

Ending Dependency

MAARDEC Takes a Multi-Dimensional Approach to Rehabilitation of Disabled Nigerians

Innovations Case Narrative: MAARDEC

As a Nigerian with disability, I consider myself an exception rather than the rule, because I was fortunate enough to get a good education and the rehabilitation and equipment I needed. As a primary school pupil in the 1970s, I had to crawl on all fours; no mobility aids were available. My older siblings got me to and from school on a bicycle. During my holidays as a secondary school student, I was dismayed to discover how dependent I was on my brother to drive me everywhere in our father's car. I was petrified at the thought that he might not have time to drive me or would refuse if we were to quarrel. And what if I worked hard enough in the future and bought a car of my own? Would I have to depend on a driver?

Determined never to be dependent on anyone for transport, and eager to assert my independence, I secretly developed a device that let me drive using only my hands. I researched it extensively, sneaking into my father's car to test prototypes. My first attempts failed woefully, but I eventually developed a model that worked. When my test-drive ended in a minor crash, my father was furious. But when I graduated from university, my family helped me acquire a car, which I drove using the device. Called the Cosokoli Hand-Control Mobilizer, it allows people with lower limb paralysis and amputations to drive conventional cars using only their hands. [See Text Box 1 on following page.]

The mobilizer was my second innovation. As a secondary school student in the late 1970s, I struggled with my leg braces, which constantly fell apart. Moreover, by their very nature, the braces kept me from wearing other types of shoes. So I made sketches of a better and more durable brace that would allow me to wear any type of shoes. A roadside welder and technician brought my sketches to life. After several refinements and some testing, I began to use the braces that I dubbed the Cosy Easy-fit-in Calipers. A quarter century later, our organization has fabricated thousands of these versatile, electroplated leg braces for clients who marvel that they can wear them with conventional shoes.

Cosmas Okoli is the founder and CEO of MAARDEC. He is an Ashoka Fellow, and has been recognized as an Outstanding Social Entrepreneur by the Schwab Foundation for Social Entrepreneurship.

By 1991, after many hours tinkering in workshops, I had developed several other inventions. Noticing how little support was available for persons with disabilities in Nigeria, I established MAARDEC, the Mobility Aid and Appliances Research and Development Center. With the award-winning mobilizer as its crown

jewel, MAARDEC has since enabled thousands of disabled Nigerians to live independently.

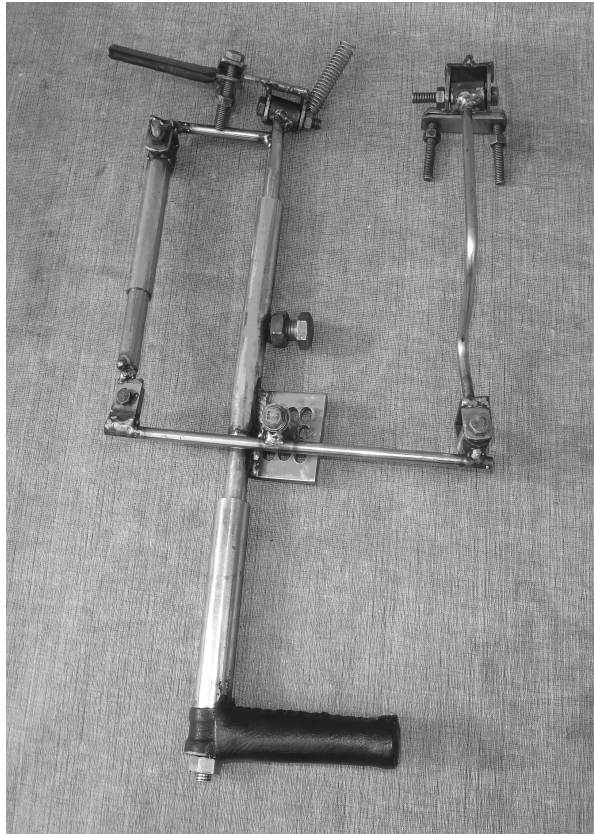
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My main reason for establishing MAARDEC was to share my personally developed innovations with fellow Nigerians with disabilities; I also wanted to start a movement to address the many problems militating against their empowerment. Today MAARDEC is a radical, holistic, and multi-dimensional approach to rehabilitating, empowering, and developing persons with disabilities and

helping them reintegrate into mainstream society. Made up of over a dozen components, it draws strength from the synergy between them. In the rest of this paper, I will describe those components, after a short bit of history.

REHABILITATION, LIKE CHARITY, BEGINS AT HOME

Fate dealt me a cruel hand in 1966; at age four, I lost the use of my legs to poliomyelitis. Soon after, my mother died, and then we faced the traumatic three-year-long Nigerian Civil War, much of it happening in our part of the country. Because my future seemed bleak, my father, a pioneer educator, prepared me for a life as a village cobbler/shoemaker, behind my back and without my consent. But I had other ideas. When my older brother was enrolled in elementary school, I demanded that my father enroll me too. I got my wish.



The Hand-Control Mobilizer

The Hand-Controlled Mobilizer is a simple push-and-pull device. It uses a system of mechanical linkages attached to clamps on the brake and accelerator pedals of an automatic transmission vehicle to allow a person to drive without using their legs.

A 12mm-thick rod, 460mm long, is housed inside a single pipe 390 mm long with two different sectional diameters: 15mm and 20mm. The tolerance between the rod and pipe allows the user to push and pull the rod inside the pipe.

When the user pushes the L-shaped arm down, the rod presses down directly onto the brake pedal to slow the vehicle. When the user pulls the arm up, the device uses a series of linkages to activate the accelerator pedal and speed up the vehicle. The transmission must be in drive position for any movement to be possible.

Note: The original mobilizer was designed for manual-shift vehicles. It had two extensions that were operated with the same hand that engages the shift-stick gear. We have discontinued this old model, which some clients found cumbersome. We now advise clients to buy automatic transmission vehicles.

The device requires minimal maintenance, just occasional tightening of loose parts. It can be removed from one vehicle and installed in another. We know of one device that has been in use for 12 years.

At school, classmates called me names because, without access to a wheelchair, I crawled on all fours. In our native Igbo language, the word “cripple” literally means “a helpless human vegetable.” Determined not to be traumatized by the name calling, I studied diligently and consistently scored at the top of the class, to the utter chagrin of my classmates. Over time I became quite popular, especially with those who wanted help with their schoolwork. But before I gave them any help, I made them apologize and promise never to call me names again. When they refused to let me play soccer—which I loved but could only play with my hands—I got my father to buy me a ball of my own. As a ball owner, I made the rules and

decided who played with me and who didn't.

At home, I was treated like every other member of the family. Like the rest of my siblings, I took turns sweeping the house, washing clothes, and washing dishes. My siblings helped me only by fetching water and making sure I was well settled on a low stool whenever I did the washing. I was also spanked just like them. At home, I gained ample self-confidence and developed a can-do mentality that made me see disability for what it is—a challenge that can be overcome by dint of hard work

In the early 1980s, I was an undergraduate at the University of Lagos. Late one night I woke up to find my roommates fighting. They were using my crutches as weapons—and soon damaged them. Over the next few days I tried to purchase replacement crutches, checking everywhere I could in Lagos, then Nigeria's capital city. Desperate, I contacted my father in my hometown, some 600 kilometres away; after a two-week search, he sent me a pair of crutches.

and creative imagination. I resolved quite early in life not to let disability stand in the way of living a full and productive life.

In 1973, my father enrolled me at the Salvation Army Home for Physically Handicapped Children at Oji River in Enugu state. After surgery and physiotherapy, I was fitted with leg braces and given a pair of crutches. For the first time in my life, I could move about independently and with more dignity. It was liberating, and reassuring to be among peers with disabilities for the first time. Having mastered the use of braces and crutches after two years, I returned home to complete primary school. I also attended a conventional secondary school.

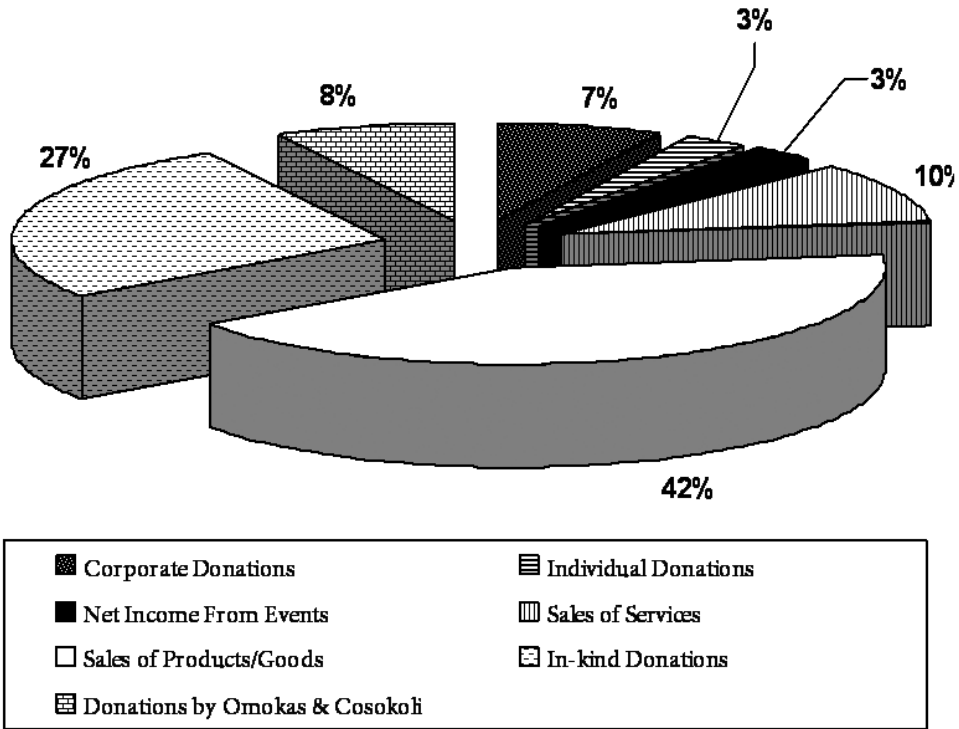


Figure 1. Source of Funding

In the early 1980s, I was an undergraduate at the University of Lagos. Late one night I woke up to find my roommates fighting. They were using my crutches as weapons—and soon damaged them. Over the next few days I tried to purchase replacement crutches, checking everywhere I could in Lagos, then Nigeria’s capital city. Desperate, I contacted my father in my hometown, some 600 kilometers away; after a two-week search, he sent me a pair of crutches. Meanwhile, I sat in my room and missed lectures. It dawned on me that Nigeria greatly needed a local establishment to fabricate mobility aids.

In 1987, I was in the first contingent of athletes with disabilities to represent Nigeria at the World Stoke Mandeville Wheelchair Games in the UK. When we returned, we immediately had to give up the five wheelchairs the government had loaned us—even though some of us did not have our own wheelchairs. I was shocked. Were wheelchairs that scarce? In 1990, having won a national youth service award, I was appointed a staff and social development officer of the federal ministry responsible for social welfare. There I discovered that the department provided not a single wheelchair, despite countless requests and recommendations from our department. I soon resigned my appointment and in 1991 set up MAARDEC to remedy this sorry state of affairs.

Before MAARDEC was formally established in 1992, I had long been using mobility aids I had developed. My friends with disabilities were fascinated to see

that I wore conventional shoes with my leg braces. Others marvelled that I could drive myself around town, or were curious about the sturdy, electroplated, iron elbow crutches I used from year to year. I established a workshop to mass produce these mobility aids and appliances to benefit my friends and others. This workshop was the foundation for MAARDEC. In our workshop, we use conventional tools, like machines to drill, grind, bend, and weld materials. We are now developing a lift that will enable a wheelchair user to get into his car by himself and then drive or be driven.

SUSTAINING THE ORGANIZATION FINANCIALLY

In 1991, when I quit my job in the Nigerian civil service, I invested my life savings to set up MAARDEC. Based on my personal experiences and the problems facing Nigerians with disabilities, I was determined to make MAARDEC work. Indeed, I became a one-man crusade. At this point, Ashoka, Innovators for the Public, played a pivotal role; it sought me out and made me a fellow, with a very welcome four-year stipend.

At one point, I used some of my Ashoka stipend to run the center. Today, with its envisioned hearing aid project (described below), MAARDEC hopes to generate more than half of its \$1.5 million budget from sales, the rest through donations. Over the years, we have devised a combination of ways to fund the center. Figure 2 shows our sources of funding in an average year, though the proportions vary from one year to another. [See Figure 1: “Source of Funding”]

Our primary source of income is the products and services we sell. We are about the only establishment in Nigeria that has the expertise to fabricate, assemble, repair, adapt, and maintain an assortment of mobility aids and appliances. We also stock various spare parts and accessories for them, along with equipment for those with visual and hearing impairments. As a result, we work with many customers—individuals, hospitals, rehabilitation centers, retirement homes, and government contractors. For a fee, we fabricate hospital beds, trolleys, commodes, and drip stands.

We also repair wheelchairs and can adapt conventional cars with our Hand-Control Mobilizer so that persons with disabilities can drive. We can also fabricate customized versions of our sturdy crutches and leg braces. In addition, we repair bicycles, fabricate gates and barbeque grills, build ramps for clients’ SUVs, refurbish metallic office furniture, and offer spray-painting services. Moreover, for a fee, our in-house physiotherapist will attend to the needs of recuperating accident victims and the aged and infirm in our clinic or in their homes. Overall, sales from products and services provide 42% of our budget.

We also get funding from many other sources, including governments and agencies, and many people donate goods, time, and expertise. At our formal opening in 1992, the federal government gave us 500,000 naira (then equivalent to U.S. \$50,000). In 1996, the Ministry of Women’s Affairs and Social Development donated workshop equipment. In 1994, at the Lagos Motor Fair, we met individuals from

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the Royal Netherlands embassy in Nigeria, which later donated 800,000 naira (U.S. \$40,000) worth of products, and became a major sponsor of our 1995 Reach-out Program. As I will describe later, the agencies that have paid us to conduct research include the National Agency for Food and Drugs Administration and Control (NAFDAC) and the World Bank.

MAARDEC also obtains financial support from two private companies I own and run: Cosokoli Ventures Nigeria, Ltd., a transportation company, and Omokas Nigeria Ltd., a registered customs clearing and forwarding agent. They are more financially viable than MAARDEC, with which they share office space and a symbiotic relationship. I spend about 15% of my time on these businesses.

A final, very important source of support is partners and supporters who offer donations of goods and time. Companies donate sweets, juices, and non-alcoholic beverages, along with wheelchairs and spare parts for prostheses. They also provide couriers and decorators to support our programs. These donations save us having to pay for products or services ourselves, especially for our annual Reach-out Program.

In addition, MAARDEC has 75 volunteers whose support in the form of time and expertise has been invaluable in all our programs and activities, especially Reach-outs. Over the years, many of the masters of ceremony for our programs have been popular television personalities and actors who are eager to give their services. We recently entered into a partnership with a motivational speaker and human performance coach who donates his services during our motivational summits and staff retreats.

OUR WORK: PROVIDING EQUIPMENT AND SERVICES

In combination, our income from various sources and the work of our volunteers allows us to provide a wide range of mobility aids and services. We began our work with the aids themselves, and they are still our primary focus, because mobility aids provide independence. While a few orthopedic hospitals and rehabilitation homes provide a few such aids, MAARDEC caters to the entire range of needs of Nigerians with disabilities. We have designed MAARDEC as a one-stop center, devoted exclusively to fabricating, assembling, repairing, maintaining, and selling (at affordable rates) an assortment of mobility aids and appliances.

For example, some overweight clients ask us to fabricate wheelchairs and commodes to fit them. We also convert conventional motorcycles into tricycles by making all the controls hand-operated. We also stock prosthetic supplies, specialty wheelchairs, crutches, incontinence supplies for paraplegics and quadriplegics, and products for those who have visual or hearing impairments. If we cannot fabricate products, we import and stock them.

Before MAARDEC was established, Nigerians with disabilities depended mostly on medical supply dealers. But these dealers stocked few mobility devices because users could rarely afford to buy what they needed. Nor could the dealers supply the wide variety of needed products, fabricate products from scratch, or

adapt them to suit users' specific needs. From the beginning, then, MAARDEC aimed to make a range of products and services available, at all times, at affordable rates, under one roof.

But our work providing mobility aids is merely the basis for a multi-faceted organization, whose initiatives reach throughout the Nigerian society and government. We offer many of our services and programs free or at very low cost to participants. Among them are the following:

Physiotherapy services. MAARDEC employs a physiotherapist, who assesses people with disabilities and determines what equipment will allow them to move about independently. After our technicians finish with the fabrication and fitting, we train our clients to use the equipment appropriately.

Guidance and counseling services. MAARDEC offers free guidance and counseling services to these individuals and their family members. We counsel them on many aspects of life. First, we focus on discovering and developing their innate abilities to earn a living, return to school, or start a business. We also help them participate in sports events. We counsel them in ways to become more independent and to manage their understandable anger. We offer information and advice on reproductive health and AIDS, on relationships and sexual harassment, and on being professional in the workplace; we cannot let disability become an excuse for incompetence. But most of all, we encourage them to shun begging in any guise. Working with their family members, we disabuse them of the many ill-founded notions associated with disability in our society, and we implore them to encourage and support family members with disabilities to lead full and productive lives.

Motivational summits. As an extension of our guidance and counseling services, we organize motivational summits. Professional motivational speakers and successful individuals with disabilities serve as role models, teaching participants survival strategies and ways to tap their innate abilities. Since 1991, through this service, we have touched the lives of 1.57 million Nigerians with disabilities directly and indirectly.

Mentoring programs. Role models with disabilities are still in short supply in Nigeria. I mentor young persons to excel in spite of their disabilities. I also encourage my friends with disabilities who have become professionals to mentor others. Four people I have mentored have gone on to win state and national awards and gain automatic employment in the civil service, as I did 19 years ago. One of them was a former secretary of MAARDEC, who had been a victim of polio. She was also nominated to the national political reform conference, where she held her own against politicians and other influential leaders as she made a case for Nigerians with disabilities.

Vocational training and employment assistance. One of my cardinal goals while designing MAARDEC was to provide employment opportunities for Nigerians with disabilities. To this end, I have ensured that at least 50% of our staff are indi-

viduals with disabilities. Since few of them have formal education and stand little chance of gainful employment elsewhere, we train them in-house in specific technical skills applicable to our work. Others are employed after being trained elsewhere. Over the years, many have become master technicians, skilled at fabricating, assembling, repairing, and maintaining our entire range of products. We also support qualified persons with disabilities in their job searches, sometimes offering letters of recommendation.

Support for artists with disabilities. Between 1999 and 2002, we managed the career of Nigeria's foremost mouth-artist, Late Idowu Akinrolabu, a quadriplegic who paints with his mouth. We supplied him with a hand-controlled electric wheelchair and adapted it with mouth-controls, and also sought out sponsors for his first major exhibition in 2001, introducing his works to art lovers and establishing him as a full-time artist. Based on this success story, we are currently training another quadriplegic to become a mouth-artist. We have also collaborated with Creative Connections, a U.S.-based organization, on an art-exchange event involving 48 hearing-impaired Nigerian youths. They produced art work based on various themes from their culture and environment and sent them to children in U.S. schools, who responded by sending their own art to Nigeria.

Outreach to the poor. I was dismayed to discover in 1993 that no matter how many rebates or discounts we put on our products, the vast majority of Nigerians with disabilities still could not afford them. The reality is that they are the poorest members of society. In 1994, with great fanfare we introduced our Reach-out Program, in partnership with local and international philanthropic individuals, corporate bodies, religious groups, embassies, etc. This was long before corporate social responsibility became part of corporate culture in Nigeria. The Christmas-season program has now become the high point of our annual calendar. To date, we have distributed 56,200 assorted mobility aids and appliances, valued at 77.265 million naira (or U.S. \$643,875), to Nigerians with disabilities. Roughly 45 volunteers assist us with the logistics of organizing this annual event.

Direct financial assistance. In addition to the Reach-out Program, we give direct financial assistance and donate our products and services to the indigent disabled. People come to our center to have their wheelchairs repaired, but they cannot pay for the repairs or for the transportation home. Countless others cannot afford to come pick up their donated wheelchairs. When this happens, MAARDEC foots the bills.

We also pay for rehabilitation with our physiotherapist and doctor. When we discover clients cannot pay, we offer the services at no cost. In other cases, we contact hospitals and philanthropic individuals we know and ask for support in the form of money or donated services. We have also obtained scholarships and paid school fees for people with disabilities whose families cannot manage the financial burden of caring for them.

Developing microfinance and small enterprises. Because MAARDEC cannot employ every person with a disability, we have found other ways to empower

them to go into business for themselves. Some are trained in crafts like shoemaking, carpentry, tailoring, hairdressing, electronics repair, photography, and producing confectionery and furniture. Others can provide business or telephone services. But they usually lack the financial wherewithal to expand or scale up these businesses. In response, we have partnered with philanthropic individuals and corporations to obtain interest-free loans or donate equipment to small business owners. So far, over 200 people with disabilities have benefited from this intervention. The loans range from 50,000 to 100,000 naira (U.S. \$417 to \$833). Machinery and equipment are donated and need not be paid for.

Promoting participation in sports. When I attended a school for the physically disabled, we played soccer on our crutches and had tug-of-war competitions. I was one of the first Nigerians with a disability to compete in, organize, and administer sports for other people with disabilities. I represented Nigeria in wheelchair table tennis at international championships. Passionate about sports, I was elected president of the Special Sports Federation of Nigeria (SSFN). The first person with a disability to head the federation, I held office from 1995 to 2001.

The highlight of my tenure was successfully lobbying the authorities in Nigeria to establish sports for persons with disabilities as events that earned scores at national sports festivals. This paved the way for athletes with disabilities to become sports professionals, rather than merely offering demonstrations. In 2000, I led a delegation of Nigerian athletes with disabilities to the Sydney Paralympics. We won seven gold, one silver, and five bronze medals—in stark contrast, our able-bodied Olympic contingent won not a single gold medal. Some of these athletes are still the world record holders in their events. Others have worked on our staff.

Over the years, I and other athletes with disabilities, have introduced others to sports and have seen them win four out of Nigeria's five gold medals at the 2006 Commonwealth Games in Brisbane, Australia. A career in professional sports is now open to millions of young Nigerians with disabilities who can represent Nigeria's states and the country at national and international sporting events. Participating in mainstream sports events is one important avenue for reintegrating people with disabilities into mainstream society. Sports can bring people out of the depression that can result from the psychological effects of disability and help them become well-adjusted citizens with a means of livelihood.

Research and Development. A major part of our operations involves research and development of mobility aids and appliances and mechanisms to address disability issues. We do not see the nation making any appreciable headway in empowering people with disabilities to become productive and independent. So, through research, we hope to do so.

Let me provide just three examples. First, in 2005 MAARDEC conducted a nationwide study on the ways that fake and adulterated food and drugs can cause disabilities; we found that such substances were responsible for 5 percent of disabilities in Nigeria. Second, we provided consultancy services to Adekunle Ajasin

University on ways to make the campus accessible to students with disabilities. A first phase in the project, an accessible hostel, is now in use. Third, in March 2007 the World Bank asked us to develop a mechanism to address issues of child/youth disability in Nigeria.

We also conduct research to improve our products. In 2006, we developed a lightweight manual tricycle that reduces both production time and cost; in 2007 we built 75 of them. With sponsorship from the First Bank of Nigeria, we distributed 60 of them during our Reach-out Program. We also improved our leg braces with a streamlined design—instead of leather kneepads, strategically placed Velcro straps now stop the user's knee from buckling. We have also developed and test driven a racing version of our manual tricycle, which we intend to mass produce for use in races and for recreation.

ACTIVISM:

DEVELOPING LEGISLATION AND ORGANIZATIONS OF THE DISABLED

In addition to our other work, we are very committed to activism and organizing for the disabled. In Nigeria, people with disabilities have virtually no legal protection. Public buildings, roads, and transportation systems are inaccessible. Given Nigeria's culture of atrocious driving habits, plus its open drainage system, people with disabilities face dangers every time they go out in public. They also experience overt discrimination in the workplace. Nigerians must redress these unfortunate situations and develop a more inclusive country—as I stress every time we have an opportunity in the media or at MAARDEC events. As a start, we took action when we learned of an obscure government directive from 1986 directing all employers of up to 100 workers to reserve 2 percent of their positions for qualified Nigerians with disabilities. Though few employers have complied, we spread the word about this directive, and some people with disabilities have gotten jobs by pointing it out to prospective employers.

We focus on two areas of activism: legislation and organizations. At MAARDEC, we stay abreast of legislation in the National Assembly pertaining to people with disabilities. In 2005, along with Senator Bode Olajumoke, who chairs our board of directors, I visited the Senate president; we implored him to have President Obasanjo sign the Handicapped Persons (Public Buildings) Special Facilities Bill, 2004 (HB. 31), which had been passed by both houses. In 2005 we also joined others to advocate for a bill establishing the National Trust Fund for the Disabled.

In 2007, through the Association for Comprehensive Empowerment of Nigerians with Disability (ASCEND), we sent a comprehensive bill to the National Assembly to protect the rights of Nigerians with disabilities, and we are now lobbying the 36 state assemblies to follow suit. We also visited the Lagos Metropolitan Area Transport Authority (LAMATA) to point out that the dedicated bus system, partly funded by the World Bank, is not accessible to people with disabilities. LAMATA is now starting to provide for passengers with disabilities. In addition,

five individuals with disabilities are now serving state governors as special advisers on disability matters, and two states have passed legislation granting automatic employment in the civil service to qualified individuals with disabilities.

Nigerians with disabilities also need a cohesive body of advocacy organizations so we can pursue a comprehensive, common agenda. In the past, separate organizations have wasted tremendous amounts of energy by presenting different agendas on the same issues—and the authorities have not taken these groups seriously

or funded them consistently. Meanwhile, petty internal bickering within organizations distracts them from their goals.

After years of observing this situation, in 1998 I started nurturing an organization of Nigerians with disabilities. In 2002, I brought on board colleagues with disabilities from different backgrounds. In 2006, the Association for Comprehensive Empowerment of Nigerians with Disability (ASCEND) was fully registered and started in earnest. So far we have chapters in 12 of Nigeria's 36 states, with 100,000 members nation-

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wide. We aim to use that numerical strength to become a formidable political group.

Currently operating from the MAARDEC office, we work with affiliated organizations and political parties to get better deals for all of us. For example, in December 2006, before the 2007 Nigerian general elections, we visited the Independent National Electoral Commission to find out about its provisions for persons with disabilities. During the election, five ASCEND members worked with independent electoral observers to monitor the election. Last dry season we conducted a successful road show across seven states, culminating in a national rally in Abuja on December 3, 2007, to commemorate the International Day for the Disabled. In the process, we visited state governors to inform them about our activities and implore them to empower their citizens with disabilities.

FUTURE PROJECTS AND CHALLENGES

We have many hopes and plans for the future, after we relocate to a larger, permanent site that can accommodate the many projects I just described. With the help of my two private companies, we have taken out a bank loan to purchase a property in Lagos.

Franchise the MAARDEC model. We are looking for funds to establish 37 outlets, one in each state plus Abuja, through a franchise. These franchises will be managed by trained people with disabilities to bring our services closer to the doorsteps of Nigerians with disabilities. We currently have an impact on the lives of only 6.3 percent of the 24.8 million Nigerians living with disabilities, but this project will let us reach out to more of them. If all goes well with the 36 franchises, we intend to reach out farther to the 774 local government areas around the country.

Localize and regionalize our annual Reach-out Program. In the past year, we have reached out to philanthropic individuals, corporations, and state governments to partner with us and organize our annual Reach-out Program in their localities. This is a follow-up to the 2007 Reach-out, which we held in five locations across the country. We want to bring our program closer to Nigerians with disabilities to save them having to travel.

Provide ICT training to Nigerians with disabilities. The Internet has opened up an information superhighway, but in Nigeria relatively few people, even in urban centers, have good Internet services. And relatively few of Nigeria's 142 million people are computer literate, especially in rural areas. But Nigerians with disabilities can support themselves and help others by opening cybercafés. We plan to collaborate with our sponsors and supporters, as well as Rodrigo Baggio, a Brazilian social entrepreneur who provides similar training to poor children in Rio de Janeiro's slums. We intend to seek donations of gently used desktop computers and appropriate equipment for connecting to the Internet.

Expand the microfinance facet of our activities. A majority of Nigerians with disabilities are involved in small-scale businesses, so MAARDEC intends to expand its intervention, bringing in more partners and sponsors. We intend to provide small loans to 100 Nigerians with disabilities every year, so they can start or develop businesses. This would also require that we create effective structures for monitoring and evaluation.

Produce and market affordable hearing aids locally. We are currently developing an agreement with a U.S.-based social entrepreneur to produce and market state-of-the-art hearing aids in Nigeria. We intend to train persons with disabilities to

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administer a hearing test and provide a patient with the right hearing aid as quickly as possible. This will be an important source of income for the organization. We intend to give discounts—or free aids—to people who cannot afford them, but we will sell them for profit to individuals or organizations that can afford them. In the past, we lacked the expertise to cater fully to this group; but now, with this venture, we can.

Organize art competitions and exhibitions for Nigerians with disabilities. As in every other sphere of national life, Nigerians with disabilities are under-represented in the arts. With our growing list of sponsors, donors, and supporters, we intend to start a program to discover talented Nigerian artists with disabilities and organize competitions and exhibitions for them. Then they can make names for themselves and earn income as well. Our search will extend to schools at all levels and to practicing artists.

Establish an Empowerment Village by 2015. Our proposed village will house all our activities under one roof. We envision putting many facilities in place. A factory will produce mobility aids and appliances, which will be finished in the electroplating plant. Individuals will seek services at the physiotherapy clinic, and the vocational training and employment bureau, and will engage in a range of sports at the indoor sports hall and outdoor sports facilities. People in other offices will be engaged in research and development and in microfinance and enterprise development. Finally, a farm will provide both food and facilities where people can train in fish and snail farming. We already have set land aside for this project; with enough funding, we can have it running well by 2015. We also plan to train 1,000 Nigerians with disabilities annually, at various vocations. When they finish their studies, we will help them start their own small- and medium-scale industries by accessing the many microfinance opportunities available.

Replicate the MAARDEC Model. Our model can be replicated in other African countries and indeed in developed countries. In Nigeria, some organizations have copied aspects of our model, but none have replicated it wholesale. In Ondo state, the Handicapped Development Foundation is loosely based on our model; its founder may partner with us to integrate more components of our model. Abuja also has some rehabilitation centers based on our model.

Our ultimate goal is to empower as many people with disabilities as possible, so as to reduce poverty and dependency.