

Report on Cameroon Visit

From April 28 to May 20, 2014, CIF member Bill Clarke traveled to Cameroon at his own expense and visited with CIF member, Clement Sofalne, who is also a member of the NGO ABIOGeT with whom Forests without Borders-Forets sans frontiers have entered into an agreement on a reforestation project in Northern Cameroon.

The purpose of the mission was to assess the initial project, to explore possibilities for additional work in Cameroon and to consider expansion into similarly arid areas of neighbouring Chad. Cameroon has been described as “Africa in brief” in terms of its ethnic, social and ecological diversity. The southern portion contains tropical rainforest which changes, going northward, to arid, near-desert conditions. In excess of 1,000 tree species occur in the country. Forestry and reforestation techniques vary by region. The greatest needs and challenges are in the North and Far North Provinces.

Four days were spent in the national capital (Yaounde, near the geographic centre of the country) meeting with seven key groups and possible collaborators. Meetings also occurred with two groups in the Northern Province, twenty-four in the Far Northern Province and three in Chad. Salient information on groups, villages and contacts is included in Appendix 1.

Most government office and groups met with were anxious to support the work. Finances are severely limited, however, and most help would be in-kind or through provision of information which could be applied to advance work and to further knowledge. IRAD, the Ministry of Forestry, and the Ministry of Environment appear interested in this way. Similarly in meetings with communities, there is interest from leaders and willingness to contribute labour and whatever resources that can be mustered to apply to community forestry efforts. The African Model Forest and CUSO may be able to draw funds and volunteers to engage more directly. Since the visit in April-May, ABIOGeT has agreed to frameworks of collaboration with these two groups which should help ABIOGeT in searching for finances for future projects.

The site of the 2013 plantation and well near the village of Karabiwa was visited. Initial survival of approximately 60% was bolstered by gap planting subsequent to establishment. Current survival near the end of the first dry season was estimated at 60%. Significant browsing was noted, apparently from goats and cattle which roam the landscape. Living hedges which have been planted as a fence around the plantation area not yet grown enough to deter livestock. The plantation guard designated by the village to deter entry by livestock says grazing pressure, particularly at night, has increased due to pastoral people moving to the area to avoid conflict closer to the Nigerian border. The necessity of plantation guardians (at least until other plantation protection is effective) and of wells are probably the most significant differences in plantation establishment (from temperate and wet tropical forest) and both represent

significant expenses in establishing tree cover. Recovery of browsed stems at the Karabiwa plantation is expected as the brief rainy season starts in June. Concurrent planting of living hedges, apparently, is preferable to the ideal situation of having hedges planted in advance, due to logistics and expense involved with travel and potential tree growth foregone.

The Karabiwa plantation was deemed a success by qualified members of ABIOGeT, an opinion with which I concur given my observation and limited experience in such dry conditions. The operation of the well, and the appreciation by the village people of a local water supply are both clear successes. An appreciation of the trees will occur as they begin to grow. Although awareness activities were conducted as part of the planting and negotiations to begin work in the area, a culture of tree cover does not exist in that area of the Far North. Other benefits additionally realized by villagers are noted in Appendix 2.

Location of possible plantations is largely determined by the interest of village leaders who may have land available. Other considerations in selection of areas to begin plantations are the interest of the villagers and any technical knowledge or experience that may exist in the area. For example, one area had a retired forester involved; another, a retired agriculturalist who has interest in tree planting and possible agro-forestry.

Location of possible plantations is largely determined by the interest of village leaders who may have land available. As there has been relatively little exposure to successful forestry techniques and tree plantations in the area, the possibility of provision of a well is a major factor in obtaining the interest of several villages in planting trees. The cost of a drilled well is difficult to assess, in advance, but would likely be the major cost in any successful tree planting operation in the area. With smaller plantations (5 to 10 ha), a well alone could cost a thousand dollars per hectare. If we are serious about establishing tree cover in these arid regions of great need (and in the absence of any other partners interested in water provision), a well/water supply has to be accepted as a cost of doing business. As the area of tree cover increases from the initial size planted, cost per hectare decreases significantly. It must be noted that a well is a cost that cannot be controlled by villagers who are willing to guard areas from grazing livestock and undertake annual maintenance on plantations in return for the establishment of a water supply.

Of the 11 villages in the Extreme North who had expressed interest in plantations, all are believed to require wells (which, due to depth to water table and hard substrate, would likely require drilling). We met with representatives of four villages, did field visits where possible, and checked into interest and capacity of groups. It is difficult to ascertain precise information on initial visits; however, all areas had potential, interest and suitable land available.

The visit to Chad was two days and concentrated on villages close to the border with Cameroon and part of a wildlife reserve. There are about 30 villages associated with the reserve, and some attempts at forest tree nurseries and out-planting had been attempted in programs in previous years. Some local people have kept nursery activity going at a small scale (<1,000 plants) and one nursery has a hand dug well that is providing water. ABIOGeT has a co-operant in the region and have started relations to re-build tree nursery efforts. (ABIOGeT's main nursery in Maroua, Cameroon, produced ~80,000 tree seedlings last year.) ABIOGeT has technical strength in nursery production, and is willing to assist other tree nurseries in the region.

Tree planting is done by the Ministry of Forests and Wildlife on a small scale in Cameroon under arrangements with Maries (roughly equivalent to Town Councils). There is no follow up and there may not be a high degree of interest in the work or its successful completion. The Cameroon Department of Environment has a tree planting program (Sahel Vert) at a larger scale that is similarly delivered, provides wells, fencing and a forest guard but there is no follow up and long term results are questionable. The tree planting through ABIOGeT is different in that it encourages buy-in from local village groups and encourages longer term work such as agro-forestry initiatives in the fenced plantations, conducted by women's groups and others.

Recommendations

1. To continue work in Cameroon directly with ABIOGeT with emphasis on establishing forest cover in arid regions, use of rare and valuable native species, and planting other trees of importance (for food, medicines, forage, structural use, fuel production and ecological purposes),
2. To support ABIOGeT in relevant partnerships (eg. with IRAD to add scientific rigour to its plantings, and with CUSO and the African Model Forest in moringa plantations and other efforts),
3. To seek partners who may be able to assist with the provision of water (eg. Engineers without Borders, Ryan's Well and possibly others) in areas where there is realistically no available water but there is great interest in establishing tree cover,
4. To support two of the 11 villages requesting community forests in 2014, and to let this support be known, if at all possible in June, so as to enable work in more favourable seasonal conditions.
5. To encourage a collaborative arrangement between ABIOGeT and Sahel Vert. Sahel Vert appear to have the financial and other means to establish plantations, but lack technical follow-

up to ensure that plantation are maintained and become free to grow. [An independent forest scientist informed me that his work on plantations in Cameroon showed success rates of 60% with ABIOGeT compared to 50% with Sahel Vert (where 30% survival is considered a success)].

6. To actively consider planting projects in similar regions in Chad in 2015 in co-operation with ABIOGeT and others.

Appendix 1. Salient information on groups, villages and contacts met

In Yaounde (National Capitol) and area

1. April 29 - Actions pour la Biodiversite et Gestion des Terroirs (ABIOGeT) ; Clement SOFALNE, Executive Director clement.sofalne@abioget.org and Clair Rene BANGA, Board Member (and PhD candidate - specialist in irrigation and vegetation of arid areas) bangaclair@abioget.org . Met at airport and overview of next few days meetings that the three of us would attend with others
2. April 30 – Institute for Research and Agricultural Development (IRAD) ; Dr. NGOME Francis, Researcher ngomajebe@yahoo.com. Interested in bringing more science into plantings and other efforts.
3. April 30 – Reseau Africain de Forets Modeles (RAFM) ; Dr. Mariteuw Chimere Diaw, Director c.diaw@africanmodelforests.org , Julie Gageo, Development Agent j.gogoe@africanmodelforests.org and Joachim Nguiebouri, Development Agent j.nguiebouri@africanmodelforest.org . RAFM currently have two Model Forests in Southern Cameroon and are interested in partnering to fund efforts relating to forestry and agro-forestry in the North.
4. May 1 – RAFM ; Gabriel Sarasin, Project Manager, B-Adapt program g.sarasin@africanmodelforests.org . They have established moringa plantations in an eco-agriculture business model, and are interested in co-operating in more moringa planting and supplying mycorrhizae.
5. May 2 – CUSO International ; Guy Huot, Regional Representative Central Africa (who is also a Quebec Forester with some 20 years' experience in Cameroon) guy.huot@cusointernational.org . CUSO place volunteers (from Canada, other and host countries) to work with Nationals in development. Have volunteers throughout Cameroon.
6. May 2 – Ministry of Forestry and Wildlife (MINFOF) ; Anicet NGOMIN, Chief Forester ngomin.anicet@yahoo.fr . They conduct relatively small planting through contracts let to Municipalities annually. Forester oumma5@ysahoo.fr would be another contact. (The Department of Environment actually plant more area annually, which is delivered similarly.)
7. May 3 – University of Dshang a few hour bus ride from Capitol. Met with a professor / forest pathologist (PhD from Laval) who is helping Clement on a report on a possible threat to neem trees. U of D have a strong agriculture program with a forestry department.

In Garoua (Capital of Northern Province)

8. May 6 – Division de Gestion de Sols (DGS) ; Mana Justin, Forest Technician justinwmana@yahoo.fr . Provided advice on soils, grazing, logistics and land that may possibly be available through his decades of work in the field in this area.

9. May 6 – Societe de Developpement du Coton de Cameroun (SODECOTON) ; SADOU Fernand, Chief of Professional Services fernand.sadou@sodecoton.cm . Advised that land suitable for cotton production is usually drier than for forest production, and did not see compatibilities

In Maroua (Capitol of far North Province) and area

10. May 7 - ABIOGeT ; Guy Magloire FOKAM, Project Co-ordinator guymagloirefokam@yahoo.fr, Tapita Victoire, Community Animator and Secretary lavictoiretapita@gmail.com , Jacques Day Tchonbay, Environment Engineering graduate daytchonbay50@yahoo.fr . Discussed program, visit to tree nursery in Maroua, overview of next week and a half.

11. May 7– IRAD ; Dr. Mama TOUKA , Forest Research Scientist. Provided information on past planting, results and applicability of research. Interested in producing high quality scientific reports and educational material.

12. May 8 – Travel to Karabiwa to meet with Forestry Officer, Chief of Canton, Village Chief, Plantation Guard and villagers. Discussed success of project, water supply, need for continued maintenance of trees and other arrangements.

13. May 9 – Met with retired Forester and with Mayor Andre DJAFSIA of Guere in Vele to discuss local projects, availability of land, interest and capabilities.

14. May 9 – United Councils and Cities of Cameroon ; Fisso Kouma, Mayor of Yagoua and Regional Deputy Chairman c_yagoua@cvucc.cm . Offers barb wired and posts for fencing as contribution to work in any communities in this region.

15. May 10 – ABIOGeT ; with attendees as of May 7 plus representative from Chad, YOUSALA Laodandji, Forest Technician lyoussala@yahoo.com and Nursery Manager Badzogoum ZELE and Assistant Emmanuel DZAMAGAI. Reviewing programs and possibilities.

16. May 11 – Reseau des Animateurs pour l'Education des Communautés (RESAEC) ; BOUBAKARI Hamadou, Coordinator resaecbh2002@yahoo.com . Discussed outreach and networking possibilities. They work in collaboration with CUSO and others.

16. May 14 – Meeting at ABIOGeT office with mayor of Doukoula. Have land available and interested in tree planting. Field visit arranged.

17. May 14 – Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED) ; meeting with Director who gave OK for work in area. Possibility of contribution of improved cooking stoves to relieve pressure on scarce firewood resource.

18. May 14 – Commission de bassin de Lac Tchad (PRODEBALT) ; Hara Taidi, National Co-ordinator harataidi@yahoo.fr . Representative of Cameroon in six nation effort to preserve lake and combat desertification. Interested in concepts.

19. May 15 – Agence Nationale d'Appui au Developpement Forestier (ANAFOR) ; Mme Onana Hortense, Regional Chief mhonana@yahoo.fr . Responsible for planting as an agency created by the Department of Forestry and Wildlife.

20. May 15 – Meeting with Mayor of Boboya and site inspection of area of possible tree plantation. Across a road from Sahel Vert plantation that has fences in disrepair. Area suitable and lots of land available. Mayor is retired Agriculturalist and seems quite capable and interested.

21. May 15 – Site visit with Mayor of Doukoura and assistant. Area also suitable, lots of area available and keen interest.

22. May 15– Dr. Mama TOUKA , Forest Research Scientist. (Follow up meeting) Offer to assist with site descriptions, follow up work and other work personally and with students.

23. May 16 – ABIOGeT. Follow up meeting with all staff and nursery visit

In Chad (Region of Mayo-Kebbi West)

24. May 12 – Informal meeting in village of Ribao with nurseryman and visit to former nursery site still with small production and a functioning well. Discuss assistance for nursery and possible work in area.

25. May 12 – Informal meeting with Dubais Jonas (Technician with Chad Forest Service) and with spokesperson for several communities in the larger Binder Lere Wildlife Reserve and involved with ILOD about possibilities of work in reserve.

26. May 13 – Met in with Regional Delegate responsible for the reserve and a Forest Inspector. Visited a tree nursery where attempt to hand dig a well had failed. There is still a small production at the nursery temporarily irrigated by water trucked from Lac Lere, several miles away.

Appendix 2. Benefits realized by the village and villagers of Karawiba

The village of Karabiwa is the site of the first project in Cameroon which “Forests without Borders – Forets sans frontieres” (FwB-Fsf, which is a Registered Charity in Canada) and “Actions pour la Biodiversite et Gestion des Terroirs” (ABIOGeT, which is a Non-Governmental Organization registered in Cameroon and in Canada) have partnered. Their aim was to help villagers establish a community forest in northern Cameroon.

Cameroon is a democratic republic in Central Africa which has rich historic, social and ecological conditions. It has more than 275 ethno-linguistic groups, more than 1,000 species of trees. It has been described as “Africa in brief” as it has ecological and social conditions as varied as those found in the whole continent. The climate of Cameroon varies greatly from tropical along the coast, to semi-arid and hot in the Northern Plains and the Sahel region with a seven month dry season in the North.

The community of Karabiwa is located 80 km from Maroua which is the capital of the Far North Province. Karabiwa is in the canton of Magdeme. The village is a distance of 3.5 kilometers from the National (Main Road). Karabiwa residents are mainly composed of two ethnic groups, the Arabe Shao and the Kanuri. There are more than 250 people in the village of Karabiwa, and all live in traditional “boukarous” or round houses with walls of mud or sticks, and roofs of thatch. Residents are engaged in traditional agriculture and have small livestock free ranging around their community. The village has no school or health center. The area is arid and people live on about \$1.50 CDN and usually one meal a day.



Above : Typical house in Karabiwa showing stacked wood and domestic animals

Below: Meeting in Karabiwa to discuss progress of project



The first source of potable water for the entire village has just been installed as part of our project. The tree plantation near the village required a source of water to irrigate planted trees. The villagers of Karabiwa were more than happy to contribute their labour to the establishment and maintenance of the tree plantation in return for a water supply. Due to depth to the water table and compacted soil layers, hand digging of a well was not possible. A well had to be bored at some distance from the plantation. Using hand tools and piping, villagers brought the water supply 1.6 kilometers on to the plantation and closer to the community. A cart is used to bring containers of water the final distance to the village.



His Majesty Dounoma Madi of Canton of Magdeme drinking water from FwB/FsF well near plantation

Prior to the well and tree planting, water of questionable quality was carried considerably longer distances. The water was carried mainly by women and children of the village. The well and greatly reduced distance to a water supply has meant that the women and children have more time for other activities. Ms. Tapita Victoire, animator in community organization with ABIOGeT also advises that, whereas in the previous year almost every child in the village had stomach problems, since water from the well became available, there have been almost no stomach complaints at all.

The well and water supply are immediate benefits for which the residents of area are extremely grateful. Although tree cover is rare in the area and there is no tradition or experience with tree cover, a women's group in the village (who are leading the plantation maintenance) plan to grow crops in the shade of partial tree cover. Crops such as ground nuts (peanuts) will provide more protein for village consumption and added options for generating household income which can be applied to school fees and other important needs.



Bill Clarke, FwB/FsF Trustee congratulating Mme. Fanne and Mme. Ngoudja, leaders of Karabiwa Women's Group, on work establishing and maintaining the community forest

Another effort (to support the partnership to address lack of tree cover and to reduce pressure on scarce wood resources of the general area) was the contribution of improved cooking stoves. These are proudly used in village households, and villagers are pleased to report less smoke in the living area of houses and less fuel wood that has to be gathered and consumed.

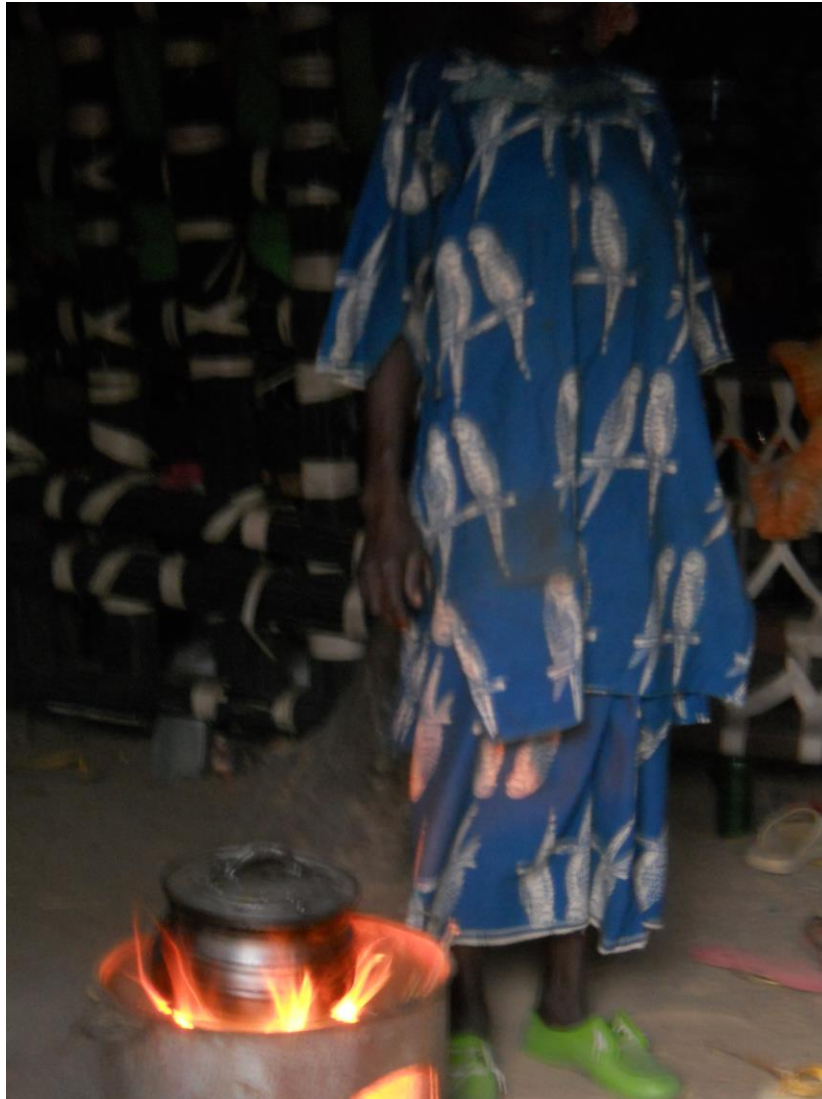


Photo of improved wood stove being used for meal preparation inside the home

While some 250 people are direct beneficiaries of the above benefits, some 2,000 people in the larger department (area) of Mayo-Sava are believed to benefit from reduced pressure on scarce resources and the provision of a potable water supply. Villagers look forward to anticipated benefits of tree growth and tree cover. Eleven other villages in the area have come forward to request such a community tree plantation to provide a range of immediate and longer term benefit for the villages and villagers concerned.



Photo of auger offered by Strathmore to ABIOGeT

Here is the auger which will be used to dig holes to plant trees. This is an important gift from Strathmore Landscape based in Montreal. Strathmore is a company where Clement Sofalne worked in summer 2012 and with whom he maintained a good relationship. Community in Cameroon is very happy to have this working equipment. The auger will undoubtedly accelerate work of ABIOGeT in the far north of Cameroon.

BC June 7, 2014 (based on reviews of earlier draft sections)