



Innovative results of the project to support the expanded program on natural resource management training in the Congo Basin (2011-2014)

Damase Khasa, Professor
Université Laval, Québec Canada (Member of Academic Consortium for the Congo Basin Forest Partnership)

16th CBFP MoP– Kigali, Rwanda (21-26 November 2016)



UNIVERSITÉ
LAVAL

Faculté de foresterie, de géographie et de géomatique



GRUPE DE LA BANQUE
AFRICAINNE DE DÉVELOPPEMENT

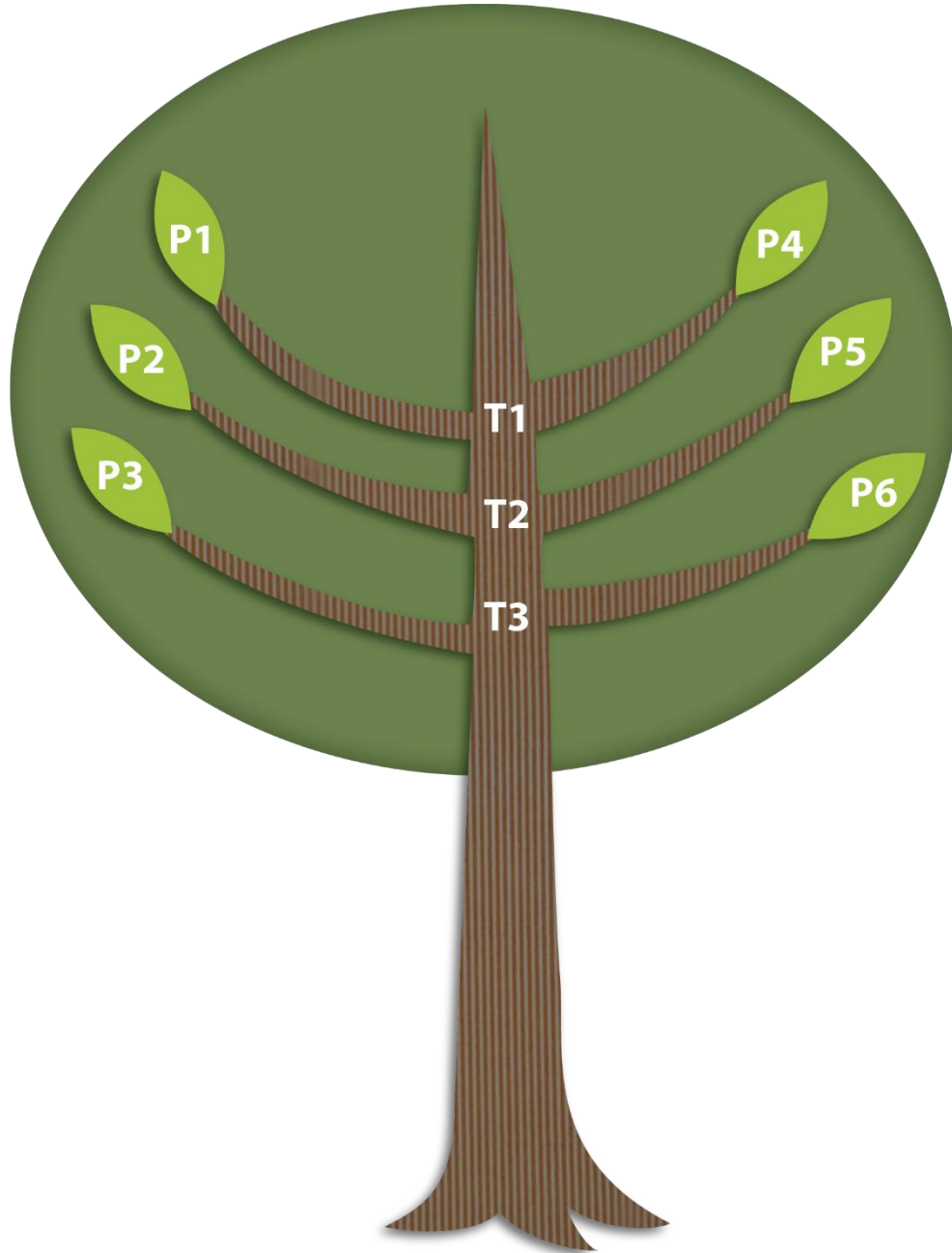


Presentation Outline



- 1. COMIFAC Revised Convergence Plan (2015-2025)**
- 2. Project Summary and Beneficiaries**
- 3. Objectives and Expected Results**
- 4. Innovative Results**
- 5. Way Forward**
- 6. Acknowledgements**

1. COMIFAC REVISED CONVERGENCE PLAN (2015-2025)



PRIORITY THEMES OF INTERVENTIONS

- P 1** Harmonization of forest and environmental policies
- P 2** Management and sustainable development of forest resources
- P 3** Conservation and sustainable use of biological diversity
- P 4** Combating the effects of climate change and desertification
- P 5** Socio-economic development and multi-stakeholder participation
- P 6** Sustainable Financing

CROSS-CUTTING THEMES

- T 1** Training and capacity building
- T 2** Research and development
- T 3** Communication, awareness raising, information and education

2. Project summary and beneficiaries



Client Information

BENEFICIARY : Forestry and Environment Training Network of Central Africa (RIFFEAC);

EXECUTING AGENCY : RIFFEAC

Financing Plan

TOTAL COST : 11.639.985 euros

CBFF: 7.624.985 euros

Other donors: Global Affairs Canada (1,575,000 euros); GIZ-Germany (1,125,000 euros); Université Laval-Canada (565,000 euros); Cerfo-Canada (375,000 euros); Riffeac and its member (375,000 euros)

Period : 3 years (From July 2011 to June 2014, extended to December 2014)

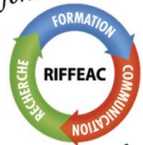
2. Project summary and beneficiaries

Beneficiairies : RIFFEAC Platform
and 20 member institutions
in 9 out of 10 COMIFAC countries

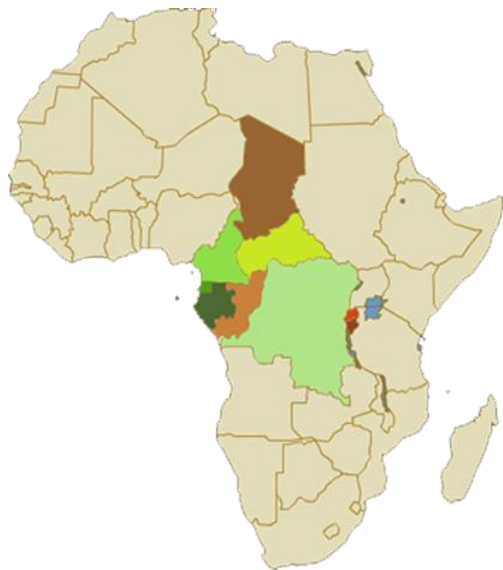
- Burundi
- Cameroon
- Gabon
- Equatorial Guinea
- Central African Republic
- DR Congo
- São Tomé and Príncipe
- Congo
- Rwanda
- Tchad



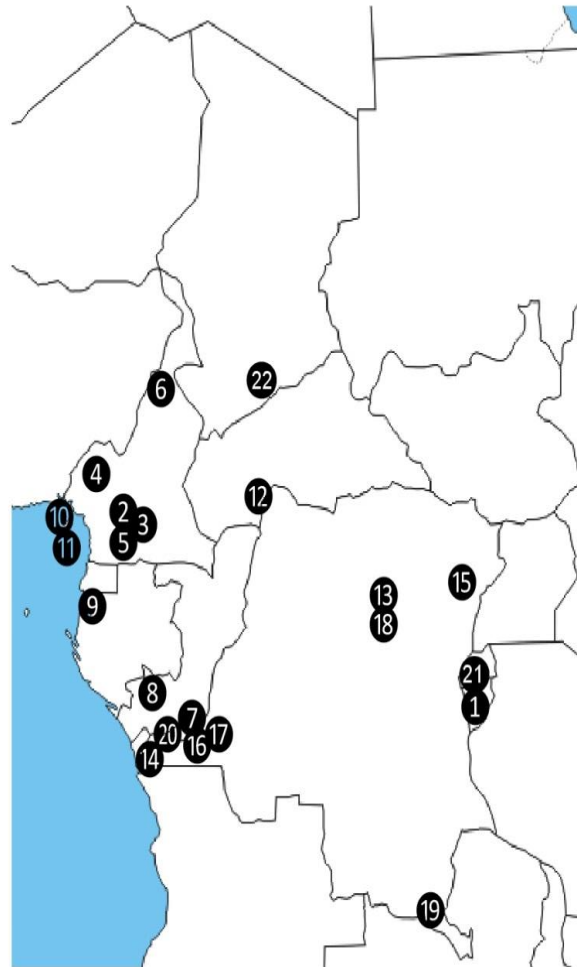
La formation au cœur...



...de la gestion durable



RIFFE AC and its 22 members in 2016



Institutions membres du RIFFEAC

1 FABI - Gitega	Burundi
2 CRESA - Yaoundé	Cameroun
3 HIES - Yaoundé	Cameroun
4 FASA - Dschang	Cameroun
5 ENEF - Mbalmayo	Cameroun
6 EFG - Garoua	Cameroun
7 ENSAF - Brazzaville	Congo
8 ENEF - Mossendjo	Congo
9 ENEF - Libreville	Gabon
10 EUEAPF - Malabo	Guinée équatoriale
11 FMA - Malabo	Guinée équatoriale
12 ISDR - Bangui	RCA
13 ISEA - Bengamisa	RDC
14 UKV - Boma	RDC
15 UCG - Butembo	RDC
16 ERAIFT - Kinshasa	RDC
17 UNIKIN - Kinshasa	RDC
18 UNIKIS - Kisangani	RDC
19 UNILU - Lubumbashi	RDC
20 ISEA - Tshela	RDC
21 KCEM - Kigali	Rwanda
22 IUSAES - Sarh	Tchad

3. Objectives and Expected Results

- ❑ The overall objective of the Project was to enhance training and research activities in order to reduce deforestation and degradation of natural resources in the Congo Basin. Its specific objectives were to:
 - i) support RIFFEAC's coordination activities,
 - ii) support the technical training; iii)
 - support university training and research; iv)
 - support the project management unit.

3. Objectives and Expected Results

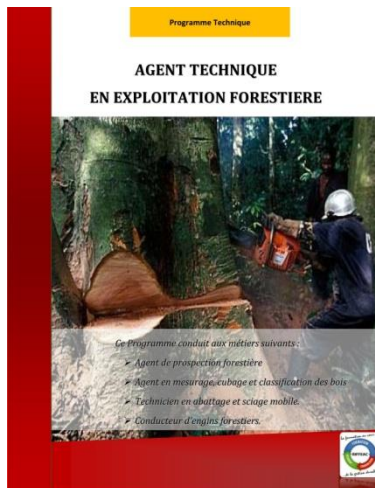
- ❑ The expected results were: (i) the training institutions are strengthened technically, financially and in terms of tools and; (ii) modules for technical, university and post-graduate training are prepared and taught at the target institutions; (iii) infrastructures for the training institutions are improved and rehabilitated; (iv) the demonstration forests are developed and well managed; and (v) students conduct research at the target universities

4. INNOVATIVE RESULTS

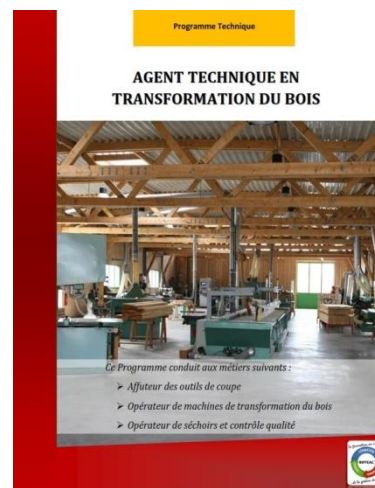
4.1. Revision and harmonization of programs for vocational and technical training

❑ 11 programmes developped and adopted

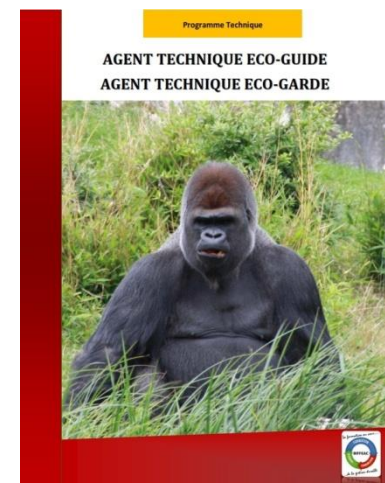
✓ 3 technical agents with 9 job descriptions



1. Technical agent in forest operations with 4 job descriptions (JD) :
- Forest survey
 - Scaling and classification of wood
 - Felling and mobile sawing
 - Use of forest machine



2. Technical agent in wood transformation with 3 JD:
- Sharpening of cutting tools,
 - Operation of machinery sawmill
 - Dry operation & quality



3. Technical agent in wildlife and protected areas with 2 JD :
- Eco-guard
 - Eco-guide

4.1. Revision and harmonization of programs for vocational and technical training

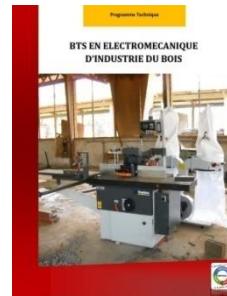
- ✓ 5 senior technician certificate (STC/BTS)
- ✓ 3 technical engineers



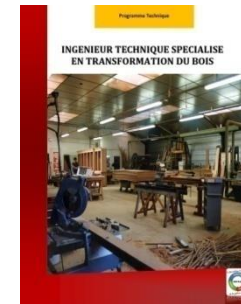
Senior technician certificate in forest operations



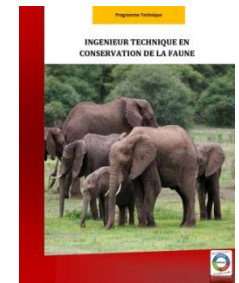
Senior technician certificate in industrial carpentry



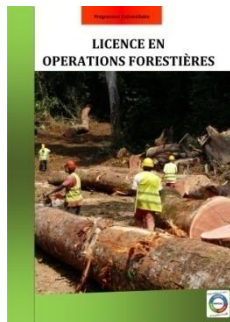
Senior technician certificate in electro mechanics



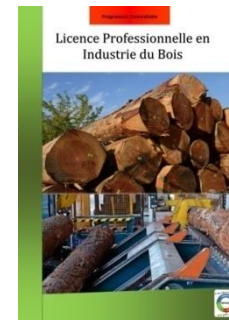
Senior technician certificate in wood transformation



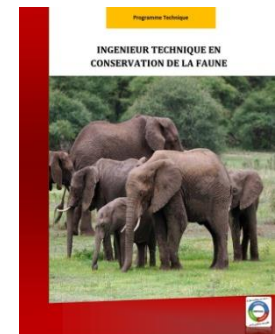
Senior technician certificate in wildlife and protected areas



Technical engineer in forest operations



Technical engineer in wood transformation

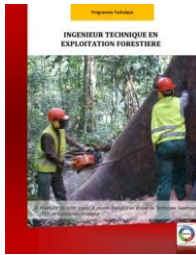


Technical engineer in wildlife and protected areas

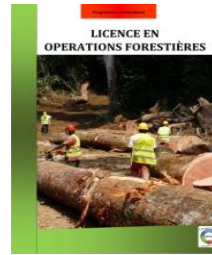
4.2. Revision and harmonization of programs for university training

□ 7 programs developed and adopted

✓ 2 Bachelors of Science (Bac+3)

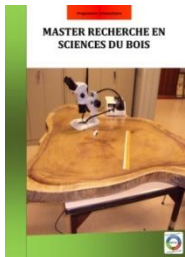


– B.Sc.in forest operations



B.Sc.in wood industry

✓ 4 Masters (3 research et 1 professional)



M.Res.in wood science
(ENEF-Gabon)



M.Res. Agroforestry
(U.Dschang)



M.Res. in forest policy
and governance (Uniikin)



M. Pr.in forest policy
and governance (Unik)

✓ 1 Process Engineering (Bac +5)



4.3. SPECIALISATIONS OF INSTITUTIONS

□ University training

- 3 Centres of excellence created
 - ✓ ENEF Gabon in wood sciences
 - ✓ FASA de Dschang in agroforestry and ecosystem services
 - ✓ FSA -UNIKIN in forest policy and governance



- FASA-
U.Dschang
specialized in
agroforestry and
ecosystem services



- ENEF Gabon
specialized in
wood sciences



- FSA –UNIKIN
specialized in forest
policy and governance

Global objective of the programme

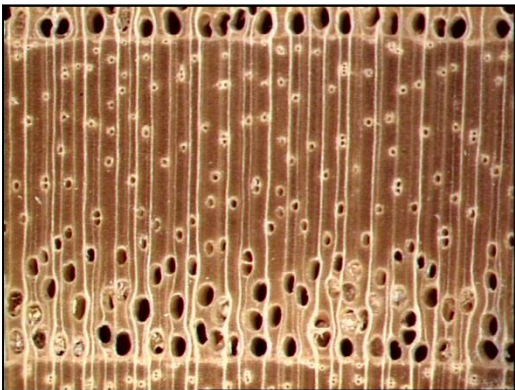
(Agroforestry and optimization of ecosystem services of natural and cultivated landscapes of the Congo Basin)

- The program aims to train highly qualified personnel (HQP) with expertise *in diagnostic, evaluation, design and research skills* on *techniques, innovative and emerging management of agroforestry systems (AFS)* as well as *economic and ecological valuations of AFS*



Global objective of the programme

- The program aims to train highly qualified personnel (HQP) with expertise *in areas of wood sciences* (wood anatomy, physics, chemistry, mechanics).

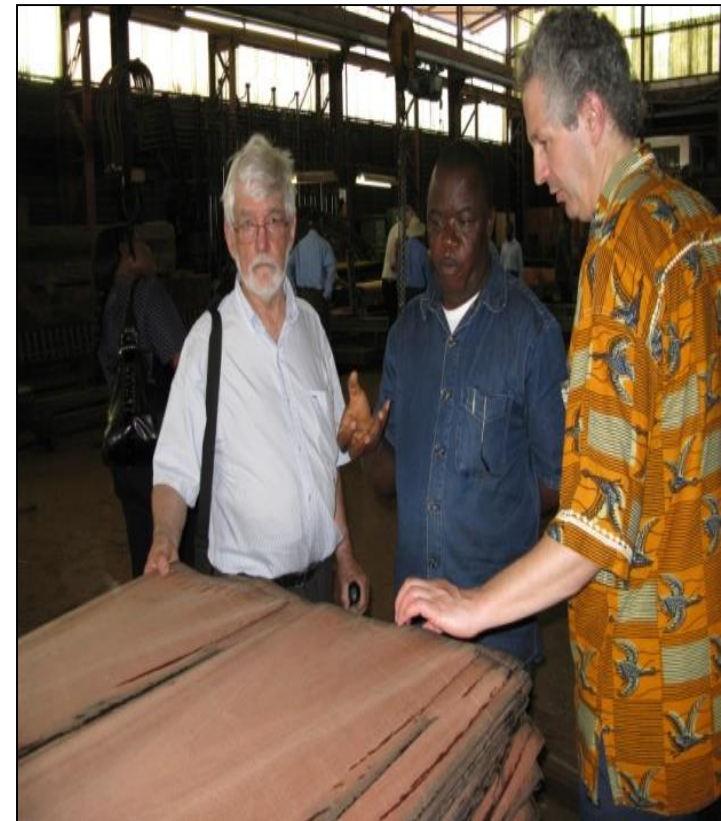


Global objective of the programme

- The program aims to train highly qualified personnel (HQP) with expertise *in forest policy and governance*. It is a multi-disciplinary and multi-faculty program (management of natural resources, economy, law).

Global objective of the programme

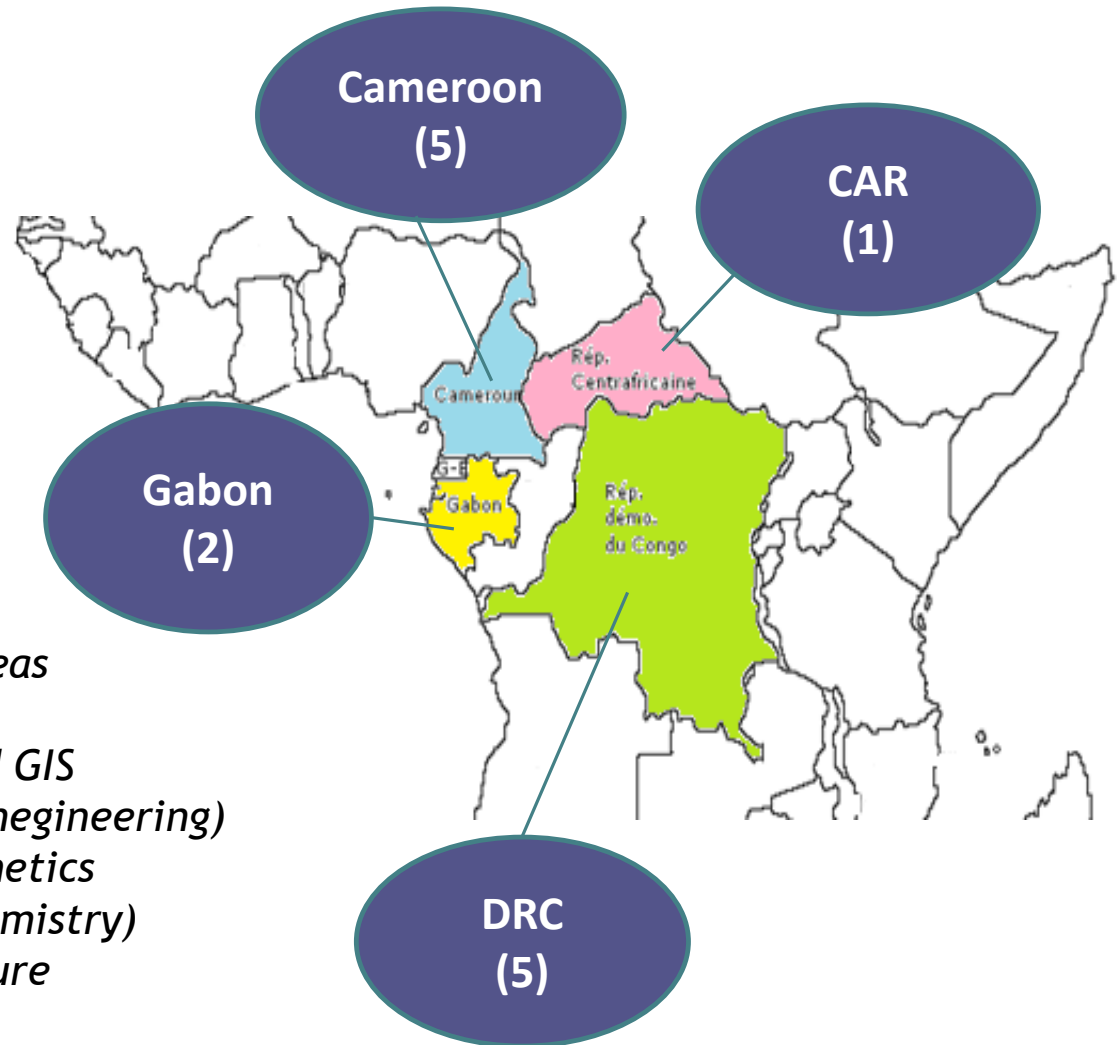
The program aims to train wood engineers in 5 years with expertise *in wood sciences, transformation process and engineering sciences* in order to develop production plans in wood transformation industry and valorisation of wood residus (2nd and 3rd transformations).



4.4. TRAINING OF TRAINERS (SCHOLRASHIPS)

- ☐ PhD training
 - 20 PhD scholarships
 - 10 Université Laval, Canada
 - 1 U. Stellenbosch, South Africa
 - 9 Institutions of the Congo Basin
- ☐ Masters and Diploma of specialized post-graduate studies (DESS)
 - 34 Masters of research scholarships
 - 3 Université Laval
 - 10 ENEF Gabon
 - 10 UNIKIN
 - 11 UNI Dschang
 - 2 Diploma of DESS

Origin and areas of specialization Of scholars enrolled at Laval



Research areas:

Agroforestry

Conservation and protected areas

Community forestry

Geomatics, remote sensing and GIS

Mycoremediation (ecological engineering)

Fish farming et population genetics

Wood Science (Physics, and chemistry)

Carbon sequestration Sylviculture

4.5. MODERNISATION OF INFRASTRUCTURES

Construction

N°/O	Name of beneficiary institution (BI)	Place/Country	Work done	Capacity	Date received
1.	Ecole de Faune de Garoua (EFG)	Garoua / Cameroun	Construction of a dormitory R + 1 48 modern rooms	72 Places	17 october2014
2.	Ecole Nationale des Eaux et Forêts de Mbalmayo (ENEF Mbalmayo)	Mbalmayo / Cameroun	Construction of a simple building of 2 rooms: one GIS room and 1 computer room	100 Places	29 november 2013
3.	Ecole Nationale des Eaux et Forêts de Mossendjo (ENEF Mossendjo)	Mossendjo / Congo	Construction of academic block consisting of a library, two computer rooms and 1 office in clay brick	100 Places	27 february 2014
4.	Ecole Nationale des Eaux et Forêts Libreville (ENEF Libreville)	Libreville / Gabon	Construction of a school complex R + 1: two classrooms, three laboratories, 8 offices, 2 multimediarooms and 28 single rooms	3 labs = 60 2 classrooms = 40 8 offices Dort. = 28 2 multifunctional rooms= 30	10 october2014
5.	Institut Supérieur d'Agronomie de Tshéla	Tshéla / RDC	Construction of an administration building R + 1 (01 library, 01 computer room, 13 offices, 01 conference room)	Salle info = 50 Library= 50 Conference room. = 50	25 september2014
6.	Faculté des Sciences Agronomiques de l'Université KASA VUBU	Boma / RDC	Construction of a school complex	250 places	26 september 2014

4.5. MODERNISATION OF INFRASTRUCTURES

N°/O	Name of beneficiary institution	Place/Country	Work done	Capacity	Date received
7.	Institut Supérieur d'Agronomie de Gitega (ISA Gitega)	Gitega /Burundi	Rehabilitation of two laboratories and a library	100 Places	29 july2014
8.	Faculté Agronomique et des Sciences Agricoles de l'Université de Dschang (FASA –Dschang)	Dschang / Cameroun	Rehabilitation of the Department of Forestry, Dean office and 2 Amphi	2 amphi = 1000 Dean office = 10 Mulimedia room= 40	10 may 2014
9.	Centre Régional d'Enseignement Spécialisé en Agriculture Forêt Bois (CRESA Forêt-Bois)	Yaoundé / Cameroun	Rehabilitation of the instructional unit (10 office, conference room, four classrooms, resource center, two computer labs, etc.)	100 places	7 may 2014
10.	Ecole Nationale des Sciences Agronomiques et Forestières (ENSAF)	Brazzaville / Congo	Construction of a block of three (03) classrooms	120 places	13 march 2014
11.	Faculté des Sciences Agronomiques de l'Université de Kinshasa	Kinshasa / RDC	Rehabilitation of plumbing	1000 places	29 may 2014
12.	Ecole Régionale postuniversitaire d'Aménagement et de Gestion Intégrés des Forêts et Territoires Tropicaux (ERAIFT)	Kinshasa / RDC	Rehabilitation of a conference room (Luki) and a laboratory at ERAIFT Kinshasa	100 places	30 September 2014
13.	Kitabi College of Conservation and Environmental Management	Kitabi / Rwanda	Construction of a student dormitory	30 places	30 September 2014
14.	Institut Supérieur de Développement Rurale	Mbaïki / RCA	Rehabilitation of three (03) classrooms	100 places	07 may 2014

4.5. MODERNISATION OF INFRASTRUCTURES



informatics and GIS Building at ENEF Mbalmayo- Cameroun



Dortoir de 48 chambres - Dormitory of 48 rooms
Ecole de Faune de Garoua - Cameroun

Residence with 48 rooms at the School of wildlife Garoua - Cameroon



Bloc constitué d'une bibliothèque et d'une salle informatique - Building of a Computer and a Library room
Ecole Nationale des Eaux et Forêts de Mossendjo - Congo

Multimedia Centre at ENEF Mossendjo - Congo



Complexe Scolaire R + 1 - School Complex Ground floor + 1

Ecole Nationale des Eaux et Forêts Cap Estérias - Gabon

Complexe académique à l'Ecole des Eaux et Forêts Cap Estérias - Gabon



Bâtiment Administratif R+1 - Administration Building Ground floor +1

Institut Supérieur d'Etudes Agronomiques (ISEA) de Tshela - RDC

Administrative Building R+1 at ISEA Tshela - RDC



Complexe Scolaire - School Complex

Faculté des Sciences Agronomiques de l'Université KASA VUBU à BOMA - RDC

Academic Complex at FSA of University Kasa Vubu in BOMA - RDC

4.5. MODERNISATION OF INFRASTRUCTURES



Rehabilitation of the administrative building at
FASA-U.DSchang- Cameroon



Construction of a block of 3 classrooms at ENSAF-
Brazzaville, Congo



Rehabilitation of three classrooms at ISDR Mbaiki
- RCA



Rehabilitation of student dormitories at KCEM -
Rwanda

4.6. ACQUISITION OF TOOLS AND INSTRUMENTS

❑ Acquisition of equipment

- Beds, mattresses and accessories for dormitories, chairs and benches for classrooms and laboratories (mostly to equip new constructions).

- Computer rooms (to equip the majority of BI)

Computers, printers, copiers, laptops, projectors, etc.



- Vehicles

✓ 5 vehicles 4x4 and 1 minibus.



4.6. ACQUISITION OF TOOLS AND INSTRUMENTS

□ Acquisition of equipment

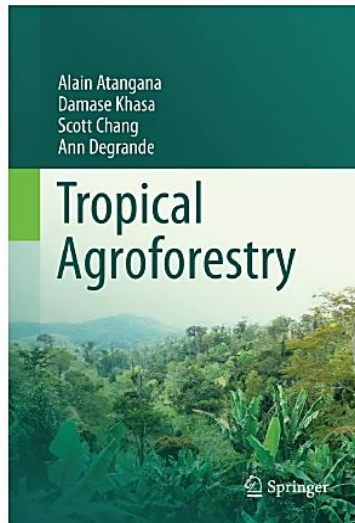
- Educational resources including textbooks (all BI received items)
- Field equipment and laboratory (equipment procured and distributed in 16 BI)
 - Field : Compas, GPS, binoculars, chainsaws, etc.
 - Labo : distiller, scale, microscopes, binoculars, etc.



Book Review



springer.com



2014, I, 467 p. 107 illus., 27 illus. in color.

Printed book

Hardcover

► 74,99 € | £67.99 | \$99.00
► *80,24 € (D) | 82,49 € (A) | CHF 100.00

eBook

Available from your library or

Agroforest Syst
DOI 10.1007/s10457-013-9668-z

BOOK REVIEW

About us Publications Careers Capacity Development Partners Contact Us Intranet

Search this website with Google

Home Our Research Where We Work Our Products News

107-7723-1

News and events

Home > First ever agroforestry textbook for the tropics >

Newsroom

[Featured Stories](#)
[For Journalists](#) ►
[Agroforestry News](#)
[Press Releases](#)
[Multimedia](#)
[Events](#)
[Transformations Online](#)

First ever agroforestry textbook for the tropics

Submitted by Kate Langford on December 4, 2013



environment in some of the poorest and most degraded regions of the world.

"This new textbook brings together everything that is currently known about the theory and practice of agroforestry in a tropical context," explains Ann Degrande, Senior Scientist with the World Agroforestry Centre in Cameroon and one of the textbook's 4 authors.

"While agroforestry has been practiced traditionally worldwide for millennia, it is only in the last 30 or so years that it has been properly recognized as a discipline of agricultural science."

"Increasingly we are seeing tropical countries look to agroforestry as a means of not only improving people's livelihoods through the supply of fruits, timber, fodder and fertilizer and therefore higher incomes, but also in stabilizing erosion, replenishing soils, storing carbon and enhancing on-farm biodiversity."

Universities which have developed agroforestry curricula for undergraduate and postgraduate studies are in urgent need of educational resources to support their teaching. The last authoritative agroforestry textbook was published in 1993 by PK Nair, a pioneering researcher and educator in the field of agroforestry.

Since then, major advances have been made in the science of agroforestry, such as in tree domestication and agroforestry for integrated pest management and biofuel production.

The contribution of agroforestry to the mitigation of climate change (through carbon
/newsroom/highlights/treesilience-assessment-resilience-provided-trees-drylands-eastern-africa countries attempt to negotiated a

The first comprehensive textbook on all aspects of agroforestry in the tropics has just been published, filling the need for educational material on an area of agricultural science that has the potential to improve livelihoods and the

Featured Stories

Partners from different sectors congratulate ICRAF for a fruitful 20 years in the Philippines

December 19, 2013

Join our #WCA2014 social media team!

December 16, 2013

Tackling obstacles, catalysing linkages, and developing synergies: The Global Landscapes Forum

December 6, 2013

Premiere: Agroforestry training for commune extension

December 5, 2013

[Treesilience: An assessment of the resilience provided by trees in the drylands of Eastern Africa](#)

November 26, 2013

Rural Eastern African communities to reap huge benefits from new DGIS Programme

November 21, 2013

Climate-smart agriculture is making a difference

November 21, 2013

Agroforests are reducing carbon losses in Jambi, Indonesia

November 20, 2013

Lesser known coffee variety almost as profitable as oil palm in Sumatra's peatlands

with an estimated total of 500 diversity and comprehensiveness in the book.

book in a rapidly developing field task. The authors have to access, ize the mind-boggling array of ture; integrate new knowledge ation; and present the current atter in a concise, balanced, and m and simple language that is i the teacher and the taught. That ve accomplished in this book.

of the book is not intended here. ty and complexity of the task, no ned as complete and flawless; e at which knowledge accumu- lled fields like agroforestry will short life-spans. By referring to on of the book (Preface), the 'are of some such shortcomings. ges the readers to bring any such s' attention so they could be tions. Undoubtedly, the book is ution to the development of iewer once again congratulate nificant achievement.

Springer

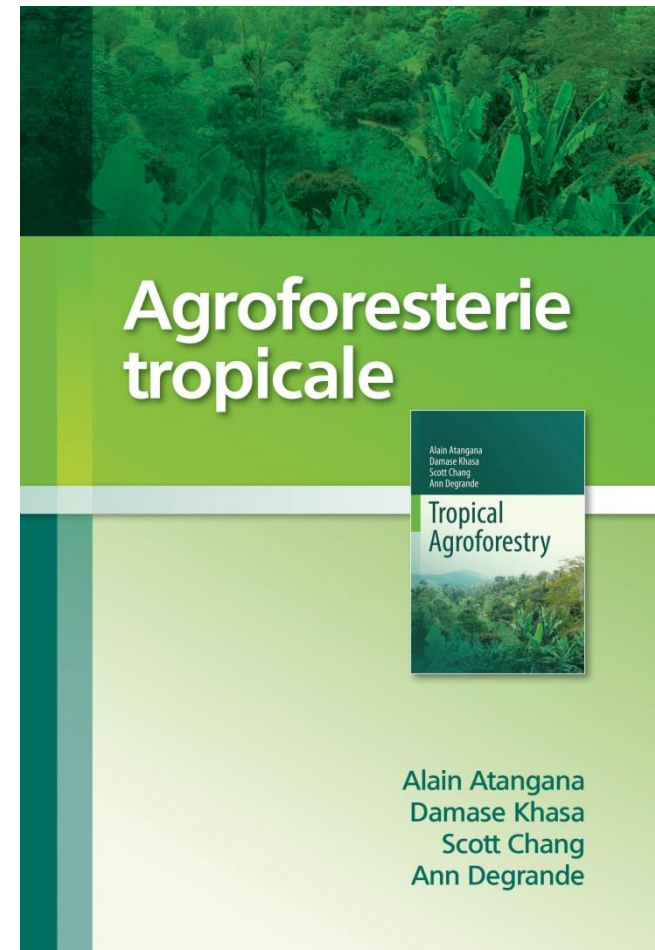
25

« Agroforesterie tropicale »

Translation into French of English version
published by Springer (2014).

Alain-René Atangana, Damase Khasa et
Martin Beaudoin-Nadeau.

200 copies were distributed to RIFFEAC
member institutions



GRUPE DE LA BANQUE
AFRICAIN DE DÉVELOPPEMENT



4.7. RESEARCH SUPPORT

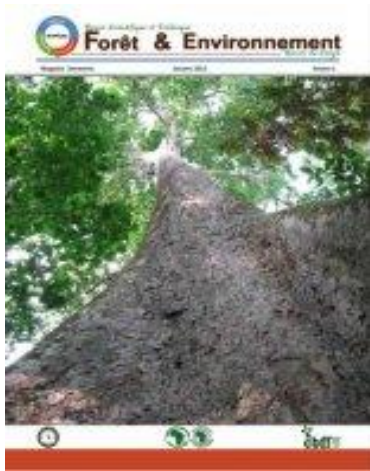
Research Grants

- ❑ 2 calls for proposals
 - ✓ 1st call for PhD students at Université Laval
 - ✓ 2nd call for PhD/M.Sc. students, university research and technology transfer projects in the sub region

[Liste bénéficiaires.docx](#)

4.8. COMMUNICATIONS OF RESEARCH FINDINGS

- ❑ Scientific and technical journal on forest and environment in the Congo basin
 - 7 issues published so far



4.9. SUPPORT TO CONTINUING EDUCATION.

- ❑ Preparation of methodological guide on design and organization of seminars of continuing education
- ❑ Development and implentation of six modules of continuing education in different institutions by beneficiary institutions

4.10. Internationalization of Laval/CERFO

- **Opportunity:** This project has been an opportunity for Laval/CERFO to renew its commitment of over 4 decades of cooperation in forestry training, education and research with the Congo Basin
- **Mobilisation of personnel:** Over 25 professors at Laval have been involved since 2008 providing their expertise and knowledge during workshops, teaching at the undergraduate level and supervising graduate students at the M.Sc. and Ph.D. levels, etc. ;
- **N-S, S-S and N-N Cooperation:** Strengthening of North-South, South-South (Laval-Riffeac and its members) and its members) and North-North (Laval-ACCBFP) partnerships;
- **Creation of three pôles of excellence:** We are exploring bidiplomation (joint diplomas) for the M.Sc. programs the project has helped developed



5. WAY FORWARD (PHASE II)

Approval at the regional ministerial level of harmonized programs with Riffeac certified label and implementation at targeted institutions

- ❑ Consolidation and strengthening of project activities underway in phase I with strong communication strategy in order to achieve sustainability upon the completion of phase II

6. Acknowledgements









Merci de votre attention!



PÉRIODE DE QUESTIONS



UNIVERSITÉ
LAVAL

Faculté de foresterie, de géographie et de géomatique



GRUPE DE LA BANQUE
AFRICAINNE DE DÉVELOPPEMENT

