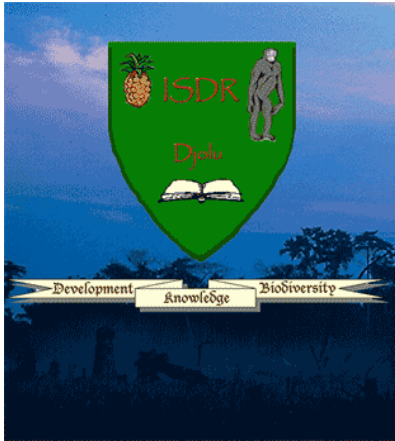


## PROJECT DOCUMENTATION

### “Remote Congolese College Needs Internet Resources”

#### DJOLU TECHNICAL COLLEGE DEMOCRATIC REPUBLIC OF CONGO



#### **Education Where It's Needed Most**

In 2003, Djolu Technical College opened its doors with the goal of providing higher education for bright, motivated young people, including women, to support sustainable development and conservation of local communities' traditional forest lands and wildlife in the region. Djolu is located in the Tshuapa district of Equateur Province, in the north central part of the DRC, about 300 miles southwest of Kisangani. The College is the only institution of higher education in an area half the size of New England.

Since its founding, Djolu Technical College has grown to an institution that enrolls approximately 70 students, and employs eight permanent teaching staff, as well as eight visiting professors from the University of Kisangani who travel by motorcycle and dugout canoe for rotations of two months at a time. They willingly forego city and family life in order to support this fledgling college and bring education to a remote area of the DRC.

At this time, the College rents classrooms in a local school, and lacks electricity, computers, running water, phone service, an internet connection, and often even school supplies. Nevertheless, despite obstacles that would be considered virtually insurmountable by western standards, Djolu Technical College is effectively bringing higher education to students in this impoverished region.

Young people in the Djolu area are thirsty for knowledge and a good education. But despite the fact that tuition costs at Djolu Technical College are only about \$100 per year on average, only 15% of students' parents can afford to pay these school fees. About 75% of students require work-study funding, and about 10% abandon their studies due to lack of money, most commonly in the first year.

The DRC is one of the poorest countries in Africa, with a GDP of \$300 per person. The Djolu area has virtually no cash economy and the average household income rarely exceeds \$100 per year. Area families generally cannot afford to send their children to the University of Kisangani, which is a two-week journey by foot over jungle paths. Automobiles are almost nonexistent and even motorcycles are extremely rare in the region, and fuel must be brought upriver at great expense from Kisangani.

The region's economy was devastated by the Congo war, which officially ended in 2003, though fighting continues in the mineral-rich eastern part of the country. The few businesses and international organizations that operated in the Djolu area before the war have been slow to return. There are no large companies providing employment in Djolu, and people rely primarily on agriculture and bartering goods and services. Fewer than 6% of people have permanent employment.

Families sometimes offer livestock and agricultural products in trade for school fees. Unfortunately the school cannot always accept payments in goats and chickens. Due to Djolu Technical College's small size, tuition alone would not be enough to pay faculty salaries and other operating costs anyway. Yet, international funding from foundations and government agencies for African colleges is scarce, and primarily limited to institutions in a half-dozen of the most developed African countries. Thankfully, because a little money goes such a long way in Central Africa, some generous individuals and the Global Giving Foundation can turn this situation around and make a lasting impact for this valiant institution.

### **Why Here? Why Now?**

Djolu Technical College, known in French as the Institut Supérieur de Développement Rurale or ISDR, was established at the recommendation of local Congolese community leaders and regional authorities as part of the agreement negotiating the creation of the Kokolopori Bonobo Reserve. This community-managed rainforest reserve near Djolu is one of the richest known habitats on earth for the most endangered great ape species, the bonobo. Other reserves and parks in the region include the Luo Scientific Reserve, and the Lomako Faunal Reserve project. Bonobos, leopards, forest elephants and Congo pea fowl are flagship species that are endemic to the region.

The Congo River Basin is often called "the second lung of the earth," constituting the second largest expanse of intact tropical rainforest in the world, after the Amazon. Over the next decade, these forests are increasingly threatened by large scale logging, commercial agriculture, e.g., palm oil plantations, and other destructive uses.

The importance of educating local youth to manage and protect their traditional rainforest lands cannot be overstated. Without an education, the people who are the ultimate stewards of these lands will lack the means to protect their natural resources.

Key project partners are the Bonobo Conservation Initiative (BCI), an international conservation organization, and Vie Sauvage, BCI's local partner organization. BCI has been a project partner since its inception, providing start-up funding and facilitating partnerships. BCI's mission is to promote conservation of the bonobo (*Pan paniscus*), the most endangered of the six great ape species, and its tropical forest habitat in the Congo River Basin. An important strategy to support this mission is to strengthen regional commitments to conservation and build capacity that empowers local people to manage their natural resources and protect bonobos.

Vie Sauvage is the other key project leader, providing locally-based expertise and managerial support. Vie Sauvage is a grassroots organization established to protect the local Mongandu peoples' traditional land and its wildlife in Kokolopori, a cluster of villages 50 miles from Djolu and, at the same time, to develop a spectrum of opportunities that improve the health and well-being of its inhabitants.

Funding support for the College has been received from the Bonobo Conservation Initiative, the Great Ape Conservation Fund of the US Fish and Wildlife Service, and the Margot Marsh Foundation. There has also been significant investment of labor and resources by the local community and its faculty and students, which are deeply committed to the College's success.

### **Accomplishments to Date**

2007-2008 marks the College's fifth academic year with 35 students in the first undergraduate class, 22 students in the second class, and 14 students in the third. Thirteen students graduated during the 2006-2007 academic year with a degree in Rural Development. Requirements for graduation include successful completion of all coursework and a 60-80 page monograph in the student's subject area. Degrees are awarded on the basis of thesis authorship and public defense of the thesis.

The curriculum includes courses in Environmental Management, Sustainable Agriculture, Forestry, Agricultural Techniques, Animal Husbandry, Harnessing Technology, Hygiene and Public Health, Mathematics, Demography, Biometry and Statistics, Agricultural Economics, Scientific Research Techniques, Accounting, English, Marketing, Psychology, Community Development, Rural Administration, Regional Planning, Civil and Land Law, and more.

The core curriculum of Djolu Technical College comprises 3,685 hours: 1,830 hours in theoretical learning or classes, 1,080 hours of professional practicum, approximately 500 hours for thesis authorship and defense, and 275 hours of internship in a company or

organization. The first year involves 950 hours for about twelve courses. In the second year, students decide whether to major in Rural Sciences (900 hours total) or Environment and Sustainable Development (also 900 hours). In the third and final year, students in Rural Techniques complete 835 hours and students in Environment and Sustainable Development complete 850 hours.

The core curriculum is mandatory and determined by the national government. Each year, the College reports to the Ministry of Higher Education and Research about the fulfillment of its curriculum objectives.

The College also hosts a number of conferences or workshops open to the public in order to encourage community involvement and support for its activities. For instance, in recent years, such conferences have been held to explain the goals and benefits of ISDR to local residents, the DRC's Constitution and guaranteed civil liberties, improving Djolu's accessibility to urban markets, and teaching math in high schools using real world examples for abstract concepts.

The Djolu Technical College holds a temporary authorization from the Ministry of Higher Education and Research. The College needs to fulfill the requirement for the definitive decree after hosting an inspection by the Permanent Commission in charge of Curricula Reforms. They will check the programs, infrastructure and qualifications of teachers, and then present their recommendation to the Ministry for the definitive decree.

### **Next Steps**

Donations received through the Global Giving Foundation will underwrite urgently needed information technology at Djolu Technical College.

**Books:** The College library is in need of technical and scientific textbooks and reference books in French. Scientific books are scarce and too expensive in DRC, especially in Kisangani, and purchase and shipment from the USA or Europe is very expensive as well. Fifty dollars or more for a single technical or science book is not an unusual price. Currently, the College's library houses only 45 books, and the 13 theses written by graduates of the class of 2007. Services such as eGranary, which can supply access to millions of digitized books and technical papers for \$1,000 to \$3,000, is a possible alternative to building a traditional library.

**Internet and Laptops:** At present, the College has neither computers nor Internet access. As a result, students and staff cannot connect to the outside world from Djolu or look up information online, which is critical given the minimal nature of the college's library. Installation of an internet connection and the first year of internet subscriber fees has been underwritten by a grant from the Internet Society. We are seeking donations from individuals to underwrite the cost of ten laptop computers, a printer and printing supplies (\$5,700). Internet subscriber fees will cost \$5,000 annually after the end of the grant period.

**Electricity:** BCI has donated a biodiesel processor to the College so the students could make their own generator fuel from locally-grown agricultural products. Funding is still needed to pay for methanol (which is impossible to obtain in Djolu) or highly refined ethanol to process the biodiesel. Solar and wind power are being explored as alternative options to support a College computer center.

**Project Budget:**

|                           |            |
|---------------------------|------------|
| 10 laptops @ \$500 each   | \$5,000    |
| eGranary Appliance Server | 2,800      |
| Printer                   | 300        |
| Printing supplies         | <u>400</u> |
| TOTAL                     | \$8,500    |

As Sir David King, Science Advisor to the British government, said in July 2007 at the World Bank, anyone who cares about the future of Africa must recognize the central importance of building the capacity of African science and technology. *“Science and technology are vital for good governance, stability and human capital. A technically skilled population is a prerequisite for economic and wealth sustainability, and well being.”*