

Prunus africana in Cameroon :
Results of FAO-CIFOR-SNV-ICRAF Program

CITES SRT Meeting

Kenya

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Verina Ingram, CIFOR



Mobilisation et renforcement des capacités des petites et moyennes entreprises impliquées dans les chaînes des produits forestiers non ligneux en Afrique Centrale (GCP/RAF/408/EC)

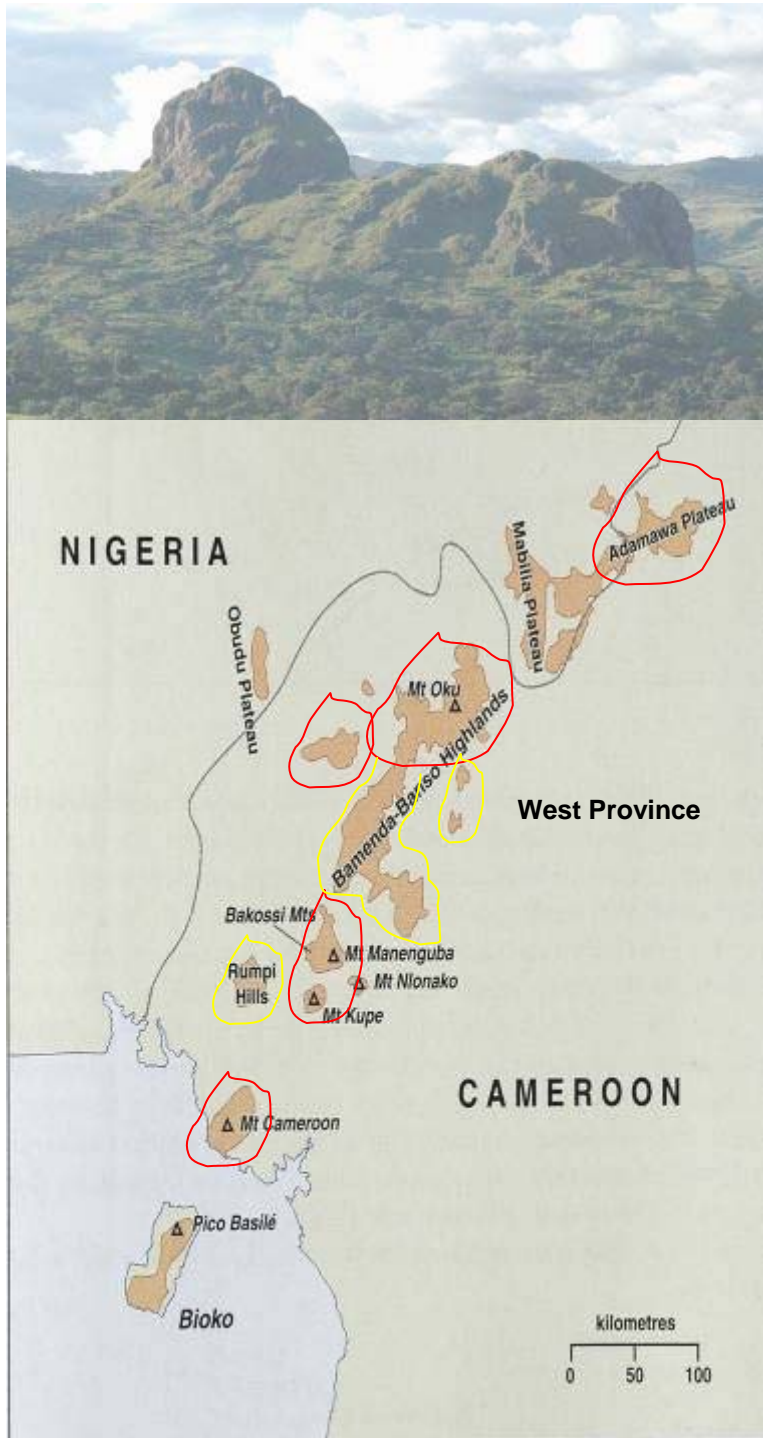


GCP/RAF/408/EC

Forests for poverty reduction: mobilizing small and medium forest enterprises in Central Africa

- Despite the crucial role of NWFP in forest people's livelihoods, the trade of these products faces many obstacles. SMFE are mostly informal, family or community enterprises. Businesses are not organized, lack sufficient market information and technological know-how and face ownership problems
- **Funding:** European Commission
- **Implementation:** Governments of Cameroon & DRC, FAO, SNV, CIFOR & ICRAF
- **Project ;** Links Convergence Plan of the Forestry Commission of Central Africa (COMIFAC) which considers NWFP as major products for alleviating poverty and enhancing food security in Central Africa.
- **General Objectives:** 1. Increase the revenues of small and medium enterprises involved in the value chains of NWFP and 2. Manage NWFP resources sustainably for both current and future generations
- **Specific Objectives:** 1. Build the capacity of actors involved in the production and commercialisation of NWFP 2. Improve production and harvesting techniques of NWFP 3. Develop the value chains of major NWFP 4. Promote a favourable legal and institutional environment for small and medium enterprises
- **Locations;** CAMEROON Gum arabic, *Prunus africana*, Honey, Bush mango (*Irvingia spp.*) DEMOCRATIC REPUBLIC OF CONGO Gnetum spp, Safou (*Dacryodes edulis*), Honey

Pygeum: Highlands Forests



- Western Highlands chain of volcanic mountains
- Habitat ranges from sub-montane to montane forests and subalpine grasslands.
- Largest remaining patches of Afrotropical forest in West Africa.
- One of top 200 worldwide *Ecoregions* (35 bird species, 10 reptiles, 55 amphibians, 6 mammals & around 100 rare/endemic plant species).
- Human activities have fragmented, degraded and isolated remaining forest –, unsustainable harvesting, fires, agriculture and bushmeat poaching.
- Huge losses forest:
 - 1958 = 37% of province forest covered
 - 2000 = 3.5% largest montane forest is approximately 98km² in Bamenda Highlands
- Role of traditional conservation & management by Traditional Authorities increasingly less successful and un-enforced
- 38 Community Forests, up to 5000 hectares each = 72,681 hectares (2007) - conserving biodiversity and sustainable livelihoods
- Highlands forests provide other essential services and benefits: water, water catchments, fuel wood, medicine, fertile land, animals, sacred shrines and ecotourism.

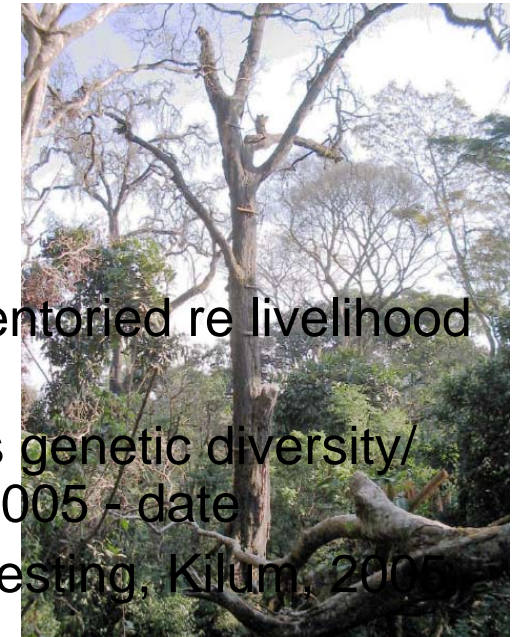
The problems.....

- **Resource availability reduced by:**
 - Bush fires
 - Grazing
 - Unsustainable harvested quantities
 - Insufficient regeneration in wild & domestication
- **Unsustainable exploitation:**
 - Lack or insufficient local management
 - Unsustainable harvesting techniques
 - Quota based permit system unrelated to actuality
 - Difficult regulatory system for SMEs
 - Inadequate regulatory controls
 - High local and international demand
- **Government capacity:**
 - Insufficient capacity and financial allocation to Prunus to respond to CITES obligations
- **Poor market and information:**
 - Little info exchange at all levels
 - No processing (added value) in Cameroon



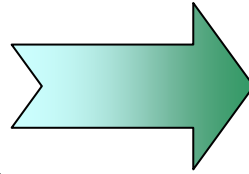
Developments

- Inventories Mt Cameroon, 2000 & Adamoua, 2001
- Cameroon request to maintain quota for areas not inventoried re livelihood implications 2005
- IRAD/Uni Dschang/Biodiversity International: 3 studies genetic diversity/ planting materials, survey participatory regeneration, 2005 - date
- Conflicts re revenue distribution & massive illegal harvesting, Kilum, 2005
- Uni Yaoundé: Phd on genetic characterisation, 2007
- FAO/SNV/CIFOR NTFP SME project started, Feb 07
- WHINCONET/SNV survey: unsustainability Kilum-Ijum, March 07
- Institute Ethnobotany Stewart: massive degeneration, Kilum Ijum, June 07
- CITES questions status of Prunus, July 07
- GTZ: monitoring Mt Cameroon November, Nov 07
- Cameroon government response to EU's Oct concerns, Nov 07
- "Ban" on imports to EU a reality, Nov 07
- MINFoF introduced Circulars, 15 & 22 Nov 2
- No Prunus harvested in NW or SW since Nov 07 (1 seizure SW, Jan 08)
- Exploiters verifying status of plantations & "non-forest" Prunus, Jan 08
- "Prunus Platform" stakeholders set up Nov 07, 3 meetings in 2008





Sustainable?



How much is available?

> 30 DBH average 55 – 68kg per tree, every 7-11 years (Hall 2000, GTZ 2000)

- Inventory: GTZ Mt Cameroon = 209 t. pa average (2000-2005)/ 0.369 m^3/ha (2008-2013)
- Inventory: MINFoF*Samba Pel mali Boudounga = 28.21 m^3/ha
- Inventory: ANAFOR Tchabal Mbabo = 493 t. pa (2001-2011)
- Inventory: ANAFOR Tchabal Gang Daba = 8.8 t. pa (2001 -2011)
- Inventory: CIFOR Kilum-Ijum = 1.036 m^3/ha (2008-2013)
- Inventory: CIFOR Kupe Muanenguba = 0.248 m^3/ha (2008-2013)

Current inventories support = 710.8 t p.a.

BUT differentiation needed for Kilum Ijum CFs and Mt Cameroon lower altitude zones

Rest of Cameroon?

Towards sustainable exploitation....

Chain focussed range of activities



- **Capacity building of SMEs**
- **Adding value; Marketing, information, transformation and processing**
- **Improving harvesting & domestication techniques**
- **Improving legal and institutional system**

Problem analysis and Prunus Platform meetings, SNV/CIFOR

*2007 April & Nov (National), 2008 Jan, April, May (SW),
Aug (National)*

Results:

- Multi-stakeholder concertation of problems AND solutions developing
- Government society/private sector/CF now talking
- Extent of problem/resource now better known
- Private sector taking responsibilities for stock inventory
- Better informed actors
- Wider range of chain actors now more involved in finding solution
- Harvesting “rules” reiterated and impacts in field discussed



Traditional harvesting methods, Feb 08

- Supported evidence of small scale “on-farm” prunus in villages – 1 tree per household average
- Observations & verbal reports that traditional harvesting for medicinal use leads to no mortality
- Traditional harvest approx. 10 X 20cm patch every 6-24 months



Domestication training, ICRAF

May 08



- ICRAF's wealth of prior experience translated into practical course
- Trained 31 trainers in vegetative propagation & nursery techniques
- Community action plans developed
- Monitoring visits scheduled
- Repeat training in SW planned

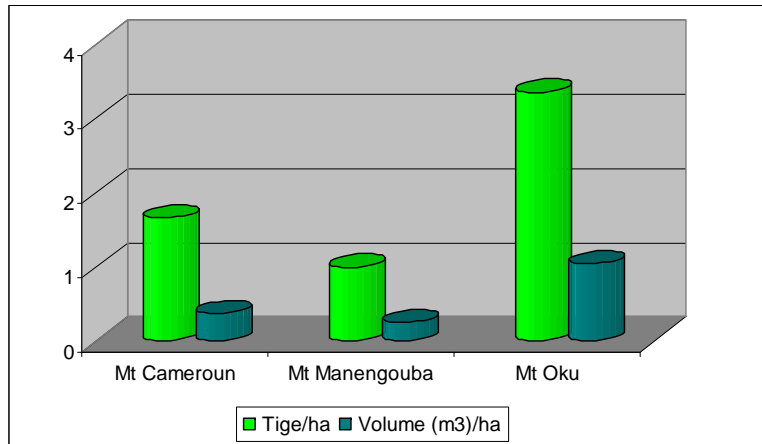
Commercial agents meeting, FAO Aug 08

- Exploiters in NW and MINFoF together inventorying plantations to prove stocks
- Exploiters and traders are now organising and grouping
- Links being made with MINFoF and exploiters - but relations strained
- Socio-economic impact of ban now being felt



NW SW Inventory CIFOR

Aug 08



- Inventories (transect ACS methodology) of 3 major areas: Mt Cameroon, Kupe-Muanenguba, Kilum Ijum
- Maps sites and defines zones – by ecological strata and altitude
- Substantiation: regions differ widely – due to prior harvesting, natural variation, altitude
- Substantiation: widely variable density (1.89-11.4 per hec), tree health status, bark volumes and distribution by DBH per site (KI has largest trees)
- Most bark is available in short term from youngest & smallest trees
- Provides short term estimate of exploitable resource per region (total average 1.654m³/ha)
- Maps presence of >30 'private' plantations and resource availability (> 14,000 trees planted, 5000 known survive, approx 32% success rate) in zones (indicates age, plants and hectares). Majority 70% not harvested, now harvestable (average age 13 years)
- Indicates majority of all trees inventoried fall in lower 3 diameter classes
- Literature references to Adamoua indicate large volumes, larger diameter and age, and virgin, unexploited forests



Baseline study NW SW CIFOR Sept 08

- Details principal uses and maps sites of *Prunus africana* in Cameroon
- Indicates farm/planted and plantations resource
- Describes actors and activities in the chain: no industrial processing in Cameroon
- Highlights lack of communication and different perceptions among actors
- Highlights information and capacity building needs of government - CITES authorities
- Indicates actor perceptions of potential harvesting in the chain
- Shows how market information influences price - can increase by 50% at harvester/CF level
- Shows how Prunus income used on basic needs by forest based communities
- Identified opportunities and constraints
- Highlights recent civil society, private sector and government (uncoordinated) initiatives in regeneration, research, domestication and management
- Recommends actions to improve the chain



Technical note: Cultivation and sustainable harvesting Prunus, Sept 08 ICRAF

- Easy to read technical information, instructions, diagrams and photos on multiplication, cultivation and domestication
- Draws on Uni. Dschang and ICRAF research
- Research on sustainable harvest technique ongoing





Future activities till 2010...

Unplanned but new activities

- Actors joint proposal to WorldBank Development Marketplace- high yield generic variants identification and domestication

Capacity building of SMEs

- Planning (business and Prunus): CFs, producers, exporters, license holders etc

Adding value; Marketing, transformation and processing

- research on accessible capital/grants/projects for Prunus transformation options
- Possible support to pilot plant(s) for feasibility of transformation and processing
- Elaborate & diffuse vulgarisation on transformation techniques
- Continuation of Prunus Platform meetings
- Domestication and cultivation training at SW site

Improving harvesting & domestication techniques

- Finalisation of sustainable harvesting techniques
- Vulgarisation & dissemination of sustainable resource exploitation techniques eg brochures, posters, radio

Legal and institutional system

- Elaboration of criteria's and indicators for revision of quotas and permit system - Management Plan for Cameroon
- Legal framework revision; 1 regional workshop (DRC & Cameroon)
- Public-private sector collaboration on Prunus: 2 regional workshops
- National & international Importers & exporters coordination: 1 workshop

Lessons learnt...

- Until multi-actor involvement in Platform, most actors in chain isolated and unaware of prices, market mechanisms and resource problems
- Still actors are unaware of ban e.g. remote areas Adamaoua
- Security of wild stands difficult to guarantee
- Harvesting technique needs to be pragmatic
- Cross border trade probably not an issue- but not captured in current administration
- Exploiters are willing to pay for inventories
- Inventory method needs to be specified & validated
- Government commitment towards Management Plan and improved enforcement, with strong traceability system essential
- Regeneration works best when stimulated by economic initiative
- Public private partnerships an option
- Domestication and tree or forest ownership/tenure is future for sustainable business

