

CORPORATE MANAGEMENT REPORT 2023



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By: **BOSQUE COLOMBIANO FOUNDATION**

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To our esteemed sponsors, beneficiary communities and the general public,

It is with great satisfaction and a deep sense of responsibility that I write to you to share the achievements and challenges faced by the Colombian Forest Foundation during the year 2023. This management report is not only a reflection of our work and dedication, but also a testimony of the unwavering support and trust you have placed in our mission.

The year 2023 has been a period of significant growth and profound impact on our communities and the environment. One of our most notable projects has been the 'Heroes of Tomorrow' Indigenous Child Development Center. This project has not only provided a safe and enriching space for our children, but has also been a beacon of hope and a model of sustainable development that is respectful of our traditions and culture.

In addition, we have taken a giant step towards digital inclusion with the implementation of Starlink in the Sierra Nevada. This project, more than providing internet access, has opened doors to educational, health and economic development opportunities, connecting our communities with the world and vice versa.

In the field of environmental management, we have focused on climatically integrated water management. This effort has been crucial in the Sierra Nevada de Santa Marta, where we have worked hand in hand with indigenous communities to develop sustainable water management practices, thus ensuring the conservation of our natural resources for future generations.

These achievements are just part of our ongoing work. However, we are aware that there is still much to do. Climate change, deforestation and biodiversity loss are challenges that require our immediate attention and action. In this sense, we reaffirm our commitment to work tirelessly to protect our forests, our fauna and our culture.

I would like to take this opportunity to thank each of our sponsors. Your support has not only been essential for the completion of these projects, but has also been a source of inspiration and motivation for our team. To our beneficiary communities, we extend our deepest gratitude for their trust and collaboration. You are the heart of our mission and the reason for our work.

Last but not least, I want to invite the general public to join our cause. Every action counts and together we can make a significant difference in protecting our environment and supporting our communities.

We hope to continue counting on your valuable support in the coming years and together, continue building a more sustainable and prosperous future for all.

With gratitude and commitment,

General manager

BOSQUE COLOMBIANO Foundation

WATER MANAGEMENT TECHNICAL REPORT 2023

The year 2023 has been crucial for the Colombian Forest Foundation in terms of water management. Aware of the vital importance of water and forests, we have implemented several initiatives to protect and restore watersheds, especially in the Magdalena River and the Sierra Nevada de Santa Marta. This report details the activities carried out and the progress made this year.

1. Creating Healthy Watersheds

The Fuverde Corporation, in collaboration with our foundation, has worked intensely to protect and restore the watersheds of the Magdalena River. This effort includes wetland enhancement and increasing riparian buffers. With more than 50% of Colombia's drinking water originating in forests, this task is essential to safeguard water resources in the face of population growth and the consequent acceleration in forest clearing.

2. Impact on Aquatic Biodiversity

More than 300 freshwater species are at risk of extinction. Our efforts not only seek to protect drinking water, but also preserve the aquatic food chain, crucial for the survival of fish and shellfish consumed by humans. Water purity is critical to the health of the entire ecosystem.



3. Cost Reduction in Water Treatment

We have observed that a 10% increase in forest cover in watershed sources leads to a 20% decrease in downstream water treatment costs. This shows that watershed protection is a valuable and efficient investment.

4. Specific Initiatives

a. Growing Riparian Zones: In the Sierra Nevada de Santa Marta and Tayrona Park, we have implemented forest planting projects along corridors that cross farms. This reduces pollution and ensures safe habitats for species like the Bocachico.

b. Water Conservation in the Lower Magdalena River Valley: Given the importance of this region, which represents approximately half of the annual rainfall in the north of the country, our forest restoration projects have been key to reducing water runoff.

5. Resolution of Water Problems in Indigenous Communities

We work with indigenous communities in the Sierra Nevada de Santa Marta to restore trees affected by illegal mining, agriculture and unsustainable use of wood. These efforts are part of a comprehensive action plan to ensure water sustainability in these communities.

2023 has been a year of significant advances in water management. Our projects have demonstrated a positive impact on both water conservation and biodiversity protection. We will continue our commitment to work towards a sustainable future, where clean water and healthy ecosystems are a reality for everyone.

2. TECHNICAL REPORT: GENDER EQUITY AND SOCIAL JUSTICE IN FOREST AND WILDLIFE MANAGEMENT

In 2023, the Colombian Forest Foundation has continued its commitment to the conservation of biodiversity and the restoration of critical habitats. Although the main focus has been ecological conservation, the implications of these activities on gender equity and social justice are significant and deserve to be highlighted.

1. Habitat Restoration and Women's Empowerment

Habitat restoration initiatives, such as planting native trees and rebuilding forest infrastructure, offer opportunities for the economic and social empowerment of women in local communities. By involving women in these projects, the foundation not only promotes gender equality, but also ensures more inclusive and sustainable management of natural resources.

2. Species Conservation and Education for Social Justice

Conservation of endangered species, such as Saguinus oedipus, is not only crucial for biodiversity, but also serves as an educational tool to promote social justice. By educating local communities, especially young people, about the importance of biodiversity, it encourages greater awareness and respect for the environment and for the diverse cultures and genders that depend on these ecosystems.



can help ensure that their rights and ways of life are respected and protected, thereby promoting social justice and equity.

Although the Colombian Forest Foundation's primary focus is ecological conservation, its activities have significant implications in promoting gender equity and social justice. By integrating these aspects into its work, the foundation not only contributes to environmental conservation, but also promotes a more just and equitable society.

3. TECHNICAL REPORT: ACTIVITIES RELATED TO CLIMATE CHANGE IN 2023

In 2023, the Colombian Forest Foundation, through the Fuverde Corporation, has taken on a crucial role in the fight against climate change, using the power of forests to capture and store carbon dioxide emissions. This report details the activities and strategies implemented to address climate change through forest management and international cooperation.

1. Climate Smart Restoration

The Fuverde Corporation has led forest restoration efforts in large landscapes and cities, demonstrating that reforestation and forestry can be effective tools for capturing carbon. Techniques based on forestry and agroforestry processes have been developed to maximize carbon sequestration and long-term forest resilience.

2. Tree Planting in Indigenous Cities

Planting trees in indigenous urban areas has been a key strategy to absorb carbon and create significant carbon savings. These efforts are aimed at urban heat islands, where the cooling benefit is greatest, reducing energy costs by up to 30%.

3. Partnerships for Action

The Fuverde Corporation has formed a unique coalition in Colombia with the support of CARSUCRE, the University of Sucre and the Arahuac indigenous leadership. This technical panel includes a diversity of interests, from landowners to governments and academic institutions, all dedicated to finding forestry solutions to climate change.

4. Forests and Climate Change Science

In collaboration with the University of Magdalena, the Fuverde Corporation is investigating how restoration and sustainable management of forests can trap more carbon in forest soils. This effort seeks to fill a gap in the understanding of potential carbon sequestration in forests.

5. Impact of Climate Change on Forests

Climate change is negatively affecting forests, with dramatic tree mortality and changes in species composition. The foundation is addressing these challenges to adapt forests to rapid climate changes.

6. Solutions to Climate Change

The foundation has taken a national leadership role to provide forestry solutions to climate change in Colombia. More than 14% of carbon emissions from Colombia's Caribbean coast are absorbed by forests, and there is significant potential to increase this natural carbon sink.

In 2023, the Colombian Forest Foundation has demonstrated a firm commitment to fighting climate change through forest management. Restoration, research and collaboration activities have contributed significantly to carbon sequestration and the adaptation of forests to climate changes. These efforts not only benefit the environment, but also offer practical and sustainable solutions to mitigate the effects of climate change.

4. TECHNICAL REPORT: ADVANCES IN BIODIVERSITY IN 2023

In 2023, the Colombian Forest Foundation, through the Fuverde Corporation, has made significant advances in biodiversity conservation. This report highlights key initiatives and achievements in the preservation and





restoration of critical habitats for various endangered species.

1. Restoration of Critical Habitats

The Fuverde Corporation has led a mapping initiative of 4 ecological corridors and 4 subpopulations of the primate '*Saguinus oedipus*' (White-headed Tamarin) in the Sierra Nevada de Santa Marta. This primate, endemic to Colombia and declared critically endangered by the IUCN, has been the subject of studies to generate a functional biological corridor using GIS tools. This project is crucial to ensure the survival and sustainability of the species.

2. Impact of Climate Change and Development

The foundation has addressed the threat of climate change and development in biodiversity. It is estimated that species are becoming extinct at 1,000 times the natural rate, and the spread of invasive species is displacing native ones. Strategic habitat restoration is one response to these challenges.

3. Strategic Habitat Restoration

Fuverde Corporation has focused on habitat reconstruction by planting native trees and forest infrastructure. Specific projects include restoring guayacán forests for Carranchina turtles and red woodpeckers, and cedar trees for the marmoset monkey. These efforts seek to rescue species on the brink of extinction.

4. Advancement in Conservation Policy

The foundation has advanced conservation policy through advocacy and social mobilization. Dynamic coalitions have formed to influence legislation and protect threatened and endangered wildlife.

5. Studies and Conservation Plans

Studies and conservation plans have been made for several species, including the black and chestnut eagle (*Spizaetus isidori*) in the Colombian Amazon Andes, the Antillean manatee (*Trichechus manatus*) on the Caribbean coast of Colombia, the mountain tapir (*Tapirus pinchaque*) in the Colombian Andean Amazon, and the brown spider monkey (*Ateles hybridus*) in Quechua indigenous territory.

The year 2023 has witnessed significant efforts and achievements in biodiversity conservation by the Colombian Forest Foundation. Through habitat restoration, scientific research and conservation policy, the foundation is actively working to protect and preserve Colombia's rich biodiversity, facing challenges such as climate change and unsustainable development.

FINANCIAL REPORT 2023

The year 2023 has been a period of important advances and challenges for the Colombian Forest Foundation. With a total budget of USD 256,000, the foundation has managed to implement and maintain various key initiatives in forest conservation, biodiversity and the fight against climate change. This report provides a detailed view of the allocation and utilization of financial resources during the year.

1. Summary of the Total Budget

The \$256,000 annual budget has been distributed across several critical areas, including habitat restoration, research and development, education and awareness, and general administration and operations.

2. Habitat Restoration and Biodiversity Conservation

A significant part of the budget has been allocated to habitat restoration and biodiversity conservation projects. These projects include the initiative to map and restore ecological corridors for '*Saguinus oedipus*', and the planting of native trees for habitat reconstruction. These efforts require resources for field research, purchase of plants and materials, and labor.

3. Research and Development

The foundation has invested in research and development, particularly in studies related to the impact of climate change on biodiversity and the development of functional ecological corridors. These funds have covered research costs, GIS tools and technology, and collaborations with academic institutions.

4. Education and Awareness

A fraction of the budget has been used on education and awareness programs. These programs are designed to increase public understanding of the importance of forest and biodiversity conservation. The funds have been used for educational materials, workshops, seminars and awareness campaigns.



5. Administration and General Operations

General operations and administration costs include personnel expenses, office maintenance, utilities and other operating expenses. These are essential for the daily and efficient functioning of the foundation.

6. Sources of Financing

The foundation's budget comes from a combination of donations, grants, and international cooperation support. The diversification of financing sources has been key to the financial stability of the organization.

7. Efficiency and Transparency in Resource Management

The foundation has maintained a high level of efficiency and transparency in the management of its financial resources. Regular checks and audits have been implemented to ensure that every dollar is used effectively in achieving our conservation objectives.

8. Challenges and Future Perspectives

Despite significant achievements, the foundation faces continued challenges due to the increasing need for resources for large-scale projects and fluctuating funding sources. Looking ahead, the foundation will focus on increasing its fundraising efforts and seek new partnerships to expand its impact.

The year 2023 has witnessed an efficient and strategic use of the Colombian Forest Foundation budget. Through careful management and focus on key areas, we have made significant progress on our conservation goals,

despite financial challenges. We will continue to work to ensure financial sustainability and expand our impact in the years to come.

PROJECT SUMMARY 2023

HYDROPONIC CROPS PROGRAM IN INDIGENOUS COMMUNITIES IN THE SIERRA NEVADA DE SANTA MARTA, COLOMBIA

The Colombian Forest Foundation leads a comprehensive program of hydroponic crops in the indigenous communities of the Sierra Nevada de Santa Marta. This project responds to the problems of food security and environmental sustainability caused by climate change and overpopulation.

Strategic Components of the Program

The program is made up of four strategic components:

- Hydroponic Component: Advanced hydroponic farming systems will be implemented in 10 indigenous communities. These systems will allow efficient use of water and will significantly reduce the rate of deforestation, which currently reaches 15 hectares per month. It is estimated that with the adoption of this technology, food production will increase by 60%, ensuring food security for approximately 500 families.



- Educational Component: A comprehensive educational program will be designed and executed for 150 community leaders and local farmers. This component will include training, practical workshops and teaching materials that will address fundamental aspects of the hydroponic cultivation technique, as well as the promotion of sustainable practices and the appreciation of traditional indigenous knowledge related to agriculture.
- Communication Component: A community communication network will be created that will connect the 10 participating

communities. This platform will allow the exchange of successful experiences and good practices related to hydroponic cultivation, strengthening the adoption of sustainable practices throughout the region. In addition, awareness campaigns will be carried out and audiovisual materials will be produced to promote environmental conservation and the cultural value of indigenous communities.

- Sustainability Component: Recycling and composting practices will be implemented in each community. These measures will allow adequate management of organic waste and reusable materials, reducing environmental pollution. Likewise, the diversification of crops and the conservation of local species will be promoted, increasing the resilience of communities against climate change.

Objectives and Expected Benefits

The hydroponic crops program led by the Colombian Forest Foundation seeks to improve food security and environmental sustainability in the indigenous communities of the Sierra Nevada de Santa Marta. It is expected to benefit 500 families and preserve the biocultural and environmental wealth of the region. Through the implementation of sustainable practices and the strengthening of indigenous culture, the program seeks to empower communities to face the challenges of climate change and build a more resilient and prosperous future.

This program represents an innovative and sustainable approach to address environmental and social challenges in the Sierra Nevada de Santa Marta. By integrating modern technologies such as hydroponics with traditional knowledge and community participation, the project not only improves food security, but also contributes to environmental conservation and strengthening indigenous communities.

ETHNO-CLIMATICALLY INTEGRATED WATER MANAGEMENT PROGRAM IN THE COLOMBIAN AMAZON BASIN

The program proposed by the Colombian Forest Foundation aims to address the need for water security of 300 families of the Ticuna indigenous community in the Colombian Amazon basin. This strategic plan focuses on the implementation of a solar-powered water supply system, which is environmentally friendly and sustainable in the long term.



Program Components

Water Supply System Infrastructure: The program is based on the installation of 20 solar panels of 450W each, resulting in a power generation system with a capacity of 9kW. With the conservative assumption of having around 5 hours of peak sun per day, the system would generate 45kWh per day. Taking into account the inevitable energy losses due to conversion and transmission, around 40kWh would be available to the pump each day. The power system will power an efficient and robust hydraulic pump, specifically designed to work with solar energy.

This pump will transport water from a nearby source to the homes of Ticuna families within a 5 km radius.

- **Water Requirement and Supply Capacity:** With an estimated daily water requirement of 50 liters per person, the objective is to supply a total of 15,000 liters of water each day for 300 people.
- **Social Component of the Program:** In addition to the technical system, the program also has a social component. A project monitoring and management phase will be implemented to ensure successful and sustainable integration into the community. This will include training community members in the operation and maintenance of the water supply system, as well as the formation of a local water committee. This committee will be responsible for overseeing the long-term management of the system and resolving any issues that may arise. This approach has the added benefit of empowering the community by giving them skills and responsibilities that will allow them to maintain and control their own water supply.

Objectives and Expected Benefits

The program seeks not only to provide water, but also to create local infrastructure and capacities for sustainable water management in the Ticuna community. The project is expected to benefit 300 families, significantly improving their access to water and strengthening their capacity to sustainably manage this vital resource.

This program represents an innovative and sustainable approach to address water security challenges in the Colombian Amazon basin. Integrating advanced solar technology with community knowledge and participation, the project not only improves access to water, but also contributes to environmental sustainability and the empowerment of indigenous communities.

COFFEE TOURISM PLAN WITH AN INTERNET OF THINGS AND BLOCKCHAIN TECHNOLOGY PERSPECTIVE IN THE QUECHUA INDIGENOUS COMMUNITY

The Colombian Forest Foundation, in agreement with the Quechua community, has initiated an innovative coffee tourism project in Colombia, integrating Internet of Things (IoT) technology in coffee production. This project seeks to diversify the community's income and offer a unique experience to visitors, improving the efficiency and quality of coffee production and enriching the coffee tourism experience.

- Quechua Community and Coffee Farming

The Quechua community, made up of more than 300 families, has dedicated itself mainly to the cultivation of coffee and the production of traditional crafts. They live in small houses on the slopes of the mountains, surrounded by beautiful natural landscapes. They are known for their hospitality and are eager to share their culture and traditions with visitors.

- Coffee Tourism Experience

Coffee tourism offers an enriching and unique experience that allows visitors to immerse themselves in coffee culture and learn about the production process, from planting to cup. Visitors can interact with local farmers and learn firsthand about the hard work that goes into growing and producing high-quality coffee.

- Integration of IoT Technology in Coffee Production

The incorporation of IoT technology in coffee production has improved the quality and efficiency of production in the Quechua community. Sensors installed in coffee fields allow farmers to monitor soil moisture level and ambient temperature to ensure coffee grows in ideal conditions. In addition, IoT technology also makes it possible to monitor coffee maturity and optimize harvest time, resulting in better coffee quality and flavor.



Project Objectives and Benefits

This coffee tourism project with a touch of IoT technology is a unique and unforgettable experience that allows visitors to enjoy beautiful natural landscapes, learn about the culture and traditions of the Quechua community, and experience the delicious coffee produced in the region. The project seeks not only to provide a tourist experience, but also to improve coffee production and empower the Quechua community through the adoption of advanced technologies.

The Coffee Tourism Plan with an IoT and Blockchain Technology Perspective in the Quechua Indigenous Community represents an innovative approach to combine the tradition of coffee cultivation with modern technologies. This project not only improves the tourism experience and coffee production, but also contributes to the sustainable development and empowerment of the Quechua indigenous community in Colombia.

ACTION PLAN FOR THE CONSERVATION OF THE HAWKSBILL TURTLE IN COLOMBIA

BOSQUE COLOMBIA FOUNDATION; Email: officer@bosquecolombiano.org:

The Action Plan for the Conservation of the Hawksbill Turtle in Colombia is an initiative developed in recent years to protect this endangered species in different geographic areas. The management of this plan has been the responsibility of competent regional and local environmental institutions, the result of extensive consultation with experts, community organizations and NGOs.

Plan Objectives and Strategies

The general objective of the plan is to establish strategic educational, conservation, sustainability, communication and monitoring actions to conserve the populations and habitats of hawksbill turtles in Colombia. This includes institutional and community strengthening activities, development of awareness programs for the species, and promotion of research and sustainable development.

- Implementation and Participation

The implementation and execution of the plan involves all actors and society in general. It is expected that its execution will contribute to the conservation of hawksbill turtles and their critical habitats, and in turn, identify different socioeconomic alternatives for local communities that allow them to improve food security and their quality of life.

- Diagnosis and Needs

The process responds to needs identified during the participatory processes that are addressed in the diagnosis of the status of hawksbill turtles on the Caribbean coast of Colombia. The plan identifies the objectives and strategies, including the specific actions to be carried out and their metrics, as indicators of progress.

- Expected benefits

With its execution, it is expected to contribute significantly to the conservation of hawksbill turtles and their critical habitats. In addition, the plan seeks to identify socioeconomic alternatives for local communities that allow them to improve their food security and quality of life, responding to the needs identified in the participatory processes.

The Action Plan for the Conservation of the Hawksbill Turtle in Colombia is a comprehensive effort that seeks not only to protect this endangered species, but also to improve the quality of life of local communities and promote environmental sustainability. Through education, conservation, sustainability, communication and monitoring, the plan aims to conserve the populations and habitats of hawksbill turtles in the country, carrying

out institutional and community strengthening activities and promoting research and sustainable development.

CONSERVATION PLAN FOR THE MOUNTAIN TAPIR (TAPIRUS PINCHAQUE) IN THE COLOMBIAN ANDEAN AMAZON

The Conservation Plan for the Mountain Tapir in the Colombian Andean Amazon is a crucial initiative after the irrefutable confirmation of the presence of this mammal in the Department of Putumayo, using camera traps



in December 2019. This plan is essential to guarantee long-term term the existence of the mountain tapir and its habitats in the Amazon region of Colombia.

Plan Objectives and Strategies

The general objective of the plan is to establish strategic educational, conservation, sustainability, communication and monitoring actions to conserve the populations and habitats of the mountain tapir in Colombia. This includes institutional and community strengthening activities, development of awareness programs for the species, and promotion of research and sustainable development.

Implementation and Participation

The management of this Plan is the responsibility of the competent regional and local environmental institutions, being the result of extensive consultation with experts, community organizations and NGOs. However, implementation and execution involve all actors and society in general.

Diagnosis and Needs

The process responds to needs identified during the participatory processes that are addressed in the diagnosis of the status of mountain tapirs on the Caribbean coast of Colombia. The plan identifies the objectives and strategies, including the specific actions to be carried out and their metrics, as indicators of progress.

Background and Context

In January 2019, the National Program for the Conservation of the *tapirus pinchaque* in Colombia was published by the Ministry of Environment, Housing and Territorial Development, where national guidelines were established that seek to guarantee the conservation of the three species of this genus and their habitats. present in Colombia. Furthermore, in 2016, with the publication of the Red Book for the Mammals of Colombia, the most threatened species were defined, where the Colombian tapir *Tapirus pinchaque* is among those classified as most at risk or critically endangered.

Expected benefits

With its execution, it is expected to contribute significantly to the conservation of mountain tapirs and their critical habitats. In addition, the plan seeks to identify socioeconomic alternatives for local communities that allow them to improve their food security and quality of life, responding to the needs identified in the participatory processes.

The Conservation Plan for the Mountain Tapir in the Colombian Andean Amazon is a comprehensive effort that seeks not only to protect this endangered species, but also to improve the quality of life of local communities and promote environmental sustainability. Through education, conservation, sustainability, communication and monitoring, the plan aims to conserve the populations and habitats of mountain tapirs in the country, carrying out institutional and community strengthening activities and promoting research and sustainable development.

CONCLUSION

During the year 2023, the Bosque colombiano Foundation has demonstrated an exceptional and multifaceted commitment to environmental conservation, biodiversity and sustainable development. Through a series of innovative and strategic projects, the foundation has addressed critical challenges related to the conservation of endangered species, environmental sustainability, food security and the empowerment of indigenous and local communities.

One of the most notable achievements of the foundation has been the implementation of species conservation projects, such as the Action Plan for the Conservation of the Hawksbill Turtle and the Conservation Plan for the Mountain Tapir in the Colombian Andean Amazon. These projects have not only contributed to the protection of

critically endangered species, but have also engaged local communities in conservation efforts, raising awareness and encouraging sustainable practices.

In the field of environmental sustainability and food security, the foundation has been a pioneer in the implementation of innovative technologies, as evidenced in the Hydroponic Crops Program in Indigenous Communities in the Sierra Nevada de Santa Marta and the Coffee Tourism Plan with Perspective of IoT and Blockchain Technology in the Quechua Indigenous Community. These programs have not only improved the efficiency and quality of agricultural production, but have also offered sustainable economic opportunities for indigenous communities, while preserving their cultural traditions and ancestral knowledge.

The foundation has also shown a strong commitment to education and environmental awareness. Through educational programs and communication campaigns, it has worked to increase public understanding of the importance of forest and biodiversity conservation. These efforts are crucial to building a more informed society committed to environmental protection.

In terms of management and operations, the Colombian Forest Foundation has demonstrated exemplary efficiency and transparency. With an annual budget of USD 256,000, the foundation has managed to maximize the impact of its projects, ensuring that every dollar is used effectively to achieve its conservation goals. The diversification of funding sources and the implementation of regular controls and audits have been key to the financial stability and long-term sustainability of the organization.

Looking to the future, the Colombian Forest Foundation faces ongoing challenges due to the increasing need for resources for large-scale projects and fluctuating funding sources. However, with its innovative approach, commitment to sustainability and ability to adapt and respond to emerging challenges, the foundation is well positioned to continue its valuable work in environmental conservation and sustainable development.

In conclusion, the management of the Colombian Forest Foundation in 2023 has been an outstanding example of how an organization can significantly contribute to environmental conservation and sustainable development, while empowering local communities and preserving biodiversity. Its holistic approach, combining conservation, technology, education and community empowerment, is a model for other organizations seeking to make a positive difference in the world.