

# SCIENCE UNDER SIEGE

When Political Unrest Swept Kenya, Universities  
Paid a Price—but Taught Some Lessons, Too

*By Matthew Harsh*

In December 2007, a disputed presidential election threw Kenya into a state of violent turmoil along ethnic lines. The economically powerful Kikuyu community largely backed the incumbent, President Mwai Kibaki, himself a Kikuyu. Competing against Kibaki was Raila Odinga, an ethnic Luo and son of Kenya's first vice president. Odinga was likewise largely supported by his community, as well as by other prominent ethnic groups including the Kalenjin. After delayed results and allegations of vote rigging, violence erupted across the country when Kibaki was declared the winner.

The election brought tribal differences to the surface, and the ensuing conflict was starkly about ethnicity and access to resources. Dominant groups in mixed communities forced minorities to leave their land and their livelihoods, or be killed. Some eleven hundred people were killed and another three hundred thousand displaced within two months. Eventually, former United Nations Secretary General Kofi Annan brokered a power-sharing agreement that ended the immediate crisis. Kibaki, leader of the Party of National Unity (PNU), and Odinga, head of the Orange Democratic Movement (ODM), signed the National Accord and Reconciliation Act on February 28, 2008.

Kenya's national scientific research and higher education system is closely connected to Kenyan politics, and became embroiled in the political unrest. The system both shapes and is shaped by the key ethnic and resource-distribution dynamic underlying the conflict. Universities and research establishments, including the extensive Kenya

Agricultural Research Institute, relocate people throughout the country for work or studies where they are often destined to live as a member of a minority in the community. Universities are also traditional centers of political activism, so it was no surprise that relations between normally collegial faculty and students hailing from different ethnic groups became tense during the contentious election period.

▷ *A Kenyan wields a machete during political unrest, Nairobi, Dec. 30, 2007. Stephen Morrison/EPA/Corbis*



The devastation the unrest inflicted on Kenya's knowledge system is a sobering illustration of the price that societies pay for the failure to resolve their differences peacefully. Harrowing tales were commonplace. Mobs raided research institutes, searching for tribal minorities. Test fields were burned and equipment destroyed. Junior researchers living outside of compounds were especially affected and universities delayed opening, which led to further academic disruptions and economic hardships. When political unrest affects knowledge systems, it not only impedes education and the production of new scientific knowledge. It also damages a system that is key to strengthening democracy against the pressures of ethnic-based politics.

### **Rumblings in the Rift Valley**

The story of a junior researcher, who I'll call Murimi to protect his anonymity, helps illustrate how the turmoil affected Kenya's scientific research and higher education system. Murimi lives in the Rift Valley, an area where much of the violence occurred. He describes his position—an agricultural research assistant in a university agronomy department—as the “lowest in the academic cadre.” Nonetheless, he is on the front line of research and education. He works in the research fields with his hands in the soil, showing students what six centimeters means when spacing seeds. He monitors crop trials designed by professors and senior researchers.

Murimi is a Kikuyu, the largest of Kenya's seventy ethnic groups at about 17 percent of the population. The Rift Valley Province is an economically rich region that illustrates the complexity and volatility of ethnic politics in the country. It is a huge swath of land stretching almost from the capital, Nairobi, to Lake Victoria on the western border, and covering the entire north-south length of the country from South Sudan to Tanzania. The central Rift Valley is covered with white-tented horticultural facilities filled with flowers and fruit plants. Lush tea plantations are found in the rolling green hills of the western highlands. Life and livelihoods are tied to the land.

Before the unrest, the Rift Valley's economic resources and ethnic groups were distributed in a delicate equilibrium. Kikuyus who came to the valley over half a century ago, live in mixed communities along with Kalenjins, Luos, and people from other ethnic groups, including many who came for research or education purposes. Land was a scarce and valued resource, which created some tension. But research went on. Knowledge was generated. Students received degrees.

But the 2007 presidential election upset the balance. In the Rift Valley, Murimi and other Kikuyus are a minority in a province dominated by the Kalenjins, who comprise about 13 percent of Kenya's overall population. During the campaign, Kalenjins supported Raila Odinga, whose Luo ethnic group is another strong force

in the Rift Valley. Kalenjins themselves tasted the fruit of political power for decades during the rule of Kenya's longest-serving president, Daniel Arap Moi, a Kalenjini.

In casual conversations and joking between research staff from different ethnic groups—common and non-confrontational occurrences before the unrest—Kikuyus might be stereotypically seen as enterprising, strong in business, and sometimes overly focused on money. Murimi is certainly an enterprising man. He uses the knowledge he has gained from his research position to create a harvest and a living for his family from a very small piece of rocky land on a hillside. He also assists a neighbor, who has a much larger piece of land and many more animals but lacks Murimi's knowledge about farming and livestock management.

The majority of Kikuyus come from Kenya's Central Province, a smaller region nestled between the eastern border of the Rift Valley and Mt. Kenya. Many Kikuyus came to the Rift Valley more than fifty years ago—around the time Kenya gained independence from Britain. Kenyans argue over why and how so many Kikuyus ended up in the Rift Valley. Some feel that the Kikuyus were the first to take up a capitalist system of land management and bought land there from departing British settlers. This is the view of one professor of agronomy, Murimi's immediate supervisor.

Another professor in the same department expresses an opposite view. He feels that Jomo Kenyatta, Kenya's first president and a Kikuyu himself, enabled Kikuyu farmers to acquire land for free in an exercise of political patronage. This professor is Luo, who make up about 10 percent of Kenya's population and are historically from Nyanza Province on the shores of Lake Victoria. University students and faculty joke that Luos are stereotypically known for being smooth talkers and make good politicians. The Luo feel slighted that none of their own has ever been president of Kenya, although they did produce a president of the United States—Barack Obama's Kenyan roots are Luo.

Regardless of why and how the Kikuyus came to the valley, the fact remains that many Kikuyus live there now. Many of these Kikuyus identify with being from the Rift Valley more than from the Central Province. Murimi was born in the Rift Valley, as were his parents.

Before the unrest, differences between Kikuyus and Luos didn't generally get in the way of collegiate interactions at universities and research centers. The Rift Valley is home to several major universities and several campuses of the Kenyan Agricultural Research Institute (KARI). Students, professors, and researchers from many different ethnicities regularly move to the Rift Valley for work or studies. Describing the social relationships between staff at her KARI campus, one researcher stated that, "You couldn't see that [ethnic] line between them, because we are a mix." This

is true in Murimi's case, he and the two professors with divergent political views socialized and worked well together at their university.

Tension between Kikuyus and Kalenjins seemed to be becoming more common, however. Kalenjins are stereotypically seen as war-like because of their strong traditional hunting rituals. Kalenjins are known for producing the best long distance runners—prompting jokes among university students that Kalenjins don't need land or a job because they can just run for a living.

Yet, land is of course important to Rift Valley Kalenjins. A soft-spoken Kalenjin student from the western Rift Valley I'll call Kibet described the situation: "Land is almost everything in our community." Kalenjins are farming and livestock-raising people who have had a patriarchal system of dividing land between relatives for generations. Kibet explained: "My grandfather had twenty-five acres and five sons. My father was given five acres and in our family we are five sons. So each and every one of us expects to get one acre."

The Kalenjins are also strongly associated with Kenya's second president. Some argue that Daniel Arap Moi effectively created the Kalenjin identity. Seeking political support, Moi brought disparate tribes together under the Kalenjin banner and through alliances with other groups, including some Kikuyus. Moi went on to rule Kenya for nearly three decades. He did oppress political opposition, which led to periods of unrest in the Rift Valley in the 1990s. Moi's authoritarian rule also extended to Kenya's knowledge system. He held the power to appoint the ministers who dealt with agriculture, research, and education and he influenced who would be the heads of research institutes and the chancellors and vice chancellors of universities.

### **The Kibaki-Odinga Divide**

Like many Kenyans, researchers, students, and professors tended to support a presidential candidate based on their own ethnicity. Kikuyus backed Kibaki, Luos supported Odinga and Kalenjins aligned with the Luos, hoping that a victory for Odinga would mean regaining land in the Rift Valley from Kikuyus. Although it is an oversimplification, a professor of sociology at University of Nairobi says the election pitted "Kikuyus versus Luos, or, if you like, the Kikuyus versus other tribes."

And the rivalry was destined to play out within Kenya's knowledge system. Universities have always been sources of activism and political opposition, and not just in Kenya. After President Moi made Kenya a one party state, university campuses were among the rare venues where debates could be heard although protests and demonstrations were common and the regime often cracked down on dissent. A professor who was a student during this time says, "We went to the streets, protesting, and of course, as usual, we were beaten up by the police. And eventually the university was closed."

Naturally, university students sought to be involved in the 2007 presidential election. They felt an itch to demonstrate. At the University of Nairobi, the administration narrowly averted mass protests that might have shut down the campus. Many credited this to the purportedly close relationship between the university's vice chancellor and the president of the student government who, it seems, cooperated to head off demonstrations.

Students were involved in campaigning for their respective candidates and candidates went to great lengths to mobilize students into attending their campaign events. Organizers would contact student leaders, who in turn would forward the messages to fellow students, often along ethnic lines. The campaigning created divides among students, including between friends. Splits developed even among roommates in dormitories and stories began to circulate about students intimidating each other.

However, some students worked to dampen ethnic politics, especially in their home provinces where they enjoyed a respected status due to their education and were considered more in tune with national politics having lived in the capital. Kibet, the Kalenjin student from the Rift Valley, took this time to go to local constituency offices or small shopping centers to discuss election issues. He says that he and his friends tried to encourage people to discuss and debate the issues—such as the relations between branches of government or the distribution of development funds—rather than focus on ethnicity.

On election day, December 27, researchers, students, and professors were among the throngs of Kenyans who waited for hours in line to vote. Kibet stayed up late into the night. He and other voters in his constituency went to where the votes were being counted and insisted that votes be counted aloud in front of them.

Researchers and faculty, as a privileged social class, were plugged into more elite social networks. Through these personal relationships, they exchanged information and speculated about who the winner would be, and if there might be unrest or violence after the election. Mobile phones and other technologies served as channels of communication with colleagues in the capital and in other urban centers.

Early reports of the ballot count indicated that Raila Odinga was emerging as the frontrunner. One scientist and Odinga supporter said a friend and supporter of Kibaki called him shortly after the vote and conceded that Kibaki was going to lose. Another staff member at a research institute stated that he was concerned about violence breaking out after the election. He said that in conversations with former colleagues who were now members of Kenya's national security service, they reported hearing chatter indicating that violence would break out, no matter what the result of the election. One researcher at a KARI campus in the Rift Valley recalls that there was "anxiety in every quarter."

## Arrows and Machetes

Suddenly on December 30, Mwai Kibaki, the incumbent president and the candidate backed by many Kikuyus, was declared the winner, and sworn in. It was a Sunday, and like most Kenyans, faculty and staff were home with their families. By almost every account—those of researchers, professors, students in the capital, Central Province, Rift Valley Province, and Nyanza Province—the reaction to the announcement was immediate. People took to the streets. Luos, Kalenjins, and other supporters of Odinga gathered in public spaces to decry the result and claim vote rigging. Kikuyus and supporters of Kibaki, meanwhile, started celebrating, sometimes in the same public spaces where Odinga's followers were protesting.

Many researchers use the same exact phrase when describing the situation: "Hell broke loose." Soon, violence spread outside of demonstrations and erupted from the shores of Lake Victoria to the slums of Nairobi and beyond to the beaches of the Coast Province in the east. The turmoil did not spare Kenya's knowledge system. In the Rift Valley, Odinga's Kalenjin supporters were expecting to win and be given some of the land back currently occupied by Kikuyus. Now that Kibaki emerged victorious, some Kalenjins became determined to take the land by force and flush Kikuyus out of the Rift Valley.

For more than two months, the unrest disrupted higher education and slowed down or froze scientific knowledge production as the conflict shifted from being a dispute about an election to one about ethnicity, land, and resources. Murimi is visibly shaken up as he describes this time period. As a Kikuyu and PNU supporter living in the Rift Valley, he found himself part of a minority group surrounded by angry Kalenjins. His land and home were in a mixed community where Kalenjins and Kikuyus had long lived interspersed in very close proximity. Everyone knew who belonged to which ethnic group. If names and appearances didn't give it away, then style differences between Kikuyu and Kalenjin home construction did. Murimi felt, like many Kikuyus, that he was no longer welcome in his home—where he had lived his whole life.

Soon after the election, groups of Kalenjin warriors armed with bows and arrows began raiding Kikuyu homes, many of them Murimi's neighbors. Some Kikuyu researchers and academics, being more senior than Murimi, had the advantage of living on the campuses of universities and research institutes. Campuses are fenced, with entry and exit controlled by private security guards, and provided more senior personnel with a higher level of security than their junior colleagues. Living outside the protection of the university walls and fences, Murimi's security came from the social ties he had with his neighbors. But these were quickly breaking down.

Many raids happened after dark. One junior staff member at another university in the Rift Valley was awakened in the middle of the night by burning Molotov cocktails

being thrown through his window. His home burned as he struggled to get his family out. The only remains of the structure are ash, a few stones from the foundation, and barbed wire from the fence. Murimi stayed at his home, but slept outside in the cold. He feared that if his house was found to be inhabited, it would be burned with him inside it. If it was empty, he thought it might be left alone. He says he witnessed an *askari*, or security guard, being murdered by a Kalenjin with a bow and arrow.

For Murimi, who armed himself with a machete, one of the worst experiences occurred when his neighbor turned violently against him. Murimi, a Christian, discussed how he loved his neighbor as a brother. He regularly helped his neighbor, sometimes spending hours helping gather his goats and cows. In return, Murimi could always depend on his neighbor supplying him with milk. But he describes how during the political unrest the neighbor “rose against me from bushes with bow and arrow. This was not the brother time.”

Similarly, Kalenjins and supporters of the ODM raided universities and national agricultural institutes across the Rift Valley and in the Luo stronghold of Nyanza Province in search of known Kikuyu researchers and staff members. One researcher at Kenya Medical Research Institute in Nyanza Province describes a mob of Luos storming the research campus and coming to the gate of the compound saying, “This place is harboring Kikuyus.” After this incident and others like it, she continues, “If you were Kikuyu, you got out.” Similarly, a mob of youths pulled down a wall and overcame security guards at a Kenya Industrial Research Institute facility also in Nyanza Province. Computers were stolen and equipment was destroyed.

News of these raids spread east to the neighboring Central Province. Here, Kikuyus are the ethnic majority, but there were many non-Kikuyus working at the province’s Kenya Agricultural Research Institute and Kenya Trypanosomiasis Research Institute labs. Kikuyus from the towns surrounding the research facilities plotted revenge missions for what had happened at research institutes in Nyanza and Rift Valley. The director of one research institute in Central Province received death threats targeting specific non-Kikuyu researchers who worked at his lab. Mobs eventually raided this research facility. Police and security forces thwarted the raiders’ first attempt, but eventually the mob found an unfenced area and used it as a means to enter the grounds of the institute. Test fields adjacent to offices and living quarters were burned. According to the director, “There was a lot of panic. A lot of people who come from Western Kenya found it very hard to stay here. So they left, some of them left with their families.”

It is impossible to know the total number of raids or the total number of researchers who were killed or driven out. It is safe to say that almost every institute in Nyanza and the Rift Valley was raided or threatened, as were many institutes in Central Province. Of the many researchers and professors who were forced to leave their homes

and their jobs, some went back to stay with relatives in other parts of the country where the situation was less tense. Some with nowhere to go went to camps for internally displaced people (IDP). Large IDP camps were set up by international relief organizations. The headquarters of the Kenya Agricultural Research Institute in the outskirts of Nairobi became an IDP camp and housed many researchers who had fled from institutes in other parts of the country.

Those researchers who stayed behind faced many difficulties in carrying out their work. Many are dependent on public transport to access their research field sites that are often far from research institutes or universities. During the unrest, transportation became severely hindered. Groups of youth set roadblocks on major roadways, stopping vehicles to search out people from opposing ethnic groups. Some researchers would send text messages to each other to circumvent roadblocks. But many were unable to reach their sites, sometimes ruining experiments where protocol dictated measurements be taken at certain specific times. Given the increased food prices because of difficulties in transportation, there were also instances of illegal harvesting on experimental agricultural plots.

Personal relationships between researchers and research participants changed due to the ethnic tensions. That especially affected people in the fields of medical and social science research. Even if a researcher could get to the site where they were conducting a trial of a drug or a survey to determine demand for a crop variety, they dared not go if it was within the community of a rival ethnicity. One researcher, who took the name of her Kikuyu husband, no longer uses it when she goes into the field. Her field sites are in Western Kenya where Luos and other groups were driving out Kikuyus.

Like other Kenyans, students witnessed atrocities. In the western Rift Valley, Kibet saw a mob kill an old man as he climbed a fence to reach the safety of a police station. Much of the violence was perpetrated by the 'idle' youth—young, jobless, hungry, and not enrolled in higher education. A common narrative during the violence was that political factions paid this demographic to carry out violent acts. A young man would supposedly receive 10,000 Kenyan shillings (roughly \$100) for bringing the ear of someone they'd killed, and 30,000 shillings for burning a house. Kibet says he heard young people plotting and bragging about fights that they had been, people they had killed, and houses they had burned.

Many students were not able to get back to their studies for the start of the semester. Non-Kikuyu students from the Rift Valley faced a perilous journey through the Central Province if they needed to return to a university in Nairobi. Kibet says that he witnessed gangs of Kikuyu youth dragging non-Kikuyus off public buses and into the woods.

Most universities delayed the start of the term. At the University of Nairobi, the delay was about two weeks and inevitably affected the pattern of the semester.

Professors rushed to cover the same amount of course material as in a full-term, or skipped material then sometimes testing students on that material anyway. The situation dug into university finances. The University of Nairobi's cash flow depends on fees from part-time students who pay once term starts.

Professor-student relationships changed. New supervisors were sometimes given to masters and PhD students because previous student-supervisor pairs were from rival ethnic groups. As a result of this, research projects and topics changed, or were cancelled. Allegations arose that grades had become based on ethnicity more than merit. Professors had to take time in class to discuss their grading criteria and rubrics to quell these issues. One history professor told his students, "Although I am from another community, when I mark your essays it will surely be fair."

### **Kenya's Wise Men**

Besides being affected by the unrest, universities and research institutes and the people that make up these institutions in many cases also aided the afflicted and actively tried to bring about reconciliation. Administrators sought as much as possible to turn campuses into safe havens for students from all ethnic groups. As somewhat closed systems, universities could control their own populations better than in the chaotic scenes in surrounding communities.

When campuses re-opened for classes, administrators required that lecturers talk to students about the ethnic violence and tried to minimize political posturing on campus. As one professor put it, "The vice chancellor more or less told the faculty to preach unity and understanding, and they didn't want anybody giving speeches with any political undertones. Because that could trigger ill feeling and instability in the institution." One professor stated that this "eased the tension." Another professor commented, "Over time, you build bridges in class." Universities provided food for students who lost their homes and/or families in the violence or if for reasons related to the unrest they could not afford to eat.

Similar formal and informal acts of support occurred at research institutes. Directors mandated that staff attend peace-building seminars. Researchers would keep in touch via text message with colleagues from different ethnic groups who had fled for safety, updating them on the situation at the institute and indicating when it was safe to return. Some researchers did what they could to help protect their colleagues from raiding mobs, despite being from rival ethnic groups. For instance, an acting director of a national medical institute who was a Luo taught a Kikuyu researcher a local Luo greeting so that he might be able to avoid being targeted if encountered by angry Luo youth.

Administrators, professors, and researchers also tried to negotiate peace within the wider community on whatever scale that they could. The vice chancellor of one

college in the Rift Valley intervened “when a warrior came for blood” by negotiating for a cow to be sacrificed instead. Some administrators and professors ventured out into the surrounding communities to engage with those on all sides of the conflict. They believed that their status as learned members of the society could trump their ethnic identities and they could be neutral representatives in local negotiations. One professor, because of his experience working with and teaching young people, decided to go to meetings of local youth groups to discuss peace and reconciliation.

Murimi’s professor tells such a story. Many people witnessed youth being paid to commit violent acts but stood idly by. This professor was able to interrupt these transactions, at least temporarily, by asserting his status as a community elder. When a group of women came to pay youth to commit violence, the professor intercepted one of the young men afterwards. “As the leaders of this community, we are not going to allow you to do that kind of thing,” he told the young man. The professor believes that his intervention succeeded because of social ties he has built with the young people of the area.

After the formal peace process got underway, many professors and researchers brainstormed how they could promote political and ethnic reconciliation in the future. Some researchers thought that simply doing their work was the most important thing that they could do to contribute to political stability; to them, their research is a form of civic activism.

Scientific researchers framed the conflict as being fundamentally about land and resource scarcity. And they feel to address that scarcity is one of the ultimate goals of their work. Creating knowledge about better land management techniques, or designing new crops that can be more productive on the same amount of land, might lessen the tensions created by shrinking farmland. As one agricultural researcher put it, “My job is to tell you how to get more food.” Similarly, studying the vectors that spread diseases, like the mosquitos that cause malaria, would help stop these diseases rampaging through overpopulated areas of land.

Many in Kenya’s knowledge system also see higher education as a key factor in the long-term solution to conflict. Education is understood as a way to prepare youth for constructive employment and decrease the number of young men and women who are unemployed and hungry—a part of Kenyan society that participated in some of the worst violence. Some professors took this message directly to the village. “You don’t need your neighbor’s land, you need an education,” one professor told a group of young Kenyans.

These are noble notions, but there is obviously a limit to how deeply and quickly the knowledge system can be a force for peace. Even when researchers succeed in developing a new seed, vaccine, or other technology, there is no guarantee that the

people who need it will be able to buy it, or otherwise have access to it. Better use of land does not alter the power relationships between ethnic groups with attachments to the land. Demand for higher education is increasing and not all Kenyans can enter university. Furthermore, education does not guarantee employment upon graduation.

The aftermath of the unrest witnessed some individual instances in which knowledge did help rebuild relationships. When Murimi and his neighbor made their own peace, it stemmed from the mutual acknowledgement of their symbiotic relationship. Murimi's neighbor has more land and animals, but Murimi has the knowledge to maximize the benefits of these resources.

Kibet has successfully finished his studies and his parents are proud of him. He still looks forward to receiving his acre of land from his father, but he sees higher education as a way out of the shrinking land problem. He finds occasional work as a research assistant with former professors at his university and is considering a post-graduate education in Kenya or abroad.

Kenya's knowledge system slowly returned to business after the peace agreement. However, some tensions and long-term effects remain. Some researchers never returned to their jobs. There are still campus arguments about which side was guilty of more vote rigging or perpetrated more violence.

Yet, there seems to be broad agreement on one important point: Kenya's two-month crisis hurt everyone, and damaged the knowledge system. The events in Kenya show how political unrest can severely disrupt education and reduce technological and innovative capabilities. The crisis also demonstrated the role that higher education and research can play in strengthening a nation's democratic ethos.