu County, sandalwood trees are found mostly in Samburu East and Samburu North sub-counties. These are the areas of Marti, Wamba, Londung'okwe and Oromode. The sandalwood harvesting done in these villages is driven by the demand in international markets, such as India and China.

India is one of the primary markets for sandalwood,<sup>8</sup> where it is used<sup>9</sup> in religious and cultural ceremonies. The heartwood of the sandalwood tree is burnt<sup>10</sup> at weddings and funerals for its scent, while its oil is used in Hindu and Buddhist ceremonies.<sup>11</sup> The following section delves into the history of sandalwood trafficking in Kenya, with a focus on the key actors involved in the illegal trade and the societal harm experienced by community members.

## History of sandalwood trafficking in Kenya

In East Africa, records show that the sandalwood tree has been exploited for the extraction of essential oil since at least 2002.<sup>12</sup> It was listed as an endangered species by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 2004.<sup>13</sup> In 2005 the Kenya Wildlife Service (KWS) began taking action against its harvesting. This harvesting was mainly being done by people living in communities that

#### Figure 1: Kenya Gazette notice on presidential ban on sandalwood tree harvesting, 2007

GAZETTE N	NOTICE NO. 3176
	THE FORESTS ACT
	(No. 7 of 2005)
	PROTECTION OF TREE SPECIES
Forests Ac	ERCISE of the powers conferred by section 34 of the ct, 1, Mwai Kibaki, President and Commander-in-Chief of Forces of the Republic of Kenya declare—
OSYRIS I	LANCEOLATA (EAST AFRICAN SANDALWOOD-MSANDALI)
as protecte 14th Febru	d tree species for a period of five (5) years, with effect from ary, 2007.

Dated the 4th April, 2007.

MWAI KIBAKI, President.

Source: Government of Kenya, Gazette Notice 3176, Nairobi: Kenya Government Printer, 2007

border areas under its jurisdiction, e.g. Tsavo National Park. The Environmental Liaison Center International noted its over-exploitation in Kenya:<sup>14</sup>

From April-December 2005, KWS made 179 arrests and recovered about 180 000 kgs of sandalwood with a market value of approximately Ksh. 14.5 million – of which only about Ksh. 0.9 million goes to the harvesters.

In 2006<sup>15</sup> more reports of over-exploitation prompted a proposal at the 2013 CITES Conference of Parties in Bangkok to consider placing the East African sandalwood on its Appendix II List of Species.<sup>16</sup>

Sandalwood oil harvesting entails uprooting<sup>17</sup> the entire tree, making agro-forestry and sustainable propagation extremely challenging. In 2007, the government of Kenya issued a five-year presidential ban<sup>18</sup> on its harvesting. This was precipitated by the KWS' arrests of sandalwood traffickers in Kenyan national parks and game reserves.

Despite the ban, over-exploitation of the sandalwood tree has continued, with many cases making headlines<sup>19</sup> in the past two decades. This has led to local and international legal and regulatory sanctions in an effort to protect the tree. The Kenyan Wildlife Conservation Management Act of 2013 lists the East African sandalwood as an 'endangered species'.<sup>20</sup> Article 92 of the act states:

Any person who commits an offence in respect of an endangered or threatened species or in respect of any trophy of that endangered or threatened species shall be liable upon conviction to a fine of not less than twenty million shillings or imprisonment for life or to both such fine and imprisonment.

As mentioned above, East African sandalwood was listed on CITES' Appendix II on 6 December 2013.<sup>21</sup> Appendix II lists species that are not currently threatened with extinction but may become extinct due to over-exploitation.

In the case of sandalwood, traders at the local, national and international levels are responsible for its exploitative harvesting, as are those who benefit from the trade. As described in the next section, in Kenya the findings indicate that these beneficiaries include local government officials who are mandated to protect the tree but are instead benefitting from its trade in the international market.

#### The sandalwood market in Kenya

The market value of sandalwood is determined by its functions in various societies across the world. Sandalwood is the source of an essential oil drawn from its heartwood, used in perfume, skincare and pharmaceutical products<sup>22</sup> in Europe and North America. Sandalwood timber is also used for wood carvings and furniture in China and Japan.

These uses have sustained the global market value of sandalwood oil, which was US\$1 750-US\$2 100 per kg (KES 175 000-KES 210 000) in 2019.<sup>23</sup> Given the expected rise in sandalwood demand in India and China, studies predict that by 2040<sup>24</sup> sandalwood trees will be extinct in the wild due to overharvesting.

The sandalwood trade in Kenya is most likely a multimillion dollar business. A KFS officer<sup>25</sup> in Samburu County said that, at the village level, 1 kg of un-chopped sandalwood fetched US\$1 (KES 100), and 1 kg of chopped sandalwood timber US\$1.5 (KES 150).

### Studies predict that by 2040 sandalwood trees will be extinct in the wild due to overharvesting

The Kenya Forestry Research Institute (KEFRI)<sup>26</sup> confirmed that 1 kg of sandalwood produces 20 millilitres of sandalwood oil. One millilitre of sandalwood oil sells for US\$2 (KES 200) in Kenya. Thus, 1 kg of Kenyan sandalwood produces 20 millilitres of sandalwood oil, which fetches US\$40 (KES 4 000) on the international market. A kilogramme of sandalwood is therefore worth US\$40.

In the most recent case<sup>27</sup> of sandalwood trafficking, at Emali in Makueni County in Kenya, suspects were arrested with 5 500 kg of sandalwood. Assuming that this had been sold at US\$1.5 per kg, the community received US\$8 250 (KES 825 000). On the international market, 5 500 kg of sandalwood would sell at US\$40 per kg, fetching US\$220 000 (KES 22 million). This shows the level of exploitation of the local community. The size of the sandalwood market in Kenya can also be seen from the cost of smuggling sandalwood across the Kenya-Uganda border.

A smuggler<sup>28</sup> in Busia town said that tonnes of sandalwood, packed in in carton boxes, are ferried via public buses from Nakuru to Busia at least three times a week. At Busia border the smuggler uses bicycles to transport 100 kg gunny bags of sandalwood into Uganda at a cost of KES 3 500 per bag. To facilitate the passage of the sandalwood into Uganda, the smuggler bribes local border police at KES 100 per bag.

The linkages between the Kenyan and global sandalwood market can be observed at the Port of Mombasa, which contains scores of confiscated containers holding sandalwood. The volume of the sandalwood trade in Kenya can also be seen in the sizes of these containers and the frequency with which security agencies confiscate them at the port.

All the suspects linked to the containers were charged with the offence of 'export of confiscated species' in contravention of sections 99 (1) and (2) of the Wildlife Conservation and Management Act of 2013. At Kilindini Police Station, the Occurrence Book indicates the confiscation of 11 containers between 2015 and 2018. On average, these containers contain approximately 237 tonnes of sandalwood, with a current market value of US\$9.48 million (KES 948 million).

## The 'protection economy' and sandalwood trafficking in northern Kenya

In 'protection economies',<sup>29</sup> illicit actors use corruption to influence state authorities to facilitate the operation of certain illicit markets.<sup>30</sup> A protection economy works when those with legitimate authority, such as government officials, are embedded in organised crime syndicates to facilitate the movement of illicit goods across a specific geographical area.<sup>31</sup> The operation of the protection economy in facilitating illicit markets can be described as follows:<sup>32</sup>

In every transaction in which one party does not trust the other, and in which the state is not available to enforce broken contracts – either because it does not exist, is not strong enough, or because the transaction is illegal – protection becomes a commodity in its own right. The existence of protection economies indicates that the resources available for fighting specific types of organised crime may be inadequate compared to the resources at the disposal of the organised crime networks. Protection economies thrive when public servants such as police officers seek to benefit from organised crime by extracting payment for providing safe passage to actors in illicit markets.

Protection economies thrive when public servants extract payment for providing safe passage to actors in illicit markets

In northern Kenya, the arrests of state officials<sup>33</sup> in possession of sandalwood indicate the existence of such a protection economy. The role of state authorities in protecting and facilitating sandalwood trafficking was echoed in a focus group discussion (FGD) with a police officer in Malaba:

As traffic officers we are on the Bungoma-Malaba Highway each day. So, one day, the boss called us at about noon. He ordered [us to] remove the roadblock immediately and go back to the station for immediate re-deployment to other urgent assignments. After one hour, he asked us to go back to the highway. Later we realised that he was clearing the highway for sandalwood to pass. He thought we would arrest the lorry [driver]. (Malaba town, 7 May 2021)

While the findings indicate a widespread pattern where sandalwood trafficking in Kenya is facilitated by state-embedded actors. Conversely, the research also finds that the establishment of multi-agency teams to combat transnational organised crime, including sandalwood trafficking, has resulted in the arrest and prosecution of several suspects since 2019.

The apparent involvement of officers from the National Police Service, KWS and Kenya Forest Service (KFS), rangers (county government staff) and chiefs in the illicit sandalwood trade exemplifies a protection economy. This involvement facilitates the identification of harvest areas (community forests), harvesting and loading at the community level, and safe passage for harvested sandalwood from villages to the Kenya-Uganda border.

#### Study sites and methodology

The study was conducted in Samburu, Busia and Mombasa counties between 26 April and 14 May 2021. Samburu County is in north-western Kenya. It was chosen as a study site because a number of sandalwood traffickers had recently been arrested there.<sup>34</sup> Here, the semi-structured interviews were conducted with a retired forester, two chiefs (who are considered part of the state governance system), two sandalwood brokers and a youth involved in sandalwood harvesting at the community level.

Two FGDs with a total of 21 participants were also conducted. Participants in the first FGD included community representatives, chiefs, women, sandalwood traders and youth. The second included retired KFS officers, chiefs and sandalwood brokers.

The second site of data collection took place along the Kenya-Uganda border. Busia County was chosen because it is a key inter-state transit point for sandalwood trafficked from Samburu and other parts of Kenya to Uganda.

Sandalwood used to be transported from Samburu to Tororo in Uganda for semi-processing at a Skybeam Africa factory.<sup>35</sup> This factory has since been closed<sup>36</sup>. However, sandalwood from Kenya is still being transported to Uganda and then exported back to Kenya as a Ugandan product.

In Busia, semi-structured interviews were conducted with five more respondents – two clearing agents, a sandalwood smuggler, a KFS officer and a police officer. Two FGDs were also held. The first, in Busia town, included KFS officials, clearing agents, local police, smugglers and local community leaders. The second FGD, in Malaba town, drew respondents from the Kenya Revenue Authority (KRA), police, sandalwood smugglers and sandalwood traffickers.

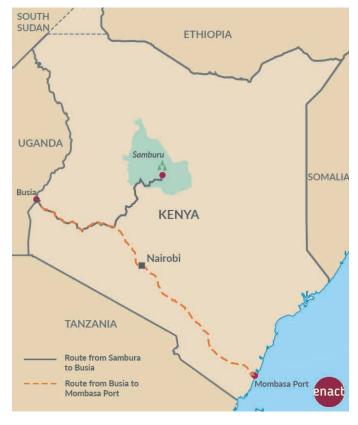
The respondents were selected based on their interest or involvement in the sandalwood trade in the region. The KFS officers and some of the chiefs came at the issue from a conservation angle, as did some of the older community members. The sandalwood traders and brokers were encouraged to attend as they had information that could enable the sustainable harvesting of the tree.

The final site of data collection was Mombasa. In particular, the Port of Mombasa<sup>37</sup> that serves as a key

hub for sandalwood trafficked from inland Kenya and the East African region. Interviewing the concerned agencies at the port was critical in gaining insights on the scope of the market, as well as the final destinations of containers containing sandalwood. A FGD was conducted with members of the Joint Port Control Unit (JPCU).

The JPCU is a multi-agency monitoring framework established with the support of the United Nations Organisation for Drugs and Crime (UNODC). It is responsible for joint monitoring of containers at the port to stem the ferrying of illegal goods such as wildlife trophies, sandalwood and drugs. The JPCU's members are made up of representative from the KRA, KWS, KFS and Kenya Ports Authority (KPA). Five semi-structured interviews were also conducted with staff from the KFS, KWS and KPA.

In addition, there were two biographical interviews with brokers to gain insight into the network of actors that facilitate the harvesting and transportation of sandalwood from Samburu to Busia.



#### Figure 2: Map of study areas

Source: ISS/Amelia Broodryk

## Key actors and networks that facilitate sandalwood trafficking in Kenya

The network that facilitates sandalwood trafficking consists of key actors. A majority of these actors are based at the source of sandalwood in Kenya (Samburu County).

#### Local community networks

Research has shown that sandalwood trees in protected areas such as Tsavo National Park<sup>38</sup> in south-eastern Kenya were initially targeted, now sandalwood traffickers source sandalwood from community forests in southeastern<sup>39</sup> and north-western Kenya.<sup>40</sup>

At the community level, several actors are key to the introduction of sandalwood traffickers. The most critical actor in the local trafficking value chain is the chief. Chiefs are public servants in Kenya's National Administration structure, and fall under the purview of the Office of the President.

The role of chiefs as gatekeepers in the sandalwood trafficking chain was captured by a broker:

I received a call from the lady with instructions on the kilograms/tonnes of sandalwood required. I hired a motorbike and travelled to the village to go and meet the chief. I explained to the chief the tonnage of sandalwood required and paid him KES 10 000 [in] access fees. It was the chief who then convened the rangers and the elders. This group was also paid KES 20 000. The rangers then agreed to allow us to convene the women who did the harvesting of sandalwood. (Maralal town, Samburu County, 29 April 2021)

Community rangers play a similar gatekeeping role for those seeking entry to community forests. The community rangers are locals from Samburu and Turkana communities and are employed by the Samburu County Government,<sup>41</sup> responsible for the protection of wildlife.<sup>42</sup> Retired foresters<sup>43</sup> revealed that community rangers form part of the sandalwood trafficking network, as they and the elders must be paid off by the broker for the sandalwood traffickers to access these forests.

Local women in Samburu are responsible for harvesting the sandalwood in community forests. Key informant interviews<sup>44</sup> said highlighted that, after the broker's meeting with the elders, chief and community rangers, another meeting is convened by the elders and rangers in the presence of the women of the community. This meeting sets the price for the harvested sandalwood (KES 100-150 per kg) and for chopped sandalwood (KES 20-25 per log). This pricing is done by the elders in consultation with the local women.

The warriors (*imuran*) of the Samburu people are young men between the ages of 15 and 30 who<sup>45</sup> are responsible for community security. Interviews with respondents in Samburu revealed that the easy availability of illicit arms<sup>46</sup> enabled the warriors to protect the women harvesting the sandalwood.

Warriors are paid KES 200-400 per day to provide security and accompany the women who uproot and chop up the sandalwood, after which the broker will hire them to load the harvested sandalwood onto lorries. At times the warriors also provide armed security when the harvested sandalwood is stored in homesteads.

## Figure 3: Debarked sandalwood tree in the community forest at Oromode village, Samburu East



### Figure 4: Sandalwood chopping site in Oromode village, Sumburu East



Source: Author

#### The role of the broker

Sandalwood harvesting begins when a broker receives an instruction (basically an order) on the amount of sandalwood required by the trafficker. These traffickers are usually women. A broker at Maralal town, during an interview in April 2021, described his recruitment into the illicit trade:

I am a retired soldier; I left the Kenya Defence Forces in 2001. When I left the military, I was desperate for an income because I have a family. [In] 2011 when a lady who owns a hotel in Maralal town approached me to help her in sandalwood business. This lady had contacts with another lady who owned sandalwood warehouses in Eldoret and Nakuru. She used to come to Maralal in her Prado. She would then stay in the hotel and hand over the vehicle to me with the order of sandalwood required. We did a lot of business together. I am the one who would go see the Officer Commanding Police Division (OCPD) with the money. I would also take money to the KWS officers. (Maralal town, 28 April 2021)

The broker is central to the sandalwood trafficking value chain at the local level. He is the link between the women buyers of sandalwood (the traffickers) and community actors such as the chiefs, rangers and warriors.

The broker is also the link between the trafficker and 'technicians' (people with specialised skills). In the FGDs, the technicians were revealed to be people brought in by the trafficker to ensure that the harvested sandalwood is of high quality.

It is the broker's job to facilitate a technician's entry into a community. The broker also ensures that the technician is housed in the village, so he/she can supervise the harvesting and chopping of sandalwood.

The technician, the broker and a woman from the village all keep records (ledgers) with the names of women doing the harvesting. These records are critical in paying the women per kilogram of sandalwood harvested.

The broker is the link between the women buyers of sandalwood and community actors such as the chiefs, rangers and warriors

In addition, the broker remains in communication with officials in the state security agencies. Based on the information received, the broker gives the greenlight for the harvested sandalwood to be transported via the highway, and escorts the harvested sandalwood out of Samburu County.

#### The women traffickers of sandalwood

Women traders are shown to play a critical role in controlling the illicit sandalwood trade in Samburu County. A senior police officer in Maralal shares that:

One day a group of four women came to my office in the morning hours. They introduced themselves as businesswomen in Samburu County. They were very open about the nature of their business. They told me that they trade in sandalwood. They came for an introduction and wanted to offer me an envelope with money, [which] I declined. But I was surprised at how bold they were. It seems that women have been at the forefront of this trade. In fact, most of the Prados you see out there that we confiscated with sandalwood belong to some of those women. (Maralal town, 29 April 2021)

In addition to running the trafficking, as with other organised criminal groups, the threat and use of violence is also present. According to a conservation officer in Maralal, he received a call from a sandalwood trader that he had not met,

[the caller] told me that he had been to a meeting the previous weekend in Nakuru where discussions were held on how to eliminate some of us who had taken serious steps to stop sandalwood trafficking in Samburu. He told me that I was on the list of those to be targeted for elimination, alongside some of my colleagues from other state agencies. To gain his trust, we sent him to the next meeting of the sandalwood traders' association but asked him to record the proceedings. To our surprise, the majority of the members were women. They were discussing the contributions that they needed members to make to hire hitmen from the police itself! (Maralal town, 29 April 2021) Discussions with brokers and police officers in Samburu County revealed that women buyers are at the centre of this organised crime network. They place the orders for sandalwood through the brokers, and facilitate the transport, accommodation and other logistical support for the broker to reach the village/ community forest where the sandalwood harvesting takes place.

The women buyers hire technicians (with some coming from as far away as Uganda) to inspect the quality of sandalwood harvested and to train local women in properly chopping the harvested sandalwood. Through the broker, the buyers also pay protection fees to local state authorities such as the police, KWS, KFS and county rangers to enable safe passage on the highway.

Interviews in Busia and Malaba revealed that buyers run an extensive protection economy, which includes police bosses along the Nakuru-Bungoma and Kisumu-Busia highways. These networks enable the passage of trafficked sandalwood through police roadblocks. In addition, the women buyers (as well as some men) are said to be members of the sandalwood traders' association, which protects the trade by bailing out arrested colleagues.

#### Figure 5: Harvested sandalwood stored in a homestead in Oromode village, Samburu East



The above section illustrates the linkages between local level actors and mid-level profiteers from the illicit trade in sandalwood. It demonstrates that sandalwood trafficking in Kenya includes state officers who are responsible for protecting the environment in the sandalwood trafficking value chain. It further shows that disrupting the linkages between the broker and the community gatekeepers on the one hand and then the linkages between the broker and the security officers on the other are critical operational elements to break the segments of the value chain that currently facilitate the smooth movement of sandalwood out of Samburu County.

The next section delves into the transportation of sandalwood out of Samburu County.

#### Transportation of sandalwood: from lorries to matatus

The sandalwood trafficking network in Kenya exploits community forests to benefit illicit traders, brokers, transporters and container owners at the Port of Mombasa. In a study on the networks that facilitate this harvesting in Kitui County, it was established that 'it was transporters, brokers and manufacturers who benefited highly from the trade'.<sup>47</sup>

### Changes in the mode of transportation from harvesting areas such as Samburu reveal adaptability of this illicit market

Changes in the mode of transportation from harvesting areas such as Samburu reveal adaptability of this illicit market. Initially sandalwood was transported in lorries. Several cases of lorries<sup>48</sup> being stopped and searched in northern Kenya while ferrying sandalwood have been reported and growing surveillance, continued arrests and the confiscation of sandalwood in Samburu County have forced traffickers to change their mode of transportation.

Interviews<sup>49</sup> with brokers in Samburu revealed that the preference for Prados is due to a belief among security officers that high-end vehicles belong to political leaders. They are thus rarely flagged down in highway

#### Figure 6: Confiscated sandalwood at Maralal Police Station in Samburu, April 2021



police inspections. However, since the formation of Multi-Agency teams to tackle sandalwood trafficking in Northern Kenya in 2019, drivers using high-end vehicles such as Toyota Prados<sup>50</sup> have been arrested in Samburu County for being in possession of sandalwood. A recent case of such vehicles being used to transport sandalwood in Samburu County was described in a police report:<sup>51</sup>

While working with rangers and officers from KWS, police officers intercepted a Toyota Land Cruiser vehicle ... which was loaded with 1.2 tons of sandalwood and a Mitsubishi Pajero ... which had been loaded with 500 kg of sandalwood.

Case file 109/2020 at Wamba Law Court shows the adaptability of sandalwood traffickers in terms of mode of transport. In this case the suspect used a motorcycle to ferry 70 kg of sandalwood. This change in transport could be attributed to increased vigilance by multiagency teams along key trafficking nodes such as the Sura-Adoru-Kisima-Nyahururu highway.

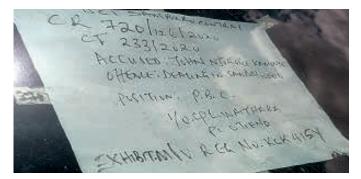
The formation of a multi-agency team<sup>52</sup> comprising officers of the KFS, KWS, the Kenya Police Service, the Directorate of Criminal Investigations and the National Intelligence Service has seen a decline in seized loads of sandalwood in Kenya. Most recently, the team confiscated sandalwood in Samburu<sup>53</sup> and Makueni counties.

However, sandalwood traffickers continue to facilitate sandalwood harvesting in close partnership with brokers and security personnel in Samburu. In an interview, a broker describes the new modes of transportation from Samburu:

In March 2021, the lady called me and ordered 200 kilograms of sandalwood; she was to travel to Samburu once we finished the harvesting. But then the lockdown was announced so she could not come. She asked me to package the sandalwood in medical carton boxes. So I separated the sandalwood into 50 kg carton boxes. We had four boxes. We took a matatu from Maralal to Nyahururu and then from Nyahururu to Nakuru. From there we boarded a bus to Busia with the cartons. (Maralal town, 30 April 2021)

The change in packaging highlights traffickers' ability to evade surveillance and state agencies' scrutiny.

#### Figure 7: Prado with sandalwood at Maralal Police Station



Source: Author

## Legal loopholes that facilitate sandalwood trafficking in East Africa

An analysis of sandalwood cases at the law courts in Kenya shows that contradictory laws, confusion over the mandate to protect sandalwood among state agencies and the incorporation of state officers within the trafficking network have enabled the protection of the sandalwood trafficking value chain to flourish. Since, 2019, there have been eight cases of sandalwood trafficking at the Maralal, Wamba and Baragoi courts. In one such case brought before a magistrate's court<sup>54</sup>, David Njoroge, Paul Njeru Mwai and Daniel Kibe Mboch were arrested in September 2019 with 11 tonnes of sandalwood worth US\$397 830 (KES 44 million and charged under section 92 (2) of the Wildlife Conservation and Management Act of 2013. The prosecutor substituted the above charge with the offense of 'removing forest produce without a permit' under the Forest Conservation and Management Act No 34 of 2016. This led to the reduction of their penalty from a possible seven years prison sentence without the option of a fine to a USD 452 (KES 50,000) fine.

Similarly, Stephen Mungai Wanjiru was charged in January 2020 with being in possession of 700 kg of sandalwood contrary to section 92 (2) of the 2013 Act. In this case, the magistrate invoked section 215 of the Criminal Procedure Code to acquit the suspect. Interviews with Senior Conservation Enforcement Officers<sup>55</sup> who arrested the suspect indicated that the handling of this case was reported to the Directorate of Public Prosecutions and led to administrative action against the then Prosecutor in Maralal.

In case of Jackson Loshibal who was arrested with approximately 600 kg of sandalwood and charged at

Maralal Law Courts under Section 92(2) of the Wildlife Conservation and Management Act No. 47 of 2013. He was sentenced to seven years' imprisonment without the option of a fine. The court also ordered that the confiscated sandalwood be handed over to the KWS for disposal through burning. The vehicle that was used to ferry the sandalwood was however returned to the rightful owner. While this judgement may be seen as successful, its weakness lies in its handing back the vehicle to the perpetrators, meaning it could again be used to traffic sandalwood. Section 105(2) of the Act allows for the cost of the disposal of confiscated endangered species/products to be borne by the trafficker, and for the forfeiture of vehicles used by traffickers to the state.

In the wider East African region, legal loopholes have also facilitated the illegal movement of sandalwood. In an interview with Mr. Katto Wambua<sup>56</sup>, a senior criminal justice advisor at Spaces for Giants, he cited the East African Business protocols that enable ease of doing business in the region as an avenue that is

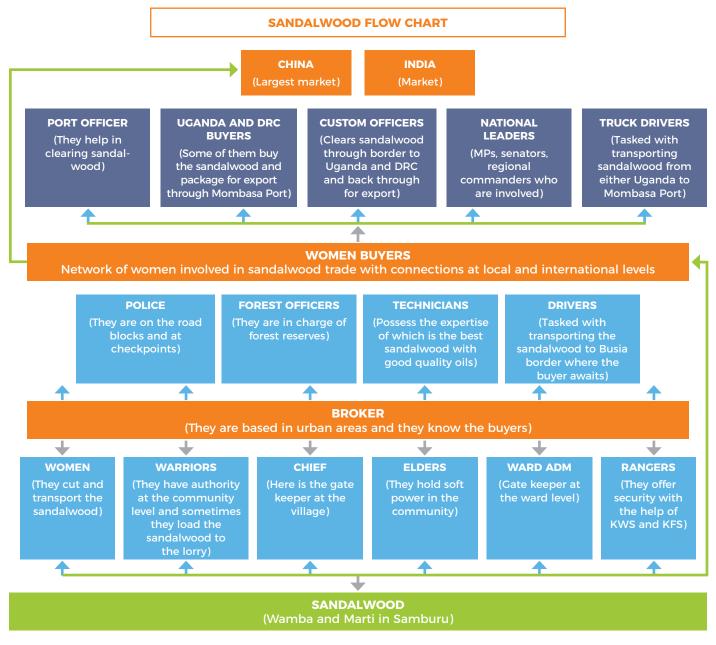


Figure 8: The sandalwood trade

currently exploited by traffickers. Through these regional protocols, Kenyan sandalwood smuggled to Uganda is then packaged as Ugandan products and sealed by the Ugandan Revenue Authority as Ugandan goods then exported through the Kenyan port of Mombasa. The above legal challenges show that successful prosecution of sandalwood traffickers will require a regional legal framework that recognises sandalwood trafficking as a regional environmental crime.

#### Effects of sandalwood trafficking at the community level: environmental harm and loss of biodiversity

As sandalwood is harvested by uprooting the whole tree, increased demand has led to its over-exploitation and deforestation.<sup>57</sup> There are several environmental impacts of harvesting sandalwood. Its uprooting contributes to faster water run-off and causing soil erosion.<sup>58</sup>

Increased demand for sandalwood has led to its over-exploitation and deforestation

The reduction in vegetation cover is linked to reduced water retention in the soil, and general water scarcity with negative impacts on the growth of food crops such as maize and beans, a lack of fodder for livestock, especially goats.<sup>59</sup> This has a direct bearing on levels of food security.

In the FGDs<sup>60</sup> with community members, it was noted that the sandalwood tree is a host to bee hives<sup>61</sup> and reptiles such as snakes. Its total uprooting thus leads to a decrease in biodiversity. Since pollinators such as bees are critical to plant propagation, a drop in their numbers will have a negative effect on the agricultural sector.

#### Loss of health and medicinal benefits

Over-exploitation of the sandalwood tree at the local level will eventually lead to a loss of medicinal knowledge among the Samburu, and an increased reliance on expensive Western medicine. Older people still use the sandalwood tree to treat various ailments, including diarrhoea and hepatitis B. The leaves are also used to make a herbal tea to treat bronchitis.

In addition, sandalwood is used as a milk<sup>62</sup> preservative by the Samburu pastoralists.

In an interview,<sup>63</sup> an elderly Samburu woman described the extent of the socio-cultural loss occasioned by sandalwood trafficking:

Our young people are interested in money. Losesiai has been critical to the survival of the Samburu people. It is a source of medicine for many diseases. My greatest fear is that in the next few years the word Losesiai will be gone. Our grandchildren will never be able to use this word due to the actions of our children today. This tree is sacred. We should not lose it. (Maralal town, 30 April 2021)

The consequences of sandalwood trafficking are therefore not limited to environmental harm. Rather, the significance of sandalwood tree could also be understood in terms of the socio-cultural functions that communities have drawn from the tree for centuries.

#### Recommendations

- 1. Community-level conservation initiatives
  - a) Community champions who protect the sandalwood trees are key to their long-term sustainability, and should be used to encourage local actors involved in sandalwood harvesting to protect it instead. Community members, through Community Forest Associations (CFAs), can be organised to play such a role. The CFAs and community rangers should work together to conserve sandalwood within their areas of jurisdiction.
  - b) Community-based organisations especially those involved in conservation in northern Kenya – could partner with CFAs to conduct community-awareness campaigns on the value of sandalwood to pastoralists in Baringo, Laikipia, Marsabit and Samburu counties. This could lead to the training of community champions dedicated to protecting the sandalwood tree.
  - c) Collaborative community-based programmes between CFAs and the County Governments in Northern Kenya could be initiated to increase

local oversight of illegal sandalwood harvesting in communities in northern Kenya.

 Intergenerational learning and exchange between elders and youth on the importance and benefits of sandalwood tree could be prioritised through collaborations between county governments and community-based organisations.

### 2. Promoting sustainability at county-government level

- a) The Samburu county government needs to adapt the Forest Conservation and Management Act No. 34 of 2016 to ensure the effective management and protection of community forests to stem the illegal harvesting of sandalwood, in line with the provisions of Section 32 of the Act.<sup>64</sup>
- b) Given that community members increasingly view sandalwood as a cash crop, the county governments could invest in sustainable harvesting and set up sandalwood cooperatives to oversee its harvesting and marketing for the benefit of local communities and as a source of revenue.
- c) The Samburu county government may also need to review the actions of community forest rangers with regard to sandalwood trafficking. Closer monitoring of these rangers may be critical in preventing them from facilitating sandalwood harvesting in community forests.
- d) Stemming the tide of sandalwood trafficking from northern Kenya will require concerted efforts by the county governments and local law enforcement agencies in tackling the influx of 'businesswomen' who are in fact sandalwood traffickers. Cutting the linkages between women traffickers, on the one hand, and brokers and local law enforcers, on the other, is critical.
- e) The development of a sustainable sandalwood harvesting and protection policy at the countygovernment level could also enable the longterm strategic engagement of key stakeholders within the security and natural resource management sectors in Kenya. A policy aimed at the sustainable harvesting and protection of sandalwood could empower communities to protect community forests while enabling county governments and national agencies such as KEFRI and the police to work in

tandem with communities to protect these forests against sandalwood traffickers.

#### 3. National regulators

- a) The multi-agency security teams in Kenya need to enhance their monitoring and surveillance of local sandalwood trafficking networks (especially brokers and state officers) in partnership with local CFAs, to break the trafficking value chain.
- b) State institutions such as KEFRI need to expand sandalwood propagation programmes into northern Kenya (by opening an office in Maralal town) to educate key community members

   such as local women - on ways to conserve sandalwood to make it commercially viable.
- c) Sandalwood traffickers should be prosecuted under the Wildlife Conservation<sup>65</sup> and Management Act, rather than the Penal Code or the Forest Act. This law has stiffer penalties, including long prison sentences, that could deter sandalwood traffickers.
- d) The JPCU at the Kenya Ports Authority has been effective in making arrests and confiscating containers with sandalwood destined for overseas markets. However, increased cooperation between the Directorate of Criminal Investigations, the National Police Service, the KWS, the KFS, the National Intelligence Service and the KRA at the Port of Mombasa is critical in gathering crucial intelligence on the owners of sandalwood containers. This could enhance state regulators' understanding of the illicit overseas sandalwood market.

#### 4. Transnational actors

- a) Harmonising environmental laws in East Africa is critical to the prevention and protection of sandalwood. Currently, trade in sandalwood is not prohibited in Uganda and Tanzania, and the existence of this regional market has facilitated the illicit market in sandalwood originating from Kenya.
- b) Protecting East African sandalwood against trafficking will, however, require a change in laws to facilitate sustainable harvesting and propagation programmes that ensure that communities eventually benefit from the tree.
- c) A regional legal framework on the eradication of the illicit sandalwood market in East Africa

should be a long-term goal of the states. This should focus on harmonising environmental laws in line with CITES. The focus of the regional legal framework should be to prevent sandalwood from being trafficked from source countries to the greater region. Such a framework should enable intelligence sharing on illicit sandalwood markets, especially along international borders in East Africa. It should also encourage communityled propagation to enable sustainable harvesting.  d) East African states could pursue bilateral agreements with demand countries in Asia. These could take the form of legal and advocacy campaigns to educate citizens in demand countries on the sourcing of sandalwood oil. International awareness raising and advocacy to protect the endangered East African sandalwood could be critical in reducing demand in international markets. International awareness could also be helpful in raising funds for community-led propagation and sustainability efforts.

#### Notes

- 1 CTSP, Uganda, https://cites-tsp.org/regions/uganda/
- 2 C Orwa et al., Agroforestree Database, 2009, http:// www.worldagroforestry.org/sites/treedbs/treedatabases. asp
- **3** PL Mwang'ingo, G Kibodya and AR Mng'ongo, Oil yield and quality variation between sexes in *Osyris lanceolata* (African sandalwood) and its value as a fodder plant in Tanzania, *Southern Forests*, 72:2, 2010, 68–73.
- 4 EA Ooko, Evaluation of anti-microbial activity of Osyris lanceolata (East African sandalwood), BSc Thesis, Jomo Kenyatta University of Agriculture and Technology, 2009.
- 5 Doddabasawa and BM Chittapur, Sandalwood plantations: points to ponder, *Current Science*, 120:7, 2021.
- 6 J Teixeira Da Silva et al., African sandalwood or Nepalese sandalwood: a brief synthesis, *Notulae Scientia Biologicae*, 8:1, 2016, 57–61.
- 7 G Koech, KFS wants sandalwood extraction banned, The Star, 4 March 2018, https://www.the-star.co.ke/ news/2018-03-04-kfs-wants-sandalwood-extractionbanned/
- 8 Auromere.com. The healing properties of Chandana-The Indian Sandalwood Tree. 2020. https://www. auromere.com/blog/the-healing-properties-ofchandana-the-indian-sandalwood-tree/
- **9** C Sandeep and TN Manohara, Sandalwood in India: historical and cultural significance of *Santalum album* as a basis for its conservation, *Nebio*, 10, 2019, 235-242.
- 10 Ibid.
- 11 Ibid.
- 12 http://www.trafficj.org/cop16/pdf/CoP16\_Prop69\_ Analysis.pdf
- 13 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Consideration of proposals for amendment of appendices I and II, 16th meeting of the Conference of the Parties Bangkok (Thailand), 3–14 March 2013, https://cites.org/sites/ default/files/eng/cop/16/prop/E-CoP16-Prop-03.pdf
- 14 Environmental Liaison Center International (ELCI), Pastoralism as a conservation strategy and contributor to livelihood security: Kenya country study, 2006, https://www.iucn.org/sites/dev/files/import/downloads/ kenya\_country\_study.pdf
- 15 CITES, Consideration of proposals for amendment of appendices I and II, 16<sup>th</sup> meeting of the Conference of the Parties Bangkok (Thailand), 3–14 March 2013, https://cites.org/sites/default/files/eng/cop/16/prop/E-CoP16-Prop-03.pdf

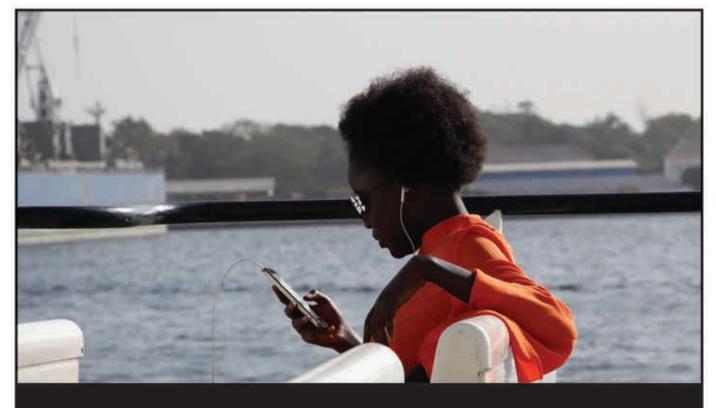
- 16 Appendices I, II and III, How CITES works, https://cites. org/eng/app/appendices.php
- 17 SN Chisika, J Park and C Yeom, The impact of legislation on sustainability of farm forests in Kenya: the case of Lugari Sub-County in Kakamega County, Kenya, Sustainability, 12:1, 2020.
- 18 *Kenya Gazette*, Gazette Notice No. 3176: Kenya Forest Act, Protection of Species, 4 April 2007.
- 19 Kenya Forest Service, Vehicles transporting sandalwood impounded, 12 February 2020, http://www. kenyaforestservice.org/index.php?option=com\_content& view=article&id=712:vehicles-transporting-sandalwoodimpounded&catid=81&Itemid=538
- 20 Kenya Gazette Supplement, The Wildlife Conservation and Management Act No. 155, Nairobi: Government Printer, 2013.
- 21 US Fish and Wildlife Service, International affairs: current CITES listings of tree species, https://www.fws. gov/international/plants/current-cites-listings-of-treespecies.html
- 22 LAJ Thomson, Looking ahead global sandalwood production and markets in 2040, and implications for Pacific Island producers, *Australian Forestry*, 4:83, 2020, 245–254.
- 23 Ibid.
- 24 Ibid.
- 25 Interview with Forest officer, Maralal, 29 April 2021.
- 26 Interview with KEFRI officer, Mombasa, 11 May 2021.
- S Nzioka, Six suspects arrested at Emali with sandalwood worth Ksh 7.7 million, *The Standard*, 9 April 2021, https://www.standardmedia.co.ke/ kenya/article/2001409069/six-suspects-arrested-withsandalwood-worth-sh77-million
- 28 Interview with a Busia-based smuggler, Busia town, Busia County, 5 May 2021.
- M Schultze-Kraft, Organised crime, violence and development, International Development Department, College of Social Sciences, University of Birmingham, 2016.
- **30** T Reitano and M Hunter, *The crime-development paradox: organised crime and the SDCs*, ENACT, Continental Report 2, 2018, https://www.saferspaces. org.za/uploads/files/ENACT-Continental-Report-02-14Feb1145.pdf.
- **31** M Shaw, Drug trafficking in Guinea-Bissau, 1998–2014: the evolution of an elite protection network, *Journal of Modern African Studies*, 53:3, 2015, 339–364.
- 32 Ibid.

- 33 C Masika, Four KWS officers, two civilians charged with illegally possessing Sh7.2m sandalwood, *The Star*, 10 April 2019, https://www.the-star.co.ke/news/2019-04-10-four-kws-officers-two-civilians-charged-with-illegallypossessing-sh72m-sandalwood/
- 34 Ibid.
- **35** Daily Monitor, How oil firm is burning up in Karamoja valuable trees, 14 December 2015, https://www. monitor.co.ug/uganda/lifestyle/reviews-profiles/how-oil-firm-is-burning-up-karamoja-valuable-trees-1633986
- Republic of Uganda, Production, Trade, Processing, Monitoring and Control of the East African Sandalwood, Osyris Lanceolata in Uganda, Ministry of Water and Environment, Forest Sector Support Department (FSSD), 2021, https://cites-tsp.org/wp-content/ uploads/2021/09/CTSP\_Ug-reports\_July-2021.pdf
- 37 M Ahmed, Detectives seize tonnes of sandalwood at port, Daily Nation, 1 October 2020, https://nation.africa/ kenya/counties/mombasa/detectives-seize-tonnes-ofbanned-sandalwood-at-port-93338?view=htmlamp
- 58 EA Ooko, Evaluation of anti-microbial activity of Osyris lanceolata (East African sandalwood), BSc Thesis, Jomo Kenyatta University of Agriculture and Technology, 2009.
- **39** DM Mumbu, Assessing the utilization and socioeconomic impacts of *Osyris lanceolata (hochst and steudel)* and associated environmental degradation in Kitui County, Master's Thesis, South Eastern Kenya University, 2020.
- 40 G Ondieki, Kenya: Sh2.4 million illegally harvested sandalwood destroyed in Samburu, *Daily Nation*, 24 March 2021, https://allafrica.com/ stories/202103250234.html
- **41** County Government of Samburu, West Gate Conservancy, https://www.samburu.go.ke/west-gateconservancy/
- 42 P Menon, Saluting rangers worldwide on World Ranger Day, Wildlife Conservation Network, 31 July 2018, https://wildnet.org/saluting-rangers-worldwide-onworld-ranger-day/
- **43** Focus group discussion with chiefs and retired foresters, Maralal town, Samburu County, 29 April 2021.
- **44** Semi-structured interview with retired woman forester, Maralal town, Samburu County, 29 April 2021.
- **45** B Straight, Land conflict, murder, and the rise of 'timeless culture' and girl blaming (Samburu, Kenya), *Ateliers d'anthropologie*, 2020, https://journals. openedition.org/ateliers/12553
- **46** M Fundi, Disarm Illegal gun holders for peace Samburu residents, *The Star*, 6 October 2019, https:// www.the-star.co.ke/news/2019-10-06-disarm-illegalgun-holders-for-peace--samburu-residents/

- **47** DM Mumbu, Assessing the utilization and socioeconomic impacts of *Osyris lanceolata* (*hochst and steudel*) and associated environmental degradation in Kitui County, Master's Thesis, South Eastern Kenya University, 2020.
- **48** K Gachuhi, Sandalwood worth millions impounded in Nakuru, *The Standard*, 29 March 2019, https://www. standardmedia.co.ke/rift-valley/article/2001318631/ sandalwood-worth-millions-impounded-in-nakuru
- **49** Interview with sandalwood broker, Maralal town, Samburu County, 3 April 2021.
- 50 J Lengarpatei, Police nab Prado ferrying sandalwood worth Ksh 2.5m, *Citizen Digital*, 29 January 2020, https://citizentv.co.ke/news/police-nab-prado-ferryingsandalwood-worth-ksh-2-5m-316160/
- 51 J Keti, Police nab Prado ferrying sandalwood worth Kshs 850,000, *Citizen Digital*, 14 February 2020, https://citizentv.co.ke/news/police-nab-prado-ferryingsandalwood-worth-ksh-850000-320597/
- 52 S Nzioka, Six suspects arrested at Emali with sandalwood worth Ksh 7.7 million, *The Standard*, 9 April 2021, https://www.standardmedia.co.ke/ kenya/article/2001409069/six-suspects-arrested-withsandalwood-worth-sh77-million
- 53 D Saruni, The sandalwood issue in Kenya, Conservation Matters, 11 April 2021, https://www.conservationmatters.com/blog/the-sandalwood-issue-in-kenya
- 54 Maralal Law Courts, David Njoroge, Paul Njeru Mwai and Daniel Kibe Mboch vs. Republic, Case File 400/2019, 2019.
- **55** Interview with Senior Conservation Officials, Maralal town, Samburu, 30th April 2021.
- **56** Interview with Katto Wambua, Spaces for Giants, Nairobi 11th March 2021.
- 57 KV Ochanda, Conservation and management of sandalwood trees (Osyris lanceolata hochst & steudel) in Chyulu Hills, Kibwezi District Kenya, MSc Thesis, Kenyatta University, 2009.
- **58** DM Mumbu, Assessing the utilization and socioeconomic impacts of *Osyris lanceolata* (hochst and steudel) and associated environmental degradation in Kitui County, Master's Thesis, South Eastern Kenya University, 2020.
- 59 Interview with a Samburu elder, Maralal, 29 April 2021.
- 60 FGD with community members, Maralal, 28 April 2021.
- 61 S Kavilu Shadrack, Kenya: bees help indigenous Yiaku defend and monitor their ancestral forest, Mongabay, 28 November 2018, https://news.mongabay. com/2018/11/kenya-bees-help-indigenous-yiakudefend-and-monitor-their-ancestral-forest/
- **62** EA Ooko, Evaluation of anti-microbial activity of *Osyris lanceolata* (East African sandalwood), BSc Thesis, Jomo

Kenyatta University of Agriculture and Technology, 2009.

- **63** Interview with a Samburu woman, Maralal town, Samburu County, 30 April 2021.
- 64 Kenya Gazette Supplement, The Wildlife Conservation and Management Act No. 155, Nairobi: Government Printer, 2013.
- 65 Ibid.



### Subscribe to ENACT

ENACT works to enhance Africa's response to transnational organised crime. Receive the latest analysis and research, delivered directly to your inbox:

1. Go to www.enact.africa

- 2. Click on 'Connect', then 'Subscribe'
- 3. Select the topics you're interested in, click 'Subscribe'

	infogra			lainers	
pub	lications	origina	l analysis		
				trend re	ports

# Read more about drug trafficking and counterfeit medicines at www.enact.africa







This project is funded by the European Union



#### About the author

Dr Willis Okumu is a senior researcher at the ISS in the ENACT Programme, and is based in Nairobi. He previously worked as the peacebuilding coordinator/researcher at Anglican Development Services Kenya. His research interests include transnational organised crime, human-environment relations, inter-communal peacebuilding and pastoralist livelihoods in East Africa and the Horn. He has a PhD in social anthropology, an MA in culture and environment in Africa from the University of Cologne, and a BA in political science and sociology from the University of Nairobi.

#### **About ENACT**

ENACT builds knowledge and skills to enhance Africa's response to transnational organised crime. ENACT analyses how organised crime affects stability, governance, the rule of law and development in Africa, and works to mitigate its impact. ENACT is implemented by the ISS and INTERPOL, in affiliation with the Global Initiative Against Transnational Organized Crime.

#### Acknowledgements

ENACT is funded by the European Union (EU). This publication was produced with the assistance of the EU.







Cover image: AdobeStock

The contents of this publication are the sole responsibility of the author and can in no way be taken to reflect the views or position of the European Union, or the ENACT partnership. Authors contribute to ENACT publications in their personal capacity.

 $\odot$  2022. ENACT. Copyright in the volume as a whole is vested in ENACT, its partners, the EU and the author, and no part may be reproduced in whole or in part without the express permission, in writing, of the author and the ENACT partnership.