

Kenyans Learn to Preserve the Environment and Grow Income



Students in Malindi, Kenya, watch ARK's Stanley Baya build a platform for a casuarina tree nursery as part of the organization's environmental education program. Fast-growing casuarina trees make excellent building material and are grown as a source of income.

Overview

Though poor Kenyans rely on nature for much of their sustenance, they often lack knowledge to protect the natural environment. This project provides education on natural resources, training in environmentally friendly livelihoods and scholarships for poor children, funded in part by increased tourist revenue at Kenya's natural attractions. Thousands of students, teachers and parents will gain practical understanding of conserving natural resources, while hundreds of families will learn ecologically sound ways to generate income.

Expected Life Change Results

An investment of \$49,700 expands ARK's programs providing environmental education, secondary-school scholarships and help generating additional income to Kenyan students and families. Expected Life Change:

- ▶ 8,620 students build a lasting, practical understanding of conservation, taking steps with their families to conserve water, energy and the environment
- 1,260 parents and teachers learn about the importance of conservation, as well as techniques to conserve local resources and improve livelihoods
- ▶ 200 people adopting new technologies for conservation and income generation
- ► 128 children benefit from secondary school scholarships
- 10,208 people impacted some in multiple ways at a cost per life changed of \$4.87

What We Like About This Project

Environmental degradation is particularly damaging to poor people who depend heavily on natural resources. ARK mobilizes the local community to conserve these resources, while improving their livelihoods in ways that can be sustained in the long run. This project demonstrates that conservation and economic development are not mutually exclusive, but rather work hand-in-hand to create a sustainable future for the community and the surrounding environment. This program will expand a successful ecotourism business to increase the support of conservation awareness and activities in a biologically rich but vulnerable area. Ecotourism revenue will help provide secondaryschool scholarships, relieving a major source of economic pressure that drives some families to earn income from poaching and other environmentally destructive practices.

Project Profile

Organization:

A Rocha Kenya (ARK, The Rock Kenya) Grant amount: \$49,700 Geneva ID: 1-QPP8-0606 Project duration: 18 months

Expected Performance

DELTA SCORE



RISK-ADJUSTED RANGE

GRANT PROFILE

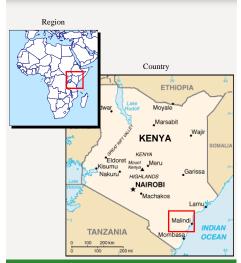
Reflects aggregate project risk

CONSERVATIVE

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AGGRESSIVE
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Please refer to the FAQ at the end of this document for an explanation of the Delta Score and Grant Profile.

Project Location



To Fund This Project

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"The rural poor depend directly on the natural resource base. This is where their pharmacy is, this is where the local supermarket is. ... We cannot afford not to invest in environmental conservation, because this is how we enhance the ability of the rural poor to have options and provide for them ways of getting out of the poverty trap."

> Stella Simiyu East African Herbarium National Museums of Kenya

Need — The Problem and Effects

The Arabuko-Sokoke Forest is the largest remaining dry coastal forest in East Africa. Much is at stake in terms of its valuable biodiversity. The forest's three distinct vegetation types provide habitats for six threatened bird species – one of them endemic, or unique to the region – as well as rare species of butterflies and more than 600 species of plants.

The Arabuko-Sokoke Forest covers 162 square miles near the Indian Ocean in Kilifi and Malindi districts of Kenya's Coast province, 68 miles north of Mombasa. It is one of Kenya's last remaining indigenous forests, the largest and most intact coastal forest in East Africa and by far the largest remnant of the forests that once dominated Kenya's coastal fringe.

Though it covers less than 1% of Kenya's area, 20% of the country's bird species and about 30% of its butterflies have been recorded in the forest. At least 24 rare or endemic species of birds, mammals and butterflies are restricted to this stretch of coast, making the forest a key part of the East African Coastal Forests Endemic Bird Area. However, forest resources have been seriously depleted by exploitation and continue to decline. Local inhabitants' extreme poverty results in heavy subsistence demands, especially for firewood and building materials, as well as poaching of animals. These activities endanger forest resources that have helped support communities, leading to a vicious cycle of degradation all too often seen in tropical forests, according to an online report by BirdLife International. The Cambridge, U.K.-based organization is a member of the Arabuko-Sokoke Forest Management Team responsible for the park's preservation.

East Africa's coastal forests are the traditional home of the Sanya people, who hunt animals and survive on natural resources. People no longer live in the Arabuko-Sokoke Forest, but a large number of people, mostly of the Giriama ethnic group, now live outside the forest's boundaries. About 104,000 people live in some 50 villages bordering the forest. Most are subsistence farmers, growing maize, cassava and beans for themselves and their families.

Education, especially at the secondary school level, is a luxury for most people living around Arabuko-Sokoke Forest and the adjoining Mida Creek, one of Africa's largest mangrove creeks. Primary-school tuition is subsidized by the government, but secondary school is not affordable for most families; average monthly income in 1991 was \$5 to \$10, while typical monthly fees for secondary school range from \$10 to \$13, according to a 2002 report by the Kenya Bureau of Statistics. In 2000, 23,000 out of 25,000 Malindi district children who qualified for secondary school did not attend, according to the report. Most people around the forest and creek remain bound by poverty and cannot afford the education which would offer them the opportunity of a better standard of living.

Local service alternatatives

Few if any other ecotourism programs operate in this region. The Nairobi, Kenya-based Wildlife Clubs of Kenya (WCK) is involved with environmental education in local schools, working in collaboration with ARK. However, WCK only visits the schools once a year, while ARK is local so its environmental education program and activities with student wildlife clubs are ongoing. Watamu, Kenya-based Local Ocean Trust also works among students and local communities, but with a focus limited to mangrove ecosystems and in a different region than ARK.

There are three other scholarship programs in the area, according to an ARK report verified by Robert Morrison, Geneva Global associate sector manager for economic empowerment. The Constituencies Development Fund (CDF) is a government-funded program that provides merit-based scholarships primarily in its local area of Nairobi. The Nairobi-based Associazione Ticino Kenya Youth Education operates within a small radius in Malindi and Kilifi districts. Goshi Community Development Project (GOCODEP), Goshi, Kenya, is a community-led initiative that works only in the Goshi area. ARK has good relationships

Local Perspectives

"The two main problems confronting the conservation and management of forests are competition for land and an increasing demand for a wide range of forest goods and services. The pressure on forest land and the growing stock comes from two clearly defined but overlapping user groups: the forest-adjacent communities, who use the forest as a resource to supplement their economic activities, and the small- or large-scale commercial users, whose main market for forest products is the urban areas. The pressure exerted will, if not addressed appropriately, impact negatively on the object of sustainability in forest management. This has put in jeopardy the gains already made in alleviating the poverty situation in the country," says Francis Muthaura, permanent secretary, Kenya Ministry of Environment and Natural Resources.

"If you look at Africa, for example, the rural poor depend directly on the natural resource base. This is where their pharmacy is, this is where the local supermarket is, this is where the do-ityourself store is, this is in fact their fuel station, their power company, their water company. What would happen to you if these things were removed from your local neighborhood? Therefore we cannot afford not to invest in environmental conservation, because this is how we enhance the ability of the rural poor to have options and provide for them ways of getting out of the poverty trap," says Stella Simiyu, senior research scientist in plant conservation at the National Museums of Kenya's East African Herbarium. She serves on ARK's National Committee and is an ARI trustee.

with these groups, but its programs rarely overlap with theirs. ARK does ensure that none of its scholarship students also receive scholarships from CDF or GOCODEP.

Vision — In Their Own Words

"While talking with an elder [in the community] who had asked me to raise the awareness of the Arabuko-Sokoke Forest and bring more tourists in, I asked him, 'What profit will that be to the community? It will not work without benefiting the people.' He was the one who suggested establishing a [scholarship] fund. . . . We learned that nearby Kilifi district is the second poorest in all of Kenya. In Malindi district, 92% of children who qualify at the end of primary school don't go on to secondary school basically for lack of school fees. We set up a bursary fund [to provide scholarships for secondary school education] that was linked closely to the forest so that people would see that the money was coming through the forest, therefore making them more likely to care for it. We saw very clearly that the forest and the creek were being degraded by local people for tinder or poles for building or trapping animals. It may have been driven by people from far away but it was being carried out by local people. We saw if we could help them . . . with their cost of living – paying for school – then that would help reduce the pressure on the forest. People can live off the land but when they have cash needs – like school fees – then there is no way for them to do it," says Colin Jackson, ARK director.

"Children are adored and influential in society; [they] are agents of change in society, more than is ordinarily recognized. If you talk to leaders in world environmental work [you'll discover that] someone taught them as a child. ... A guiding principle at A Rocha is that what is good for the environment is also good for the people in the environment. Conflict models [where you must choose to help either the environment or the people] end up failing. Finding solutions for both groups isn't easy, but that's why we're committed to a long term approach," says Peter Harris, international director, A Rocha International (ARI). The Cambridge, U.K.-based Christian nature conservation organization includes national teams in 15 countries.

Strategy — How to Meet the Need

Organization background

ARK opened the Mwamba Bird Observatory and Field Study Center in Watamu village in 2002. By working with local communities, ARK aims to achieve long-term conservation of threatened habitats and species in the Malindi-Watamu area. "ARK is a conservation organization working for the responsible care of God's creation through sustainable, community-based programs, scientific research and monitoring and environmental education. We seek to demonstrate God's love for his world in practical ways through these programs, and in so doing to also raise the standard of living for the impoverished communities we are involved with through improved education opportunities and the introduction of appropriate technologies," Jackson says. Eighty percent of governance and management are Africans. ARK has received funds from the U.N. Development Program's Global Environment Facility Small Grants Program-Kenya.

Program design and track record

Environmental education for children: ARK's environmental education officer works with wildlife clubs in schools and trains teachers to coordinate and oversee educational activities, and to incorporate lessons on environmental care into school curricula. The ARK environmental education program is run in 54 primary and secondary schools with more than 39,000 students around Arabuko-Sokoke Forest. Children build a lasting practical understanding and awareness of conservation, leading to behavioral change for themselves and their families. The program does not aim for short-term, immediate lifestyle impacts but rather to build an understanding and awareness that will remain with the children throughout their lives. Children often tell their parents about what they have been learning and try to persuade them to do things differently. Wildlife clubs are set up mostly in pri-



References

"[ARK has] a very good reputation within the conservation community. [Director Colin Jackson] in particular is an enthusiast, likes a lot to conserve biodiversity and to try as much as is possible or practical to use religion to garner support for conservation.... [Colin] has a passion for conservation of nature and in particular the Arabuko-Sokoke Forest. He leads the monitoring team which is composed of local community and local government for the benefit of the local people. He has developed [an] ecotourism [program] whose proceeds go to AS-SETS. ... Because children are unable to go to secondary schools, the benefits of ASSETS have [helped many children]. ... [Stanley Baya, ASSETS coordinator] strikes me as someone who is forward-looking, a very good personality, competent, able to do his job and achieve results," says Paul Matiku, executive director of Nairobi-based Nature Kenya, part of the East Africa Natural History Society. Nature Kenya works with ARK in the Arabuko-Sokoke Forest area, mobilizing local communities and government to conserve endangered natural resources.

"[ARK] seeks to raise funds that allow needy children to attend school. Further, the education program has a strong environmental component in its objective of raising the community's awareness of the value of conserving the rich but endangered biodiversity. ... The government of Kenya fully supports the work of ARK," says Ambassador Peter O. Ole Nkuraiyia, permanent secretary, Kenya Ministry of East African and Regional Cooperation. mary schools, and typically have 30 to 50 members. Activities are coordinated by teachers and supported by ARK and Wildlife Clubs of Kenya.

The curriculum covers four key areas:

- Water: Students learn the various sources and uses of water, and how damage to resources affect people and the environment. Lessons cover different types of pollution, their effects on livelihoods and effects of poor soil conservation such as erosion, as well as water conservation methods for home and school.
- **Energy:** Lessons cover types and sources of energy, particularly those familiar to students such as such as firewood and charcoal, as well as measures such as energy-saving stoves which let families spend less on fuel while conserving energy.
- Environment: Since students live near a large forest, lessons stress the importance of trees and forests to the health of the environment. Students learn about planting trees, establishing nurseries and keeping wood lots for timber and firewood. Practical demonstrations show the positive impacts of such activities. Students learn about sustainable ways to use the environment, such as butterfly farming, beekeeping and harvesting of herbs all of which reduce pressure on the local environment while helping raise standards of living.
- **Biodiversity:** Students learn about the richness and importance of biodiversity globally and locally, and about the interdependence of ecosystems and how humans are affected, particularly in an area where people live off the land. Students gain a deeper appreciation of the wonders of creation, such as mimicry by butterflies and plants to avoid predators, migration of birds and survival strategies for animals and insects.

Environmental education for adults: Through education, ARK hopes to conserve and protect the forest while improving livelihoods. Working closely with local government, ARK has been proactive in developing and teaching alternative technologies and incomegenerating activities, training a total of 828 people in technologies such as:

- Fireless cookers: ARK teaches how to make and use these fuel-efficient cookers, which cook food using self-contained heat in an insulated basket significantly reducing the amount of firewood needed as well as time required to gather firewood and tend fires.
- **Energy-saving jikos:** Easily made of local clay, these cookers dramatically reduce the amount of firewood required and smoke produced.
- **Recycling plastic bags:** Old plastic bags are cut into strips and woven into table mats, baskets, hats, shower curtains or floor mats, recycling waste while generating income for those who sell the items.

ARK also works with local community-based organizations to develop environmentally friendly income-generating projects. ARK believes that people need practical alternatives to exploiting the forest in order to meet their financial needs. Several projects are underway:

- **Kipepeo Project:** "Kipepeo" is the Swahili word for butterfly. Farmers are trained to harvest butterflies in the forest using nets, take them home and keep them in cages. The butterflies lay eggs in the cages, and the farmers sell the pupae to the project, which in turn sells them to live butterfly displays in Europe and North America. This project has been shown to be free of negative environmental impacts.
- **Beekeeping:** ARK provides community organizations with modern bee hives and training in harvesting. Traditionally, farmers cut down trees and used fire and smoke to drive off bees so honey could be harvested. Now, farmers can keep bees without cutting trees, killing bees and possibly starting forest fires.
- Sustainable harvesting of herbs and wild fruit: Training focuses on harvesting only small quantities as needed, preserving the plants for future harvests, rather than the traditional method of uprooting the entire plant.

In partnership with the Arabuko-Sokoke Forest Management Team, ARK's environmental education program has resulted in the creation of seven businesses in butterfly raising, beekeeping and herb harvesting.

Reference

"They are doing [environmental education] at my school. They have been able to implement conservation for the forest and nearby creek. Their talks help create awareness in the community. The other day there was a talk on conservation and planting, to make tree use sustainable. [Children] have their [tree] nurseries [at school and at home]. ... [Environmental education] is a continuous process; [the children] also help to share the same message they learn at school to other people so that the people around the schools learn as well. ARK is doing a good job. It helps children from poor backgrounds; through ARK they are able to go to secondary school," says Kanundu Charo Mgumbao, head teacher, Mida Primary School, Mida, Kenya

Arabuko-Sokoke Schools and Ecotourism Scheme (ASSETS). Coordinated by ARK, ASSETS is overseen by a committee including representatives of government agencies Kenya Wildlife Service, Forestry Department, Kenya Forestry Research Institute and National Museums of Kenya, as well as the Arabuko-Sokoke Forest Adjacent Dwellers Association (ASFADA) and other community organizations. ASSETS programs include:

- Ecotourism: ARK maintains a blind for observing birds and a boarded walkway at Mida Creek. These structures feature interpretive displays that teach the importance and interdependence of the local ecosystem, encouraging conservation. ASSETS has also developed a program to train nature guides, providing local residents with an opportunity to earn income. A total of 18 guides have been trained, of which 15 are employed.
- Scholarships: Children are eligible for scholarships covering up to 50% of their school fees; scholarships average about \$100. No full-tuition scholarships are awarded, in order to prevent the development of a culture of dependence. However, in special cases children have been awarded scholarships exceeding 50% of school fees, based on extreme financial need and scholastic excellence. The scholarship program is funded by ticket sales at the ecotourism facility, Kipepeo Project revenues, contributions from beneficiaries and donations from tourists, local businesses and others. A total of 101 children from four primary schools are currently being supported for their four years of secondary school.

Schools and families benefiting from the ASSETS program agree to start wood lots and tree nurseries to contribute to local reforestation. Primary schools helped start five nurseries; children and families participating in environmental education and ASSETS programs planted 30,000 trees and 1,000 coastal mangrove plants. The trees planted ultimately provide a source of firewood and timber for local use or for sale. The need for cutting indigenous trees in the forest and creek is greatly reduced, and the new growth improves the area's ecosystem for wildlife.

Proposed Action – What This Project Will Do

Environmental education for children: This grant will expand the environmental education program to 10 new schools, training teachers and reaching 8,620 students. Ten student wildlife clubs, one in each school, will be formed or strengthened, with a total membership of 423 students. Children in the wildlife clubs and ASSETS program will plant trees.

This expansion will require the hiring of a full-time environmental education coordinator, as well as workshops and follow-up meetings with community leaders, teachers and parents. Students in wildlife clubs will undergo mid-term and year-end reviews of their work progress and participation in the environmental education program. ARK staff with meet individually with 50 students, about five from each school, to evaluate how each student has understood the course materials and hopes to apply this knowledge.

Environmental education for adults: ARK will work with four parent-teacher associations in four schools, providing an ARK staff member to speak at association meetings on the importance of caring for the environment. Parent-teacher associations meet about six times a year; about 300 parents and 15 teachers attend each association's meetings. As a result, 1,260 parents and teachers will learn about the importance of conservation, as well as techniques to conserve their local resources and improve their living standards.

In addition, ARK will present alternative technologies and income-generating activities at local meetings of ASFADA, a community organization comprised of local farmers who rely on the forest for herbs, firewood, timber, game meat and fruits. ASFADA comprises six zones, each one working closely with smaller community-based organizations in periodic community meetings. An anticipated 200 people will adopt new alternative technologies.

ASSETS program: A new tree-viewing platform with interpretive displays will be added in the forest the forest's Karacha area. The new platform is expected to boost tourism while



raising awareness of the importance of conserving trees. According to the Arabuko-Sokoke Forest Tourism and Development Plan, improving the quality of visitors' experiences can enhance tourism to the forest. The plan includes tree-viewing platforms and interpretive materials as opportunities for development.

The current location of the ASSETS office makes it difficult for beneficiaries to access, and does not provide a visible reminder to the public that ecotourism revenue supports AS-SETS programs. This grant will pay for the construction of an office and visitor display area. Students will be able to see how protecting the forest and the resulting ecotourism helps provide scholarships, while tourists will see how their support benefits students. The office will also be used for community awareness seminars and as a training site for people learning alternative, environmentally friendly technologies.

Additionally, 128 vulnerable children will receive four-year secondary school scholarships – a key strategy for developing the community, giving the next generation hope of rising from poverty.

Many of the scholarship students will attend secondary schools far from home, but will continue with ARK's environmental education program through a newly developed correspondence course and sessions during their home visits, as evidenced by ARK reports of student participation and attendance.

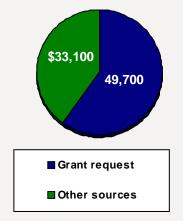
By increasing tourism revenues, this grant helps ARK toward its 2012 goal of providing scholarships to about 2,800 children from all 36 primary schools within three miles of Arabuko-Sokoke Forest. ARK aims by 2012 to triple its current earnings from tourism to \$15,000 per year.

Budget: \$82,800

Total budget for this project is \$82,800, of which this grant will cover \$49,700. Of the remaining \$33,100, \$28,100 is already committed from other sources and \$5,000 will be raised from donations.

Item	Grant amount	Other sources	Total(\$)
ASSETS program			
Scholarships for 128 students	10,000	3,000	13,000
Office construction	10,000		10,000
Administration and promotion	5,020	16,100	21,120
Transportation	4,400		4,400
Office equipment	4,100	4,000	8,100
Tree-viewing platform	3,000	5,500	8,500
Tree-planting program	2,500	4,500	7,000
Environmental education progr	am		
Coordinator salary	3,600		3,600
School, community meetings	3,434		3,434
Community, teacher workshops	3,002		3,002
Materials	644		644
Total	49,700	33,100	82,800

Project Budget



A Changed Life

"When I was young I used to poach small birds by trapping them and shooting them. We used to take our animals for grazing. ... Reaching the grazing site, we just [gave] the animals to our young kids and then we converged inside the forest to poach some animals. In those olden days, my parents used to burn charcoal for fuel. They used to cut down the big and hardwood trees so as to make hard charcoals. Hardwood is better because it makes the charcoal more strong and firm than softwood. After we have learnt from Mr. Tsofa [Mweni, ARK environmental education officer], then we passed that message. ... explaining the importance of forest conservation. We learned that conserving the environment is a way of helping ourselves. ... in our lifetimes. It also helps us by getting jobs," says Cleophass Sulubu, 15, a participant in ARK's environmental education program in Mijomboni Primary School.



Cleophass Sulubu accompanies his sister as she cooks ugali corn meal for lunch, using firewood instead of charcoal — a method that conserves native hardwoods.

Evaluation Metrics

Geneva Global's forecast of results is located on the first page of this report. At the conclusion of the project, Geneva Global will issue a report comparing actual results with:

- 8,620 students in 10 schools near Arabuko-Sokoke Forest building a lasting, practical understanding of conservation through the incorporation of ARK's environmental education program into their regular curriculum, as evidenced by an ARK tally of students reached and testimonies from 20 families indicating steps taken by children and families to conserve water, energy and the environment
- 1,260 parents and teachers from parent-teacher associations in four schools learning about the importance of conservation, as well as techniques to conserve local resources and improve livelihoods, as evidenced by an ARK tally of association meeting attendance and at least 10 testimonies
- 400 students joining school wildlife clubs, as indicated by an ARK tally of club membership
- 200 members of community organizations adopting alternative technologies for conservation and income generation, as indicated by ARK reports from visits to community organizations and beneficiaries and testimonies from at least one family adopting each of the following: fireless cookers, jikos, plastic bag recycling, beekeeping, butterfly raising, and harvesting herbs or wild fruit
- 128 vulnerable children benefiting from four-year secondary school scholarships, as evidenced by an ARK tally of scholarships granted, as well as an ARK report based on school records and regular visits by ARK staff with children and families indicating satisfactory school performance

Geneva Global Services

Project discovery. In consultation with field experts, Geneva Global finds superior programs that correct situations of the greatest human need.

Field investigation. References are checked with independent sources who know the organization.

Site visit. Before recommending a project, a Geneva Global staff person or Geneva Global Network member visits the site to verify the information we gather.

Desk research. Best practices and other reference information are used as yardsticks to measure the project.

Peer review. During research, information gathered and the description prepared must pass three quality control checks.

Expert review. A Geneva Global sector manager checks findings and recommendations. **Deal structure.** A Geneva Global researcher confers with the implementer to reach agreement on expected results, timetable and criteria for evaluation, use of funds and budget.

When you fund this project, Geneva Global will:

Document the agreement. Before money is sent to the project, a Memorandum of Understanding is signed that details expected results, timelines and acceptable uses of funds. **Assist with international funds transfers.** As you require, Geneva Global will simply provide wire transfer instructions or will handle the entire process on your behalf. **Obtain receipt of funds.** Geneva Global confirms when grant funds arrive with the implementer.

Check progress. Early in the project, usually about 90 days, Geneva Global confirms that the program is proceeding according to plan. The lead analyst is available to the implementer for advice and consultation throughout the project.

Measure results. Shortly after conclusion of the project, Geneva Global collects data from the implementer and compiles a concise analysis of project outcomes and lessons learned. For every project you fund, you will receive a Geneva Global Results Report.



Depth Analysis

Urgency: Conserving natural resources is an urgent need in the communities surrounding Arabuko-Sokoke Forest. Families unreached by ARK's program continue to deplete the forest of trees, plants and wildlife for their own survival, endangering the future of East Africa's largest remaining dry coastal forest. Enabling children to go to secondary school is a vital step toward rising out of poverty and ultimately the growth of the community. Score: medium high.

Need: Learning how to conserve resources enables people to live sustainably and improve quality of life; depleting the environment leads to deeper poverty when resources are no longer available. The future employability of children – in jobs that can sustain them and their families – depends in large part on their education. Score: medium high.

Extent: ARK's programs in conservation reach all levels of the community – schools, civic organizations and local government – mobilizing people to take action. Though more and more people are choosing to change their ways when they see the benefits of conservation, it still must be chosen by the people in order to grow in effectiveness. Score: medium.

Permanence: Taking steps to conserve has lasting effects for both the family and the environment. The family learns to manage the resources around them so that they can sustain or improve their living standards while preserving the environment. Score: high.

Intensity: ARK's programs build the capacity of local teachers, parents and civic leaders to carry out environmental education and environmentally friendly income-generating activities. ARK staff monitor individual children's progress and meet monthly with leaders of community organizations, parents and teachers. Score: medium low.

Risk Analysis

Concept: ARK's programs counter the widely held belief that investing in conservation conflicts with investing in people's livelihoods. They have proven over the years that conserving natural resources – many of which are essential to the livelihoods of the poor – has community-wide benefits. Risk: low.

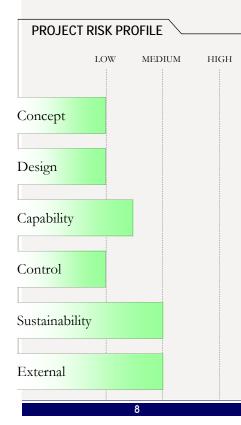
Design: ARK has had a considerable impact on the community: tourism is increasingly drawn to the area, children grow up learning to conserve and influence their families to follow suit, local and regional government collaborate with ARK and community organizations learn to improve income generation through environmentally sustainable methods. Stakeholders are influenced at many levels, leading to a very effective program. Risk: low.

Capability: ARK has demonstrated the skills required to operate this project, and will hire an Environment Education Coordinator to manage expansion. Risk: medium low.

Control: ARK has stable management, independent governance, externally audited financial statements, secure fund transfer measures. Risk: low.

Sustainability: ARK's plan for sustaining the ASSETS scholarship program for student will be helped greatly through this grant, but will not be fully self-sustaining for some years. ARK has been successful in the past in raising funds for its environmental education programs. Increasing awareness of the dangers of environmental degradation and its impact on the poor is beginning to mobilize more funds toward conservation projects. Risk: medium.

External risk: Some community members may resist giving up traditional practices. Though tourism is experiencing growth, market volatility in the market could affect income supporting the ASSETS program. Risk: medium.



ANALYSIS

A Changed Life

"I remember the day I went to collect my [final examination results] at my former primary school. I had been called to Lenana School, a nationallevel school in Nairobi. However, my joy was short-lived when my eyes wandered through the fee structure, detailing thousands of shillings. I felt so discouraged. Becoming a secondary school student became an impossible dream due to the fact that my family is financially unstable. But I gathered my courage and on that very day, accompanied by my father, I presented my results to the ASSETS team. ... They congratulated me and were very impressed by my results. The ASSETS team interviewed my father about the financial status of my family. He has financial constraints and desperately needed help. Seeing that my father was helpless, the ASSETS team asked him to give the little he [could] and assured him of looking into his wishes.... ASSETS has changed my life. When I look back on my situation in primary school, I see it wasn't an easy one. I had no source of money to rely on and it seemed primary school would never end. Later my teachers were kind enough to pay for me whenever I worked hard. Perhaps that was what encouraged me to be the highest scoring student throughout primary. Now all this fear, discouragement and uncertainty about completing my secondary school education has gone. AS-SETS has stepped in and actively contributes to my academic success. AS-SETS has revived my vision and my future looks bright," says Oscar Mwaro of Mijomboni village, about two miles from Arabuko-Sokoke Forest.

Pro

- Creates a mechanism for future sustainability
- Scalable, replicable model can be used in other environmentally sensitive areas
- Demonstrates the vital interaction of conservation with improving livelihoods for the poor
- Comprehensive approach educates and mobilizes people to conserve resources in their own best interests

Con

- Government may move to control money generated through the program; however, ARK's strong relationships with government stakeholders mitigates this risk
- Competition with other tourist destinations and political instability in Kenya could reduce tourism and hence limit program revenue



SUPPORTING DATA



Kenya

Population: 33.5 million Population younger than 15: 43% Average annual growth rate: 2.5% (compared with 1.2% in the U.S.) Urban population: 40% Languages: English (official), Kiswahili (official), numerous indigenous languages (CIA World Factbook) Life expectancy: female 47, male 49

Maternal mortality (deaths per 100,000 live births): 1,000 (compared with 17 in the U.S.)

Infant mortality (deaths per 1,000 live births): 79 (compared with 7 in the U.S.) Under-5 mortality (deaths per 1,000 live births): 120 (compared with 8 in the U.S.)

HIV prevalence (ages 15-49): 6.1% in 2005 (6.7% in 2001)

People with HIV: 1.3 million in 2005 (1.2 million in 2001)

HIV-infected children (0-14): 150,000 in 2005 (100,000 in 2001)

AIDS orphans: 1.1million in 2005 (650,000 in 2001)

HIV-related deaths (annual): 140,000 in 2005 (150,000 in 2001)

Literacy (15 and older): female 70%, male 78%

Gross national income per capita: \$480

Population living on less than \$1 daily: 23%

Population living on less than \$2 daily: 58%

Malnutrition among children under 5: 20% (compared with 2% in the U.S.) Mothers ages 15-19 (births per 1,000 females): 96 (compared with 50 in the U.S.)

Children in the labor force (ages 7-14): 7% (1998, compared with 0% in the U.S.) Religions: Christian 80%, traditional ethnic 11%, Muslim 7%, Baha'i 1%, other 1% (World Christian Database) 2005 U.N. Human Development Index rank: 154 of 177 countries

HIV/AIDS data are from UNAIDS. All other data are from the World Bank unless otherwise noted.

Organization

A Rocha Kenya (ARK, The Rock Kenya) Nairobi, Kenya

Founded 1999

Affiliations

- A Rocha International, Cambridge, United Kingdom
- Nature Kenya, Nairobi, Kenya
- National Museums of Kenya, Nairobi
- Kenya Wildlife Service, Nairobi
- Wildlife Clubs of Kenya, Nairobi
- Forest Department, Nairobi
- U.N. Development Program's Global Environment Facility Small Grants Program-Kenya, Nairobi
- Brackenhurst Environmental Program, Nairobi
- Kipepeo Project, Watamu, Kenya
- Turtle Bay Beach Club, Watamu
- Watamu Turtle Watch, Watamu
- Arabuko-Sokoke Forest Adjacent Dwellers Association, Gede, Kenya
- Friends of Arabuko-Sokoke Forest, Gede
- Arabuko-Sokoke Guides Association, Gede
- District Education Office, Ministry of Education, Malindi, Kenya
- Mida Creek Conservation Committee, Mida, Kenya

Scale, programs and staff

Description	Inception year	Number of people helped in 2005	Staff
Arabuko-Sokoke Schools and Ecot- ourism Scheme (ASSETS)	2002	101 scholarship students	Six full-time, paid One full-time volunteer Three part-time volunteers
Environmental edu- cation	2002	39,690 students	One full-time, paid One full-time volunteer Six part-time volunteers

ARK also carries out scientific research, collecting baseline ornithological data for research and protection of vulnerable sites), and offers scientific training, workshops and a visitor center at its Mwamba Bird Observatory and Field Study Center.

Income	2002	%	2003	%	2004	%
A Rocha International	40,332	56	10,428	12	67,427	60
Member subscriptions, other donations	32,007	44	79,694	88	45,622	40
Total	72,339	100	90,122	100	113,049	100
Expenditures	2002	%	2003	%	2004	%
Conservation	11,711	20	4,884	7	13,195	15
Salaries	20,933	36	28,925	44	35,483	40
Administration	25,628	44	32,203	49	39,434	45
Total	58,272	100	66,012	100	88,112	100
Surplus/(deficit)	14,067		24,110		24,937	

Overall organization revenue sources (income) and spending (expenditure) in U.S. dollars*

*Exchange rates were 76.871 Kenyan shillings (KES) to \$1 in 2002, 75.75 KES to \$1 in 2003 and 77.20 KES to \$1 in 2004.

Financial statements

Prepared:	Annually
Reviewed by:	ARK National Committee
Externally audited:	Yes, year ending Dec. 31, 2004
On file at Geneva Global:	Yes
Complete bank wire transfer on file at Geneva Global:	Yes



Profiles

Colin Jackson, national director, is a Kenyan native who earned a degree in environmental science from the University of Southampton, Southampton, United Kingdom. He worked with A Rocha Portugal for four years as assistant warden, and is a research associate with the National Museums of Kenya's ornithology department.

Stanley Baya, ASSETS coordinator, is qualified as a secondary school teacher and served as head teacher at a private school in Watamu, Kenya.

Tsofa Mweni, environmental education officer, grew up in Kenya's Coast province and earned a diploma in education from Kisii Teachers' College, Kenya. He taught at several secondary schools and spent four years as environmental education officer for a forest management project funded by BirdLife International, Cambridge, United Kingdom.

Leadership

Governance

The ARK National Committee meets three to four times a year to discuss, advise on or decide issues of ARK's effective operation. Members are:

- Edwyn K. Kiptinness, chairman (external relations director, SIL International [formerly Summer Institute of Linguistics], Dallas, Texas and Wycliffe Bible Translators, Orlando, Fla.)
- Don Odera, treasurer (financial advisor)
- Craig Sorley (director, Brackenhurst Environmental Program, Baptist Church, Nairobi)
- Tom Kabii (conservation program director, World Wildlife Fund Eastern Africa Regional Program Office, Nairobi)
- Gracie N. Kalute (farmer)
- Solomon Mwangi Ngari (manager, Important Bird Areas program, Nature Kenya, Nairobi)
- Stella Simiyu, (senior research scientist, National Museums of Kenya, Nairobi)
- John Waithaka (Ecological Integrity Branch, Parks Canada, Gatineau, Canada)
- Professor Josphat Yego (director, Office of International Student Services, Eastern University, St. Davids, Pa.)
- David Thomas (program manager, BirdLife International, Cambridge, United Kingdom)

Policies

Related parties in management or governance:NoStaff and/or Board reflects spectrum of ethnic groups or tribes:YesStaff and/or Board from varied denominations or subgroups:YesWomen in supervision or management:Yes

Responsibility	Name	Title	Years of related experience	Years with organization	Years in current role
Scientific pro- gram, overall management	Colin Jack- son	National director	15	5	5
Community Conservation	Stanley Baya	ASSETS coordina- tor	3	2	2
Education and Training	Tsofa Mweni	Environ- mental education officer	6	2	2
National ad- ministration based in Nai- robi	Beatrice Kodhe	National administra- tor	10	4	4
Administration of Mwamba center	Beatrice Omondi	Mwamba administra- tor	6	4 months	4 months

Leaders

Who is Geneva Global?

Geneva Global works for donors. We are not fund-raisers for charities. We do not promote our own projects. Rather, we are a service for thoughtful donors who want measurable results from the money they give. Geneva Global provides independent research, insightful analysis and grant management so our clients can invest where their giving changes the most lives. In short, we help you accomplish more with the money you give.

What is a *Delta Score* and how is it calculated?

The Delta Score is a universal measurement that makes it possible to compare projects, regardless of type or location. The Delta Score calculates the depth and breadth of Life Change from a project and compares it to the most common form of international giving, child sponsorship. The scoring system is calibrated so a Delta Score of 1 equals successful sponsorship of one child. This means a project with a Delta Score of 7 is expected to produce seven times more Life Change than if an equivalent amount of money were spent on child sponsorships.

What do you mean by *Life Change*?

One of the most serious flaws in traditional philanthropy is the lack of ways to measure success. How do you know whether your contribution did any good? Geneva Global uses Life Change to measure success in giving. We define Life Change as a direct, material and measurable difference in the quality of a person's life. A life is changed when an AIDS orphan is integrated into a loving family, when a mother achieves economic security by starting a small business, when an infant's life is saved by a vaccine, when a girl completes her education or when a slave becomes free from bondage.

What is the *Risk Adjusted Range*?

The comparable term in investing is "volatility." Every project involves risk. We assess up to seven categories of risk. The Risk Adjusted Range shows the range of likely Delta Scores for the project based on the combined risk. A project with low total risk will have a very narrow Risk Adjusted Range (for example, 7 to 9 with a Delta Score of 8), while a project with high total risk will have a broader Risk Adjusted Range (for example, 4 to 12 with a Delta Score of 8).

What is the *Grant Profile* and how is it determined?

We only recommend projects that, based on Geneva Global's extensive experience, have acceptable levels of risk. However, tolerance for risk varies among donors. The Grant Profile is a simple way of summarizing the total risk associated with a project. What is your personal giving style? Do you have an appetite for courageous projects that operate in difficult and even dangerous situations? Or do you value stability? Geneva Global finds, researches and recommends projects that range from daring to stalwart. The Grant Profile is an at-a-glance indicator of which giving style best matches the amount of risk for a particular project.

Who pays for Geneva Global's research?

Investigating projects in foreign countries is difficult and costly. The benefits, however, are tremendous. Geneva Global clients discover they are able to obtain 10 and sometimes as much as 30 times the results compared to traditional methods of giving. The increased results far outweigh the modest professional fees Geneva Global charges. Contact your Geneva Global advisor for fee details and information about all the services you receive.

Whom do I contact to fund this project or ask questions?

Contact your Geneva Global advisor. If you don't have an advisor, please contact Joan Cortright in Client Services: 866-7-GENEVA (toll-free in the U.S.) 610-254-0000 JCortright@GenevaGlobal.com

