GCP/RAF/408/EC
« MOBILISATION ET RENFORCEMENT DES CAPACITÉS DES PETITES ET MOYENNES ENTREPRISES IMPLIQUÉES DANS LES FILIÈRES DES PRODUITS FORESTIERS NON LIGNEUX EN AFRIQUE CENTRALE »

Guidance for a National Prunus africana Management Plan Cameroon

ANNEXES

Verina Ingram, Abdon Awono, Jolien Schure, Nouhou Ndam

June 2009

Avec l’appui financier de la Commission Européenne
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Title: Guidance for a National Prunus africana Management Plan for Cameroon

Authors: Verina Ingram, Abdon Awono, Jolien Schure (CIFOR), Nouhou Ndam (Consultant)

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Maps: Paolo Cerutti, Tony Cunningham (CIFOR), GTZ and WWF


PLEASE NOTE THAT THIS IS NOT AN OFFICIAL DOCUMENT FROM THE GOVERNMENT OF CAMEROON. THE DOCUMENT HAS BEEN PRODUCED TO SUPPORT THE MINISTRY OF FORESTRY AND WILDLIFE AND ANAFOR IN THE DEVELOPMENT A NATIONAL MANAGEMENT PLAN FOR PRUNUS AFRICANA.

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Centre for International Forestry Research
Central Africa office, Yaounde, Cameroon
June 2009

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- Support and openness from the private sector and community forests.
- All the participants of drafting meeting.
Annex 1: *Prunus africana* Action Plan

This plan was developed in September 2008 as an outcome of the CITES Significant trade Group meeting in Kenya by the Cameroon CITES Management and Scientific authorities MinFoF and ANAFOR with assistance from CIFOR.

**Date of submission**
September 2008

**Dates of project**
Activity 1 and 2 – Sept – Dec 2008 and Activity 3 and 4 – 2009-2010

**Author**
Government of Cameroon - MINFoF & ANAFOR

**Objectives**

*General objective:* Project will assist Cameroon government and partners to fulfil its obligations under CITES to implement the Significant Trade Review recommendations to finalise a Management Plan of *Prunus africana* (including the determination of the export quota) to guarantee the sustainable trade.

*Specific objectives:*

1. **In short term** (by December 31 2008) prepare a Management Plan for 4 specific zones - validate with participation of stakeholders /actors in Prunus sector
2. Adapt and implement revised institutional framework; system of permit allocation, monitoring and traceability system (by December 31 2008)
3. **In the medium term** (by 2009), capacity building of Management Authorities’ human and financial needs to implement and monitor CITES in Cameroon
4. **In medium term** (by 2010) extend scope of the Management Plan by realising inventories that lead to sustainable quotas for other zones of *Prunus africana* in Cameroon

**Justification**

- Difficulty to comply within timescale with the Recommendations of the July 2006 and July 2008 Recommendations of the CITES Plants Committee Significant Trade Review *Prunus africana*
- Non Detriment Findings indentified – see spider chart
- Consolidate existing data on resource availability of *Prunus africana* in Cameroon
- Lack of means to implement the CITES with sufficiently scientifically supported evidence
- Inappropriate institutional and legal framework for sustainable exploitation
- Lack of capacity and knowledge of Scientific authority to implement CITES

**Plan of work**

*1. Management Plan*

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timescale</th>
<th>Result</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. gather all current baseline and inventory data for Cameroon to contribute to a management plan which determines a quota on the basis of inventories and consolidate and verify the harvesting technique (s)</td>
<td>Sept - Nov 15</td>
<td>draft management plan</td>
<td>FAO project- CIFOR management Plan</td>
</tr>
<tr>
<td>2. Mission Nigeria/Cameroon border control posts mission to verifier and check data on illegal commerce with Nigeria</td>
<td>Sept - Nov 15</td>
<td>Verification of status of trade in Prunus with Nigeria</td>
<td>Mgt Authority</td>
</tr>
</tbody>
</table>
3. Finalisation meeting on management plan with authorities, stakeholders, partners.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timescale</th>
<th>Result</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31 Novemb er</td>
<td>Stakeholder understanding and consensus on Management Plan report</td>
<td>Mgt Authority FAO project- ICRAF &amp; SNV meetings Plan</td>
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</tbody>
</table>

4. Validation by Minister MINFoF

<table>
<thead>
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<th>Result</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 December</td>
<td>Management plan sent to CITES by 15 Dec</td>
<td>Minister MinFoF</td>
</tr>
</tbody>
</table>

2 Institutional framework

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timescale</th>
<th>Result</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Desk research to prepare texts for: a. Revision of current system of permit allocation to be based upon inventory and sustainable resource off-take, b. Improved monitoring and traceability system to meet CITES requirements (mission of sensitisation) c. Specify harvesting method (norms) d. Specify methodology for future inventories and calculations for sustainable off take e. Coordination mechanisms for new permitting /monitoring system between Scientific and Management Authorities</td>
<td>Sept - Oct</td>
<td>draft texts</td>
<td>Mgt Authority Activities to be done by a consultant – via GTZ ProPSFE</td>
</tr>
<tr>
<td>2. Validation Meeting Committee Inter-ministerial CITES and &quot;Comité d'attribution&quot; of Titres</td>
<td>Oct 15 - Nov 15</td>
<td>Committee agrees on texts</td>
<td>Mgt Authority (GTZ – ProPSFE support)</td>
</tr>
<tr>
<td>3. final version prepared</td>
<td>15 December</td>
<td>Implementation of new system permits and monitoring</td>
<td>Minister MinFoF</td>
</tr>
<tr>
<td>4 Diffusion of new texts (radio, newspaper, copies of texts to MINFoF divisional and provincials delegates and stakeholders )</td>
<td>December 08 – January 09</td>
<td>Stakeholder understanding and consensus on Management Plan report</td>
<td>Mgt Authority (GTZ – ProPSFE support)</td>
</tr>
</tbody>
</table>

3 Capacity building

<table>
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<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Training within the &quot;Specialised Master&quot; on CITES</td>
<td>2009</td>
<td>Trained personnel available</td>
<td>CITES Secretariat</td>
</tr>
<tr>
<td>2. Provide adequate material to issue permit and ensure monitoring - a complete computer to issue CITES Permit (and appropriate logiciel) - a vehicle 4x4 for field monitoring mission</td>
<td>2009</td>
<td>Material available</td>
<td>Mgt Authority</td>
</tr>
</tbody>
</table>

4. Inventories

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timescale</th>
<th>Result</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. prioritisation and mapping of zones for future inventories, agreement for who will inventory which zones</td>
<td>Jun 2009</td>
<td>Map of prunus zones Identification of responsibilities of inventory</td>
<td>Mgt and Sci Authorities</td>
</tr>
<tr>
<td>2. conduct inventories for other zones (about 8 zones)</td>
<td>Jun 2009</td>
<td></td>
<td>Private sector/NGOs/CFs</td>
</tr>
<tr>
<td>3. incorporation of inventories in Simple Management plans for Community Forests NW, SW (exploitation inventories)</td>
<td>Jun 2009</td>
<td>Community Forest have their simple management plan with inventories</td>
<td>Mgt and Sci Authorities</td>
</tr>
<tr>
<td>4. incorporation of inventory into Management Plan for Mt Cameroon National Park</td>
<td></td>
<td>Results of inventories done on Mt Cameroon are available</td>
<td>Mgt and Sci Authorities</td>
</tr>
</tbody>
</table>
Annex 2: Relevant legislation

**Cameroonian Forestry Laws**
Decree No.74/357, 17 April, 1974 - Sections 74, 97 98 - Regulates exploitation of medicinal plants
Law No. 81-13, 27 November 1981 - Lays down Forest, Wildlife and Fisheries Regulations
Decree No. 83/169, 12 April 1983 - Lays down Forestry Regulations
Law No. 94/01 of 20 January 1994 Forestry Law and application Decree No. 95/531/PM of 23 August 1995

**CITES implementing legislation in Cameroon**
Décret No 2005/2869/PM of 29 juillet 2005 fixant les modalités d’application de certaines dispositions de la Convention sur le Commerce International des Espèces de Faune et de Flore Sauvages Menacées d’Extinction au Cameroun
Décision N° 0104/D/MINFOF/SG/DF/SDAFF/SM du 02 mars 2006, désigné l’ANAFOR pour assurer le rôle de l’AS de la CITES au Cameroun pour les questions concernant les espèces menacées d’ instinct ion de la flore sauvage
Arrêté No 067/PM du 27 Juin 2006, portant organisation et fonctionnement du Comité Interministériel de Coordination et de Suivi de la mise en œuvre de la CITES

**CITES**

**Prunus africana**
Arrêté No.48/A/MINAGRI/DF, 28 February 1991 - Banned exploitation of Prunus in Cameroon (exempting Plantecam)
Arrêté No. 48/MINAGRI/DF ,14 February 1992 - Lifted the ban on Prunus exploitation
Decision No. 0045/MINEF/DF, 11 January 1993 - Banned felling of Prunus
Lettre Circular n°0958 15 November 2007
Lettre Circular 2058 22 November 2007
Lettre N°2050/L/MINFOF/SG/DF/SDAFF/SM 22 Nov 2007 Gestion de Prunus africana and
Lettre Circulaire N°0958/LC/MINFOF/SG/DF/SDAFF/SM 15 Novembre 2007 relative à la délivrance des documents pour le suivi de la gestion de Prunus africana au Cameroun.

**Special forestry products**
Décision N° 0020 /D/MINFOF /SG/DF/SDAFF/ SAG 06 Jan 2009 portant octroi des quotas d’exploitation des produits forestières spéciaux
Décision N° 0443 /D/MINFOF /SG/DF/SDAFF/ SAG 13 juin 2008 portant octroi des quotas d'exploitation des produits forestières spéciaux
Décision N° 0336 /D/MINFOF /SG/DF/SDAFF/ SAG 16 Juil 2006 portant octroi des quotas d'exploitation des produits forestières spéciaux
Décision N° 0009 /D/MINFOF /SG/DF/SDAFF/ SAG 13 Jan 2006 portant octroi des quotas d'exploitation des produits forestières spéciaux

**Harvesting**

**European Union**
Annex 3: Authors

CIFOR is a leading international forestry research organization established in response to global concerns about the social, environmental, and economic consequences of forest loss and degradation. CIFOR advances human well-being, environmental conservation, and equity by conducting research to inform policies and practices that affect forests in developing countries. CIFOR is one of 15 centres with the Consultative Group on International Agricultural Research (CGIAR). CIFOR’s headquarters are in Bogor, Indonesia. It also has offices in Brazil, Bolivia, Burkina Faso, Cameroon, Ethiopia, Vietnam, Zambia and Zimbabwe, and works in over 30 other countries around the world.

CIFOR’s vision is of a world in which forests remain high on the world’s political agenda, and people recognise the real value of forests for maintaining livelihoods and ecosystems services. In CIFOR’s vision, decision-making that affects forests is based on solid science and principles of good governance, and reflects the perspectives of developing countries and forest-dependent people. Our purpose is to advance human well-being, environmental conservation, and equity by conducting research to inform policies and practices that affect forests in developing countries. We are guided by the following principles:

Commitment to impact
- Our research is driven by a commitment to eradicating poverty and protecting the environment.

Professionalism
- We adhere to the highest scientific and ethical standards, and are transparent in our methods and honest in our results.
- We demonstrate accountability to our colleagues and partners.
- We respect organisational policies and procedures, and implement them consistently in a fair and transparent manner.
- We honour individual contributions and dedication to the highest standards of achievement.

Innovation and critical thinking
- We encourage innovative, creative and risk-taking solutions through credible and responsible scientific inquiry.
- We work with enthusiasm and maintain eagerness to learn and to think critically.

Respect and collaboration
- We acknowledge and respect diversity in terms of race, gender, culture, religion and different needs regarding work/family balance.
- We promote equity, empowerment, independence of thought and open participation.
- We treat colleagues and partners with trust, respect, fairness, integrity and sharing of credit.

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Email: cifor.cameroon@cgiar.org
Website: http://www.cifor.cgiar.org
## Annex 4: Road map for implementing the Prunus Management Plan

Below is the proposed time scale plan to implement this Prunus Management Plan.

<table>
<thead>
<tr>
<th>No</th>
<th>Issue</th>
<th>Deadline</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CIFOR submission of PMP to MINFOF</td>
<td>End of May</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>MINFOF to validate and submit PMP to CITES &amp; EU</td>
<td>End of May</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Approval CITES and EU</td>
<td>Mid June</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revisions by MniFoF</td>
<td>June</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>MINFOF to submit a printed copy of PMP to CITES &amp; EU</td>
<td>June</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIFOR to return Printed copies of PMP to MINFOF for distribution</td>
<td>Mid –June</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>MINFOF to ready written and approved test dividing Permit Allocation Units for Prunus</td>
<td>Before December 2009</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>MINFOF to ready written and approved Norms of Prunus harvesting</td>
<td>Before December 2009</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>MINFOF to ready written and approved Norms of ACS inventory for Prunus</td>
<td>Before December 2009</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>ANAFOR to sign a text recognising identified experts for each CITES related plant</td>
<td>Before December 2009</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>MINFOF and ANAFOR to agree on the consultation sheet</td>
<td>Before December 2009</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>MINFOF to adopt proposed monitoring formats and encouraged staff to adopt</td>
<td>Before December 2009</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>MINFOF allocate or identify funds for capacity building in the use of ACS and analysis</td>
<td>Before December 2012</td>
<td>Universities Cordoba, and Reading</td>
</tr>
<tr>
<td>12</td>
<td>MINFOF to allocate funds for Prunus National inventory and/or source form Private Sector (Regeneration tax/PSFE)</td>
<td>Before December 2012</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>MINFOF to Keep CITES and EU informed of Prunus road map as part of ongoing CITES reporting obligations</td>
<td>Before July 2009</td>
<td></td>
</tr>
</tbody>
</table>
Annex 5: Maps of PAU Landscapes
Annex 6: Bark regeneration and crown health definitions

CROWN HEALTH

GOOD

FAIR

POOR

DEAD

0 PERFECT Complete circle
1 GOOD Irregular circle
2 TOLERABLE Half crown
3 POOR Less than half crown
4 VERY POOR One or few leafy branches
5 DEAD
**Bark Damage**

0 = no damage
1 = small patches removed (<10% of trunk bark)
2 = larger patches removed (10-25% of trunk bark)
3 = large strips removed (26-50% of trunk bark)
4 = extensive bark removed (51-75% of trunk bark)
5 = ring-barking or girdling
6 = complete girdling, all bark removed (certain death)
**Stem Form**

1 – forked from bottom  
2 – fork at less than 6 m height  
3 – forking starts above 6 m height  
4 – stem twisted  
5 – stem straight
Annex 7: Minutes of Drafting meeting 26 February 2009

Minutes of the ‘Drafting a Management Plan for Prunus africana in Cameroon, 26th February 2009, Yaounde, Cameroon

Introduction
This report is in seven main parts, 1) the workshop justification, 2) the workshop Methodology, 3) the participants and their expectations, 4) a highlight / focus of each presentation, 5) the outcomes of working sessions including comments from the plenary session, 6) the way forward / road map and 7) the annexes (the workshop programme, the list of participants, presentations and Prunus exploitation data from Adamaoua and South West regions).

I-Workshop objective
The workshop was organised by CIFOR in the framework of the GCP/RAF/408/ECMobilisation et renforcement des capacités des petites et moyennes entreprises impliquées dans les filières des produits forestiers non ligneux en Afrique Centrale project, in order to draft a participatively management plan for Prunus africana in Cameroon. It is part of the partners’ (e.g. CIFOR, GTZ, FAO) support to the Government of Cameroon to meet obligations to CITES “to develop a national Management Plan for Prunus africana in Cameroon”. Key issues from all current baseline and inventory data gathered for Cameroon were discussed with participants. It will help contribute to the production of a management plan which determines a quota on the basis of inventories and consolidate the harvesting techniques.

II-Workshop methodology
The full day workshop was composed of a plenary, working and restitution sessions (see programme Annex 1) as detailed below:

- Plenary session during which key presentations updated the knowledge of participants on Prunus issues,
- four working sessions during which issues discussed covered:
  - Zoning or Permit Allocation Units (PAUs) for Prunus,
  - Harvesting and inventory techniques /norms,
  - Permit Allocation Procedure (PAP) based on a fruitful collaboration between ANAFOR, CITES Scientific Authority for Plants (CSA) and MINFOF, CITES Management Authority (CMA) and
  - Prunus plantations.
- Restitution and discussion to find consensus on issues raised in the group working sessions.

III- Participants and their expectations
A total of 66 participants were invited and 40 representatives attended from all levels of the Prunus chain (see Annex 2):

- Cameroon private sectors ( 19 invited, 8 attended)
- Associations of Community forests/harvesters in Cameroon ( 6 invited, 12 attended)
- Traditional Chiefs- forest representatives – (2 invited, 1 attended)
- International private sector ( 13 invited, 0 attended- apologies from 2 who will visit in March/April, 2 requested to be keep in touch with process)
- Development/Support Partners ( 8 invited, 8 attended)
- Government ( 10 invited, 9 attended)
- Research ( 4 invited, 1 attended, 2 sent apologies)
- Tree-nurseries (3 invited, 2 attended)
- Association of NTFP traders ( 3 invited, 1 attended)

The following expectations were stated by the participants:
1. Work together to make the management plan in order to have a well organized market that produces P. africana (PA).
2. Functional PA Management Plan should be examined that can avoid conflicts with communities and local authorities.
3. Recognise the responsibility of each Prunus actor
4. Address the problem of traceability of Prunus products
5. Leave with environmental plan that respects the conservation and exploitation for social use and economic benefits.
6. Leave with plan that assists us at the level of our work at the field. System that allows us to exchange information.
7. Monitoring system for the population and enterprises.
8. Plan that assists exploitation and regeneration of Prunus.
10. Hope that we here together find the solution.
11. Harmonise the price differences of PA in various regions.
12. Like to see a Prunus Management Plan that can help build the capacity of the farmers with the civil society involved.
13. Have a Prunus Management Plan that helps us help the farmers for a sustainable management of PA.
   Leave this meeting with a clear solution!
15. Leave today with a good management plan.
16. Learn about the P. africana.
17. Every stakeholder knows his/hers responsibility in implementing the plan.
18. That all actors will contribute to the execution of the management plan.
19. Contribute to a good research.

IV- Highlights of Presentations

ANAFOR Presentation, Narcisse Mbarga
In summary:
- ANAFOR is the CITES Scientific Authority (CSA) for Prunus and other endanger Plants while Garoua wildlife school is CSA for animals, and MINEPIA, CSA for fish in Cameroon.
- ANAFOR’s role is to advise MINOF to make decision that allow sustainable use of those species
- ANAFOR works through a network of relevant researchers
- Meaning of Plants status listed in Appendixes I, II and III of CITES
- Efforts made by ANAFOR to raise funds and carry out studies on Prunus africana and Pericopsis elata, plant species listed in Appendix II of CITES.
- Road map of ANAFOR for 2009

MINOF Presentation, Henri Akagou
In summary:
- What is CITES
- MINOF is the CITES Management Authority (CMA) for Prunus and other endanger species (Plants and wildlife) in Cameroon.
- How MINOF allocates Prunus Permit
- How Prunus was listed in Appendix II of CITES in 2005
- Suspension of Prunus Trade by EU in 2007
- MINOF is aware of international concern on Prunus issue and is doing all its best to avoid CITES suspension (as one country suspended in 1993, met CITES conditions in 2001 and till 2008 the suspension was not lifted.)
  - Attendance of CITES meeting
  - Prunus inventory with EU, FAO, SNV, COMIFAC, ICRAF and CIFOR support
  - Preparation of Prunus intuitional setting report in collaboration with GTZ
  - Preparation of Prunus Management Plan in collaboration with CIFOR
  - Collaboration with Nigeria to address trans-border issue at Adamaoua site
  - Collaboration with ANAFOR to ensure CITES trust of circulated info from Cameroon
  - Training of staff at MSc levels on issues related to CITES issues

FAO Presentation, Armand Asseng Ze
In summary:
The EU funded Project is to promote revenue through sustainable use of NTFPs it works towards COMIFAC’s mission and promotes collaboration among MINOF and its partners such as FAO, SNV, ICRAF and CIFOR in addressing Prunus sustainable issues. It has facilitated the set up of a network of Prunus actors. The Project brings together experience from both Cameroon and Democratic Republic of Congo in species such as Prunus africana, but also Irvingia spp., Gnetum spp, honey, and Safou.
GTZ Presentation, Yanek Declere & Mambo Okenye

In summary:

- Aim is to develop a strategy that will allow Cameroon to move from zero quota situation today to a sustainable yearly quota in the future acceptable by EU and CITES
- bear in mind the current consequences (lost of revenue for poor community and state of Cameroon, possible lost of international market if the suspension continues)
- build on what we know already in relation to Prunus issues (sites for potential growth, harvesting and inventory methods, initiatives of successful plantations, challenges with control and traceability)
- Overcome the challenges of sustaining best practices in inventory, harvesting control, benefit sharing, permit allocation, and regeneration.
- Achievements in relation to efforts to sustain Prunus in Cameroon and more importantly on what needs to be done. Issues included zoning, ANAFOR networking with Scientists and MINOF, Permit allocation and monitoring/traceability, inventory & harvesting norms and relationship with international bodies (EU & CITES).
- establish a proper communication mechanism at the level of all actors (CITES, ANAFOR-MINOF, permit holders, controllers, harvesters and local communities)
- address in the near future the tasks identified by MINOF such as preparing:
  - text describing permit allocation units
  - inventory norms
  - harvesting norms
  - communication of Cameroon effort on Prunus issues to CITES & EU
  - a validation of PMP that will soon be submitted by CIFOR

CIFOR Presentation, Verina Ingram

It focussed on how the four working sessions should operate. For that short terms of reference were given to each team

1. Prunus and zoning/Prunus Allocation Units.
   - Maps of all region above 800 m altitude and how it can be grouped for practical management

2. Prunus in Plantations
   - Proposition of a certificate of origin.

3. Harvesting options:
   - stripping 2/4 and 5 years frequency
     - Site specificity e.g. Mt CMR, NW, Adamaoua rainfall
     - Implementation of harvesting method
   - Fell or coppice as in Kenya and Madagascar
     - Requires big investment to ensure regeneration

4. Institutional issues (permit allocation procedure monitoring and control measures, road and export levels, relation Cameroon-Nigeria)
V- Outcomes of Working Sessions

NB Nouhou Ndam, Verina Ingram and Abdon Awono were visiting each group to clarify issues.

1. Restitution of the session on the setting Allocation Units and related discussions the plenary session

Participants of the session on the setting of allocation units were:

- Makaki Moise (Chair)
- Noumba Joseph
- Mokom Eric
- Achidi Asanga
- Okenye Mambo
- Fonlon Julius Ngoran
- Ngiko David
- Louis Nkembi
- Mngo Macarius Deme

It was retained that:

1. Prunus grows in non permanent forest, permanent forest (protected areas) and in plantations
2. In the region of Adamaoua, Prunus is found between Banyo and Tignere and extend to Nigeria
3. This raises the need to Nigeria-Cameroon collaborative monitoring to ensure traceability of trade products
4. Although Prunus it is dominantly found in Faro et Deo (Tignere) it is more accessible from Banyo.
5. It was agreed that MINFOF staff representatives in Banyo could be in charge of control and issue way bill / letter permitting a vehicle to transport the Prunus bark (Lettre de voiture) and inform MINFOF staff at Tignere
6. The Tchabal Mbabo area is in the process of becoming a National Park and the boundary has already been delimited
7. Part of the area is proposed as Community Hunting Zone
8. The Jakiri-Fundong zone is accessible from OKU and Fundong and should all be under the management of the relevant community forest authorities.
9. Only CATRACO exploited 46 t of Prunus bark in 2008
10. Zones II (Kumbo-Foundom-Oku) and III (Kambe and environs) are mainly rich with planted Prunus and there no permit unit allocation is encouraged
11. Zone IV (Bamenda, Ndop and Mbengwi) is dominated is dominated by community forests and plantations, no permit unit allocation is encouraged
12. Akwya in Manyu is easily accessible from the North West Region, therefore should be remove from South West Region to be attached to he North West Region. The NW R Delegate will monitor Prunus exploitation there and keeps his colleague in the SWR informed
13. Zone 1 of the south west region (Fako & Meme) refers to Bakinguili, Bokwango, Bonakanda etc. and all this areas are community forests the small part outside CFs has been heavily exploited.
14. Zone 2 of the south west region (Fako & Meme) is where 80% of the Prunus
15. The group of the working session feels that units identified the region of Littoral are centred on the Manengouba. (Apparently the group has not made the difference between Mt Koupe and Mt Manengouba)
16. The issue of keeping one or two units in the Littoral region was not addressed because participants raised three different options:
   - Protected areas should be reserved for no Prunus exploitation. This will reassure CITES & EU. It will protect genetic erosion
   - Only core areas of the protected areas should be reserved for no Prunus exploitation. This will still reassure CITES & EU and can still protect genetic erosion although measures will be need to avoid trespassing.
   - Community “droit d’usage” i.e. user right will be giving to protected areas to exploit Prunus exploitation under the supervision of the Protected Area (PA) authority
17. The working group also felt that all sites in the western regions are in Non permanent forest except Santchou which is a PA
18. The group recommended that the annual authorisation /permit be given at local level
19. The central Region is made of non permanent forests and deserves to be a single unit due to it low Prunus content
20. Take into account the characteristics of different zones

The different unit are summarised in the table below (Table 1).

Timelines for carrying out the inventory to confirm the quotas in landscapes were not discussed.
**Table 1: The proposed 15 Permit allocation sites in six landscapes (Regions) based on *Prunus africana* distribution and importance in Cameroon**

<table>
<thead>
<tr>
<th>Major Landscapes for <em>Prunus africana</em> Cameroon</th>
<th>Division</th>
<th>Locations</th>
<th>Proposed 15 Permit allocation sites (after an inventory &amp; agreed Prunus Management Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adamaoua - for 5 permit allocation units (Areas is Faro et Deo between Banyo and Tignere and bordering Nigeria, to be divided into 5 permit holders, each for 100 t/yr)</td>
<td>Mayo banyo</td>
<td>Faro et Dero (Samba Pelmali Boudounga) Tchabal Mbabo Goundou wawa</td>
<td>Adamaoua Region 1 Adamaoua Region 2 Adamaoua Region 3 Adamaoua Region 4 Adamaoua Region 5 The area is mainly in Faro et Dero but accessible from Banyo. Vehicle letter to move product take account access</td>
</tr>
<tr>
<td></td>
<td>Faro &amp; Deo</td>
<td>Tchabal Gang Daba Tchabal Bong Bong</td>
<td></td>
</tr>
<tr>
<td>North West - for 4 permit allocation sites (Areas to be divided into 4 permit holders, each for agreed t/yr to be confirmed by an inventory)</td>
<td>Bui</td>
<td>Jakiri, Fundong and Oku</td>
<td>North West Region 1 (Kilum-Ijim 18 Community Forests &amp; Plant Life Sanctuary)</td>
</tr>
<tr>
<td></td>
<td>Bui &amp; Boyo</td>
<td>Kumbo, Fundong and Oku</td>
<td>North West Region 2 (area outside region 1 and within Bui &amp; Boyo divisions) (Zone with private plantations) No Prunus in the wild in NW?</td>
</tr>
<tr>
<td></td>
<td>Donga Mantung</td>
<td>Nkambe and whole Division</td>
<td>North West Region 3 (Zone with private plantations) No Prunus in the wild in NW?</td>
</tr>
<tr>
<td></td>
<td>Ngoketunjia, Momo, Mezam &amp; Menchum + Akwaya in Manyu (for accessibility)</td>
<td>Bamenda, Ndop, Mbengwi, Wum and environs</td>
<td>North West Region 4 (Zone with private plantations and community forests)</td>
</tr>
<tr>
<td>Mt Cameroon for 2 permit allocation sites (Areas to be divided into 2 permit allocations, each with agreed t/yr to be confirmed by an inventory)</td>
<td>Fako, Meme</td>
<td>Bakingili Bokwago, Bomana Bwassa Mapanja, Akwaya environs Rompi Hill Bonakanda Koto II</td>
<td>Mt Cameroon region 1 (Mt Cameroon National Park)</td>
</tr>
<tr>
<td></td>
<td>Fako, Meme &amp; Manyu</td>
<td></td>
<td>Mt Cameroon region 2 (Forest areas outside the Mt Cameroon National Park)</td>
</tr>
<tr>
<td>Littoral &amp; Bakossi Mountains for 2 permit allocation sites (Areas to be divided into 2 permit allocations, each with agreed t/yr to be confirmed by an inventory)</td>
<td>Moungo</td>
<td>Bouroukou (near Melong) Nkongsamba environs Nsoung environs Mount Kupe (loum) Mount Lonako (Nkongsamba) Mount Manengouba (Nkongsamba)</td>
<td>Littoral &amp; Bakossi Mountains Region 1 (Areas inside Integrated Ecological Reserves) Littoral &amp; Bakossi Mountains Region 2 (Areas outside Integrated Ecological Reserves)</td>
</tr>
<tr>
<td></td>
<td>Kupe Manegouba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West for 1 permit allocation site (Areas grouped into 1 permit holder of ≤ x t/yr to be confirmed by an inventory)</td>
<td>Haut-Kam</td>
<td>Bafang environs Bandekum Mboebo-Folentcha (Bafang)</td>
<td>Western Highland Region</td>
</tr>
<tr>
<td></td>
<td>Nde</td>
<td>Bangante environs (Batchingou), Tombel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Noun</td>
<td>Mount Mbapit (Baigom-Foumbot) Mont Koubam (Bangourain) Mont Yawou (Makam-Foumban)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Menoua</td>
<td>Dschang Environ</td>
<td>Forêke (Dschang)</td>
</tr>
<tr>
<td></td>
<td>Bamboutos</td>
<td>Mount Bamboutos (Mbouda)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lebialem</td>
<td>Bangem, Bamebou</td>
<td></td>
</tr>
<tr>
<td>Central Highlands for 1 permit allocation site (Areas to be grouped into 1 permit holder of ≤ X tonnes/yr to be confirmed by an inventory)</td>
<td>Mbam et Kim Mefou et Akono</td>
<td>Mt. Ngora, Mt. Yangba Mt. Golep Mt. Eloumdem</td>
<td>Central Highland Region</td>
</tr>
</tbody>
</table>
Restitution of the session on Plantations and related discussions in the plenary session

Participants of the session on Prunus Plantation were:
Bunda Bernard  Bah Mary Neng
Ombolo Tassi  Nsoga Bond Remy
Evoe Philippe  Vincent Belignie (Chair)

The group came out with the following six types of ownership:
1. State owns land and resources in a protected areas as
   a. Mt Cameroon National Park (in process)
   b. Mt Bakossi Ecological Reserve
   c. Mt Oku Plant life Sanctuary
   d. Mt Tchabal Mbabo National Park (initiated)
2. State owns land and not resources in non permanent forests such as Forest non protected and not attributed (e.g. area outside Mt Cameroon)
3. Council owns land and resources (council protected area, opportunity for council Prunus plantations)
4. Community forest with villagers owning the resources and not the land
5. Private plantations with individuals owning the resources but not the land
6. Private plantations with individuals owning the resources and the land (titled / family)

The following issues/challenges were raised to be considered in Prunus Management Plan (MPM):
- So far, Prunus from plantation contributes very little to the national production
- Plantation should not be ignored rather should be encouraged
- In the future, Prunus from plantation would dominate the national production
- The issue of traceability will have to be carefully tackled to build Cameroon international image at EU and CITES
- The issue of similarity of active ingredients in Prunus from the wild and that from plantation will have to be addressed
- The issue of carbon sequestration with Prunus Plantations should be explored as addition source of funding to farmers
- The challenges of high cost of Prunus plantation setting , inventory, protection/monitoring and certification against its low market value will have to be overcome
- The need of farmers’ organisation into a legal entity to share experience and defend their right has a cost which the prunus consumers will have to bear.
- The issue of securing land title or protecting resources in non permanent land needs to be addressed.
- The need to protect against theft is a challenge and additional cost
- The needs of seed fund to develop Prunus plantation will have to be addressed
- The challenge of establishing a stable and fair relationship between harvesters and buyers of prunus bark has to be overcome.
- Nee to advice with regard to wild vs. planted species
- Need to refer the texts of CITES, also with respect to the problem of traceability.
- Note that CITES tells that while somebody is occupied planting a species that is listed by CITES the origin of the product must be well guaranteed. This is done by a certificate of origin that accompanies each part of the exploitation and export of PA.

3. Session on Harvesting and Inventory and related discussions in the plenary session

Maturin Tchatat  (Chair)
Ekati Etoma Foe  Kale Lithe Charles
Mtemching Djomo Serges  Kangong George
Nkwele Jacob  Marcellus Che
Brunuo Ewusi  Vegah Brian

For Best harvesting practices, an appropriate harvesting tool was recommended such as:
- A list of tools should be established
- People should be trained to use tools and harvest

For harvesting techniques
- Present method is Good(2/4) based on previous experience(4yrs in Kumbo, Syrs in Mt Cameroon) and studies by the University of Bangor and CERUT
- Tag harvested trees (no tag, weight, Date of harvesting, name of harvester) and bundle tag
- Do not harm the cambium (use sharpened stick during period when the is hard) (Use of appropriate equipment)
• No new method (1/8) is advisable
• Check if the negative impacts of harvesting on Prunus trees is due to nature of or it lack of respect
• There is a limited / lack of data on the results of applying the harvesting technique.
• Research that has been done shows that current application of the harvesting technique is not sustainable (lost of at least 30 percent of the trees).
• No concrete experience for better alternatives
• The harvesting technique and frequency (time period to come back to the tree and exploit the other section) should be taken together in order to discuss whether it is manageable.
• Between 1996 and 2003 trees harvested with two quarter method worked very well. It is after 2003, that the system and south collapsed (info from Nord West and south west regions).
• Check the ‘costs’ of different methods (periodical debarking vs cutting and waiting for coppicing )
• The cost – benefit analyses is needed to convince the communities to use the exploitation method.

The present method of harvesting (2/4) is good enough if implemented. This was based on previous experience (4 years in Kumbo, 5 years in Mt Cameroon) and studies by the University of Bangor and CERUT. Other accompanying measures include:
• Tag harvested trees (no tag, weight, Date of harvesting, name of harvester) and bundle tag
• Do not harm the cambium (use sharpened stick during period when the is hard) (Use of appropriate equipment)
• No new method (1/8) is advisable
• Zoning for harvesting
• Use trained harvesters (specialised harvesters from the locality)
• Branches can be harvested
• Monitoring and control should be strict (periodic evaluation with all stakeholders)
• Meting out sanctions
• Trees with DBH 30m recover faster than trees with bigger diameter

Season of harvesting
• The time of harvesting can be deferred to the rainy period (June, July, August)

Rotation period
• Present method is Good(2/4) based on previous experience(5yrs in Kumbo, 5yrs in Mt Cameroon) and studies by the University of Bangor and CERUT

Problems
• Non Respect of Harvesting Norms
• Non existence of legalized Harvesting Norms
• Bark Stealing leading to removal of bark sections left by the previous harvester
• No systems to track bad practices

Inventory
• ACS is a good method
• Permit to measure the size of plot and more representative

Challenges
• Difficult for initial planning
• Plot size is variable
• Analysis is complex
• Sampling error may be too high

How to overcome challenges
• More work to be done on analysis
• Capacity building of Prunus actors in charge of inventory and analysis

4 Session on institutional issues (permit allocation procedure monitoring and control measures, road and export levels, relation Cameroon-Nigeria)

Participants of the session on the Prunus related institutional issues were:
Joseph Ntsengue Levodo (Chair) Armand Asseng Zé (Reporter)
Mbarga Narcisse Akagou Zedong Henri
Mbu Samuel Bende Jacob
Fon Julius Declere Yanek
Dogmo Gustave Luking Majoda
On resource allocation, the group recommended:

1. That a proposal be made to MINOF with a full description of allocation units as in UFA. All the 70 sites should be regrouped into 15 Punus Allocation Units (PAU). The PAUs should have standardised names and PA should be for no exploitation and:
   - MINOF demarcates the PAUs
   - Call for tender
   - Proposed that each PAU be managed for about 30 years by a permit holder
   - Fix rotation of debarking to 8 years
   - Produce PAU management plan
   - Divide each PAU into 8 yearly exploitable units (YEU)
   - Carry out yearly inventory in the YEU to be exploited during that year
   - That ANAFOR coordinated a network of Prunus experts to advise MINOF
   - That ANAFOR become member of Prunus inter-ministerial committee
   - That MINOF act with ANAFOR advice to assure CITES / EU.

On resource control, the group recommended:

2. ANAFOR should approve management and exploitation inventories
3. MINOF services at PAU site and local Prunus partners (projects and communities) should be consulted when business people apply for Prunus permit this should be done by ANAFOR who should always be informed by MINOF central services
4. A text should be prepared to document procedural collaboration between MINOF and ANAFOR during permit allocation and monitoring. This text should further be developed to become part of the forestry law
5. Existing plantation should be introduced to local MINOF for certificate of resource ownership and control /monitoring
6. Community Forest with Prunus should approach local MINOF services for collaborative successful exploitation of Prunus and control/monitoring.
7. On resource monitoring, the group recommended:

ANAFORE has the duty to monitor the sustainable use of plant species including. For that the following should be done:

- Capacity building of ANAFOR CITES staff and that of associates at research institutions (e.g. universities, IRAD, CIFOR, ICRAF...)
- Allocation of means for field visit to discuss monitoring of quotas, bark harvesting and trend in supply
- Collect and update fair and relevant information
- Get opinion of local experts (has they may have a most recent information) before advising MINOF
- Check use of monitoring sheets at field, roads and export levels
- The Permit application sheet should include
  - The name of the area (PAU) in which the applicant want to operate
  - The status of applicant (duly registered and up to date with tax payment)
  - Commitment letter to respect harvesting norms, quota that will be allocated and would in monitoring sheet all levels
  - How it will involve the local people
  - Check fairness of data collected

8. Need to note that after the technical work of the management plan it will be effective to deal with the institutional aspects and implementation.

VI- Plenary session - Way forward / road map

- CIFOR will try and to integrate as much as possible the outcomes of the workshop and aim at submitting to MINOF a participatory drafted Prunus Management Plan (PMP) for Cameroon. The draft could be available by the end of March 2009 and CIFOR is ready to print validated copies of PMP by June 2009.
- It is expected that MINOF should:
  - Brief CITES and EU in March about the effort of Cameroon to meet the expected requirements on Prunus
  - could validate the PMP in April
  - produce before June 2009
    - Prunus Inventory Norms
    - Prunus Harvesting Norms
• Text describing the different Prunus Allocation Units
• Text describing the Permit Allocation Procedure for Prunus.
• A report to CITES on the collaboration between

- Mr Akagou, Mr Belinga and Yanek (GTZ Adviser) are responsible for follow up. The Prunus Consultant (Nouhou NDAM) will be sharing a monthly email to Key prunus partners for update on Progress on theses actions
- It is expected that ANAFOR constitute and share before June 2009 its list of Prunus expert advisers. These actors should regularly up date ANAFOR on prunus issue from their sites. Mr Mbarga is in charge of this process.

Additional comments received

From: v.ingram@cgiar.org
Sent: Mon 20/04/2009 16:01
To: v.ingram@cgiar.org
Subject: Re: Minutes from Prunus Mgt Plan Drafting workshop 26 Feb 2009

COMMENT ON THE DRAFT MANAGEMENT PLAN.
The main goal of developing this plan is to among other reasons assure sustainability in the quality and quantity of supplies of the produce.

But; the aspects of permits to be issued to specific exploiters for a longer duration for region may indirectly imply granting monopoly and we can imagine the results of market situation void of the forces of demand and supply. Please i am in Yaounde for this week up. Can there still be some photos for the drafting workshop. Thanks . BUNDA BERNARD - ASSOKOFOMI
## VII- ANNEXES

Annex 1 - The workshop programme

**Objective:** Support the Government of Cameroon to meet obligations to CITES to develop a national Management Plan for *Prunus africana* in Cameroon, by gathering all current baseline and inventory data for Cameroon to contribute to a management plan which determines a quota on the basis of inventories and consolidate and verify the harvesting technique(s).

**Output:** A participatively drafted management plan for *Prunus africana* in Cameroon

**Date:** Thursday 26 February 2009

**Location:** CIFOR Conference Room, IITA Regional Centre, Nkolbission, Yaoundé, Cameroon

### Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>What</th>
<th>Who</th>
<th>(Facilitation - Abdon Awono)</th>
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</thead>
<tbody>
<tr>
<td>08.00</td>
<td>Welcome and participants self introduction</td>
<td>Verina</td>
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<tr>
<td>08.20</td>
<td>Introduction to CITES Process and Cameroon’s action plan and proposals for <em>Prunus africana</em>, history and where we are now ANAFOR Scientific Advisory Committee Questions</td>
<td>Henri Akagou &amp; Narcisse Mbarga</td>
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<tr>
<td>09.00</td>
<td>Presentation GTZ Study</td>
<td>Yanek Decleire</td>
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<td>09.45</td>
<td>FAO project role</td>
<td>Armand Assenge</td>
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<tr>
<td>10.00</td>
<td>Presentation of Draft Management Plan (Power point and hard copies) and discussions – main group</td>
<td>Verina present</td>
<td>Nouhou - reporting</td>
</tr>
<tr>
<td></td>
<td>Coffee Break</td>
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<td></td>
<td><strong>Working session 1:</strong> on Prunus allocation units** (Discussion on the proposed zones, permits and related administration)</td>
<td>Verina, Abdon &amp; Nouhou, Jolien, to visit each of the three working session for advice/orientation</td>
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<td></td>
<td><strong>Working session 2:</strong> on Prunus technical issues** (harvesting techniques, ACS inventory technique, discussion on best practices for harvesting, inventory and how to overcome challenges)</td>
<td>Each group elect a chair and a reporter. TORs for each working sessions to be developed</td>
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<td></td>
<td><strong>Working session 3:</strong> on Prunus institutional issues** (Permit allocation procedure, monitoring and control measures, road and export levels, relation Nigeria)</td>
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<tr>
<td>12.30-1.15</td>
<td>Lunch and split into groups</td>
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<tr>
<td>13.30</td>
<td><strong>Restitution of thematic working sections findings in the plenary:</strong> 2:30-4pm</td>
<td>Abdon facilitate</td>
<td>Ndam capture reporting</td>
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<tr>
<td></td>
<td>Restitution of the working session 1 (updated zoning)</td>
<td></td>
<td>Jolien photos</td>
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<td></td>
<td>Restitution of the working session 2 (best practices during harvesting and inventory)</td>
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<tr>
<td></td>
<td>Restitution of the working session 3 (Proposed sheet for MINOF permit allocation showing ANAFOR scientific advice)</td>
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<tr>
<td>17.00</td>
<td>What next – steps for authorities in Cameroon for finalisation and adoption</td>
<td>Henri Akagou?</td>
<td></td>
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</tbody>
</table>
### Annex 2 - List of the workshop participants

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Organisation</th>
<th>Telephone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
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<td>MBUH Samuel</td>
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<tr>
<td>9</td>
<td>BAH Mary</td>
<td>Kedjem-Mawes F.M.O ASSOFORMI Secretary</td>
<td>96 95 41 25</td>
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<tr>
<td>10</td>
<td>BUNDU Bernard</td>
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<td>77 43 35 70</td>
<td></td>
</tr>
<tr>
<td>11</td>
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<td>24</td>
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Annex 3- Key presentations at the workshop
(Not included in this copy)

Annex 4- Data collected by MINFOF Regional Delegation of ADAMOUA
Prunus exploitation from the Adamoua Region between 2006-2008

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<th>Year</th>
<th>Company</th>
<th>Origin</th>
<th>Destination</th>
<th>Total (Kg)</th>
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<td>SGPA</td>
<td>Banyo</td>
<td>Bafoussam</td>
<td>150 226</td>
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<td>27 275</td>
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<td></td>
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<td></td>
<td><strong>177 501</strong></td>
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<td>Bafoussam</td>
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<td>2006</td>
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<td>Banyo</td>
<td>Yaoundé</td>
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<td><strong>189 062</strong></td>
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<td>2007</td>
<td>AFROMED</td>
<td>Banyo</td>
<td>Bafoussam</td>
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<td>2007</td>
<td>ERIMON</td>
<td>Banyo</td>
<td>Yaoundé</td>
<td>24 880</td>
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<td></td>
<td><strong>94 380</strong></td>
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<td>2008</td>
<td>CATRACO</td>
<td>Fongoy (Faro et Deo)</td>
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Annex 5- Data collected by MINFOF Regional Delegation of South West
Prunus exploitation from the south west region between 2006-2008

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<th>2006</th>
<th>2007</th>
<th>2008</th>
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<tr>
<td>AFRIMED</td>
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<tr>
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<td>SGP</td>
<td>14 000</td>
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<td>ETS ERIMON</td>
<td>-</td>
<td>0</td>
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<tr>
<td>ESSAMP &amp; FILS</td>
<td>-</td>
<td>2 000</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL PER YEAR</td>
<td>91 360</td>
<td>2 000</td>
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Annex 8: Minutes of Prunus management plan meeting 20 February 2009

Date: 20 /02/09
MINOF/ANAFOR:
- Le Directeur des Forets
- Le point focal autorité de gestion du CITES (Mr Akagou)
- Le point focal autorité scientifique du CITES pour les plantes (Mr Mbarga)
- Le spécialiste des inventaires du Prunus (Mr Belinga)
- Deux autres collaborateurs du DF (arrivés en retard)

Partenaires (GTZ/CIFOR):
- Yannek de la GTZ, Conseiller Technique auprès de MINOF et MINEP
- Verina Ingran du CIFOR chargé d’élaborer le plan de gestion du Prunus
- Nouhou NDAM Consultant pour les études du Prunus

Objectif:
- Recueillir les avis du MINOF sur le rapport de GTZ relatif à la réorganisation institutionnelle pour la gestion durable du Prunus au Cameroun

Points de discussion:
- Capacités d’ANAFOR comme l’autorité scientifique du CITES pour les plantes
- Mode d’écorçage
- Mode d’inventaire
- Mode de contrôle
- Mode de zonage
- Mode d’allocation de permis

Ce qui a été adopté par MINOF
- Capacités d’ANAFOR comme l’autorité scientifique du CITES pour les plantes
  - L’ANAFOR doit se renforcer en :
    o créant des réseaux d’experts pour chaque problématique (ex. Prunus, Assamela)
    o créant des points focaux dans les universités et les instituts de recherches pour faciliter la collaboration
    o facilitant les recherches ciblées autour des thèmes CITES
    o utilisant le fond OIBT et les 30 millions FCFA de la contrepartie promis par MINOF/DF pour mieux maîtriser les problématiques liées au CITES
    o utilisant les résultats des recherches et accueillant les avis des experts pour conseiller l’autorité de Gestion de CITES (MINOF)
- Mode d’écorçage
  o Bien que CIFOR et les autres chercheurs ne semblent pas être convaincus de la méthode actuelle de 2/4 (Prunus 30-80 cm dbh) ou 4/8 (Prunus >80 cm dbh), le MINOF l’adopte comme la meilleure offre sans alternative disponible
  o Le MINOF fait appel aux partenaires (GTZ, CIFOR, FAO et autres) pour entreprendre les recherches visant à informer les décideurs dans ce domaine
  o Taper et écorcez avec le bâton serait moins risqué qu’utiliser abusivement la machette qui affecterait le cambium exposant le Prunus à une mort lente.
  o Le MINOF fait appel aux partenaires (GTZ, CIFOR, FAO et autres) pour l’appuyer enfin de rédiger les Normes d’écorçage pour Prunus dans les prochains mois

- Mode d’inventaire
  o La méthode ACS (Adapted clustered Sampling) recommandée par CITES malgré les difficultés liés à son utilisation et aux analyses
  o Le MINOF fait appel aux partenaires (GTZ, CIFOR, FAO et autres) pour
• le renforcement des capacités de ses personnels et les acteurs de la société civile
• l’appuyer enfin de rédiger les Normes d’inventaire pour Prunus dans les prochains mois

● Mode de contrôle
  o Les mesures proposées de contrôle et de traçabilité au niveau des zones d’exploitation (cahier de charge), lors des transports et d’exportation ont été adoptées puisque s’inspirant de la lettre circulaire du MINOF
  o MINOF promet de les mettre en application et s’apprête à l’améliorer quand le besoin se fait sentir

● Mode de zonage
  o MINOF la proposition de l’étude GTZ qui préconise le regroupement des plusieurs sites connus (>64 d’après CIFOR à un nombre réduit (15 proposé par la GTZ)
  o Le MINOF fait appel aux partenaires (GTZ, CIFOR, FAO et autres) pour l’appuyer enfin de rédiger le texte d’écrivant les limites de zonage (unité d’allocation de permis -UAP) pour Prunus dans les prochains mois
  o Après le découpage, les UAPs seront attribuée sur base d’appelle d’offre
  o Une collaboration étroite entre écorceurs et collecteurs seront un des éléments de considération dans l’appel d’offre
  o Tenir compte que le Prunus se trouve dans les
    ▪ Aires protégées
    ▪ Forêts communautaires
    ▪ Forêts dans les domines non permanents
    ▪ Plantations privées
  o Dans aires protégées, MINOF promet de donner le droit d’usage spécial
  o Dans les forêts communautaires, les communautés locales elles même sont responsables de leur Prunus
  o Dans les plantations privées, les planteurs devront résoudre les problèmes fonciers et obtenir auprès de MINOF local une attestation qu’ils sont réellement ceux qui ont planté les Prunus
  o Les plantations sont à encourager en collaboration avec ANAFOR
  o Dans les forêts des domines non permanents, tenir compte de
    ▪ Exploitants légaux qui vivent de leur profession et éviter tout esprit régionaliste
    ▪ Encourager les communautés locales à s’organiser et demander la zone comme forêts communautaires

● Mode d’allocation de permis
  o Dans les UAPs les permis seront attribué pour une longue durée (30 ans selon GTZ)
  o Le MINOF accepte la proposition d’octroyer les permis à longue durée pour responsabiliser les exploitants mais pourrait réduire la durée

● Autres engagements du MINOF
  o Entreprendre un inventaire national pour rehausser l’image du Cameroun à l’étranger comme l’a fait la Guinée Equatoriale
  o Valider rapidement le Plan de Gestion de Prunus que CIFOR prépare pour que celui-ci puisse l’imprimer pour distribution et soumission au CIES et EU
  o Envoi une mission au Nigeria pour discuter de la traçabilité du Prunus transfrontalier entre les deux pays au niveau de l’Adamaoua
  o Recevoir dans l’avenir l’avis de l’ANAFOR avant d’octroyer les permis de Prunus
  o Ecrire au CITES et EU pour les informer du progrès et de la feuille de route du prunus Cameroun
  o DF promet d’assister à la réunion du CIFOR sur le plan de gestion de Prunus le jeudi 26th février malgré la réunion sur la certification à douala pendant la même période

Compte Rendu par le GTZ 23/02/2009
Annex 9: Minutes of Prunus management plan Importers-Exporters meeting 15 April 2009

Le 15 Avril 2009, s’est tenue au CIFOR, Nkolbisson une rencontre stratégique entre les acteurs de la filière Prunus africana. L’objectif de cette réunion était d’échanger et d’évaluer le niveau d’avancement des travaux devant déboucher sur la mise en place d’un plan de gestion du Prunus au Cameroun. Toute chose qui permettrait d’envisager des axes de sortie de la situation actuelle qui ne permet pas au Cameroun d’exporter cette espèce dans les espaces de l’Union Européenne qui accueille pourtant la quasi-totalité de la production nationale du Prunus. Prenaient part à cette réunion les groupes SOLVAY PHARMA et SYNKEM de France représentés respectivement par MM. Jean Pascal Yaher et Bernard Bonnevie, le Ministère des Forêts et de la Faune (Organe de gestion) représenté par M. Belinga Salemon, l’ANAFORE (autorité scientifique) représenté par M. Ondoua E. Schadrack, la Société Africaine des Médicaments (AFRIMED) représentée par son Directeur général M. Albert Nkemla, la Compagnie Commerciale pour l’Exportation des Produits Forestiers Spéciaux (CEXPRO) représentée par son Directeur général M. Mana Toukour, la Compagnie AFRICAPHYTO représentée par son Directeur Général Dr Sandjon, l’ICRAF représenté par Sado Thaddée et le CIFOR qui accueillait la réunion au titre des activités qu’il conduit sur l’élaboration du plan de gestion du Prunus au Cameroun dans le cadre du projet GCP/RAF/408/EC, FAO financé par l’Union Européenne. L’ordre du jour a porté sur deux principaux points à savoir le niveau d’avancement des travaux sur la mise en place d’un plan de gestion de Prunus au Cameroun d’une part et des actions planifiées pour la suite des opérations d’autre part.

D’entrée de jeu tous les participants se sont accordés sur la nécessité de mener des actions concertées afin de trouver une solution immédiate et durable au problème du Prunus au Cameroun. En effet les conséquences de la suspension des exportations de cette espèce sont multiples et à toutes les échelles. Autant les producteurs en souffrent parce qu’ils sont sevrés des revenus qu’ils tiraient de la vente des écorces, autant les opérateurs économiques nationaux et les firmes pharmaceutiques impliquées dans le circuit éprouvent des difficultés à faire fonctionner leurs structures en l’absence des échanges habituels. Pire encore l’absence de la matière première au niveau des compagnies pharmaceutiques soulève des vives inquiétudes par rapport à la situation des malades qui pourraient bientôt ne plus trouver les médicaments contre le mal de la prostate sur le marché. Cette situation appelle, pour ainsi dire, des actions urgentes et pragmatiques de tous les acteurs afin que l’ordre soit rétabli le plus tôt possible.

Le CIFOR a fait un exposé sur l’évolution des travaux qui doivent déboucher sur un Draft du plan de gestion de Prunus africana au Cameroun qu’il est convenu d’appeler Plan directeur national de gestion de Prunus africana au Cameroun. Ce Draft devra donner lieu à son approbation par le gouvernement du Cameroun à travers une procédure et un acte administratif appropriés. L’on a retenu que la méthode de travail du CIFOR consiste à impliquer autant que faire se peut tous les acteurs de la filière afin que le résultat final soit à l’image de la volonté générale pour une gestion soutenue et durable de l’espèce au Cameroun. C’est dans ce sens que s’inscrivent les séminaires et de nombreuses rencontres formelles et informelles à l’instar de la réunion du jour. Avant la tenue desdites réunions, sur la base des études et des inventaires menés sur l’espèce, un premier draft a été produit et circulé aux techniciens pour commentaires. Ce plan s’oriente vers la définition des unités de production majeures du Prunus au Cameroun (15 au total). A partir de ces unités, des appels d’offres pourraient être lancés pour responsabiliser les opérateurs économiques qui se seraient montrés à la hauteur des exigences des cahiers de charge pour une gestion...
conforme aux plans simples de gestion localisés (par unité de production retenue) contenus dans le **plan directeur national de gestion du Prunus au Cameroun**. Le quota devra être défini sur la base du résultat des inventaires préalables. Cela veut dire en d’autres termes que seules les unités de production ayant fait l’objet d’un inventaire pourraient faire l’objet d’appel d’offre. Si tout se passe comme prévu, l’unité de production devra être concédée à l’opérateur économique pour une longue période (probablement 30 ans). Toutes les dispositions efficientes sont à prendre pour assurer une traçabilité qui éviterait des confusions qui remettraient en cause tout l’édifice construit.

Les propositions formulées lors du dernier séminaire ont déjà été intégrées dans le document. Cependant certaines informations indispensables à la définition du temps de rotation pour la récolte sur un même arbre ne sont pas disponibles. Par hypothèse, la force de reconstitution de l’écorce serait différente d’une région à une autre et peut-être d’une altitude à une autre. En concertation avec les partenaires du projet FAO ci-dessus évoqué, le CIFOR vient de lancer, une étude pour avoir plus d’information à ce sujet. Menée en collaboration avec l’Université de Dschang, cette étude sera bouclée en Septembre 2009. Toutefois le processus devra se poursuivre sans attendre les résultats définitifs de ladite étude.

Cette présentation a donné lieu à des commentaires constructifs sur la démarche. Compte tenu des multiples contraintes que pose la suspension actuelle, une question importante a été posée à savoir **comment pourrait-on s’assurer que le Cameroun exporte le Prunus dans les meilleures conditions en 2010?** Une réponse positive à cette question passe par une planification rigoureuse des actions à mener à court, à moyen et à long terme. C’est par ce moyen que les exigences de la CITES vis à vis du Gouvernement du Cameroun pourraient ainsi être aplanies. Le rêve est même que la gestion du *Prunus africana* au Cameroun soit un modèle à vulgariser dans les pays producteurs. Le tableau ci-dessous rend compte des points d’attention.

**Points d’attention :**

<table>
<thead>
<tr>
<th>Action</th>
<th>Acteurs</th>
<th>Echéance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faire une étude sur la régénération de l’écorce pour définition le temps de rotation</td>
<td>CIFOR</td>
<td>Septembre</td>
</tr>
<tr>
<td>Faire une mission d’enquête dans les zones frontalières Nigeria/Cameroun (surtout dans l’Adamaoua) pour établir un rapprochement avec l’organe de gestion du Nigeria</td>
<td>MIOFO/ANAFOR/CIFOR</td>
<td>Juin</td>
</tr>
<tr>
<td>Compléter les contacts des importateurs et vérifier si le Prunus est exporté à partir du Nigeria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finaliser l’élaboration des normes d’inventaire</td>
<td>GTZ</td>
<td>Juin?</td>
</tr>
<tr>
<td>Procéder à la validation nationale des normes d’inventaire</td>
<td>GTZ</td>
<td>Juillet</td>
</tr>
<tr>
<td>Procéder à la validation des techniques de récolte du Prunus</td>
<td></td>
<td>Juillet</td>
</tr>
<tr>
<td>Procéder à l’approbation officielle des inventaires réalisés sur le Prunus</td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>Analyser la possibilité d’infiltrer dans la loi forestière dont la modification vient d’être lancées, une disposition qui permettrait que sous certaines conditions le Prunus soit exploité dans les parcs (allusion faite au Mont Cameroun qui pourrait être transformé en parc bientôt)</td>
<td>DF</td>
<td></td>
</tr>
<tr>
<td>Proposer la cartographie des 15 sites en ressortant leurs spécificités</td>
<td>CIFOR</td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>Acteurs</td>
<td>Échéance</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Rendre disponible le Draft du Plan directeur national de gestion du <em>Prunus africana</em> au Cameroun (Donner des copies physiques à l’organe de gestion et à l’autorité scientifique)</td>
<td>CIFOR</td>
<td>Juin</td>
</tr>
<tr>
<td>Organiser une réunion technique pour la validation du Plan directeur national de gestion du <em>Prunus africana</em> au Cameroun</td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>Adopter officiellement le Plan directeur national de gestion du <em>Prunus africana</em> au Cameroun</td>
<td>MINFOF (Organe de Gestion)</td>
<td></td>
</tr>
<tr>
<td>Transmettre au CIFOR le taux de conversion des écorces fraîches en écorces sèches (10 kg écorces fraîches = ? kg écorces sèches)</td>
<td>AFRICAPHYTO</td>
<td>10 Mai 2009</td>
</tr>
<tr>
<td>Définir les quotas de 2010 sur la base des inventaires disponibles après validation officielle</td>
<td>MINFOF (Organe de Gestion)</td>
<td>?</td>
</tr>
<tr>
<td>Faire un rapport sur la scientificté des opérations telles que menées sur le Prunus au Cameroun.</td>
<td>ANAFOR (Autorité Scientifique)</td>
<td>?</td>
</tr>
<tr>
<td>Ressortir les Plans simples de gestion des 18 forêts communautaires du Nord Ouest concernées par la récolte du Prunus</td>
<td>MINFOF (Belinga)</td>
<td>20 Avril 2009</td>
</tr>
<tr>
<td>- Actualiser les données des inventaires Adamaoua dont la validité prend fin en 2011</td>
<td>MINFOF</td>
<td></td>
</tr>
<tr>
<td>Lancer le plus tôt possible les appels d’offre après la cartographie des 15 sites</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NB.** Prière de compléter la colonne *Échéance* selon les acteurs

Par ailleurs, certains points ont été soulevés dans les discussions et devraient être analysés et pris en compte dans la finalisation du plan directeur national de gestion de *Prunus* au Cameroun. Il se présentent comme suit :

- Exigence d’une disposition sur la Formation des producteurs agréés dans les bassins de production (Unité de Production ou concession pour un long temps). Assiette de récolte pour une récolte groupée
- Exigence d’une disposition pour le renforcement des capacités de l’autorité scientifique
- Pour un meilleur contrôle, prévoir dans les plans simples de gestion des audits sur l’application des normes de gestion durable (définir le temps de révision des plans)
- Il faut montrer que nous allons soutenir la production par la domestication en impliquant au mieux le secteur privé ou les industriels pour relâcher progressivement la pression sur les espaces de forêts naturelles.
- Réflexion sur la facilitation de l’obtention des certificats de propriété pour inciter la mise en place des plantations afin d’accroître la production forestière.
- Réflexion sur une politique incitatrice à la plantation par les populations impliquées dans la production (Comment aider la population à devenir propriétaire de droit de l’arbre planté ?).

Quoiqu’il en soit, pour répondre à la demande du marché, il est indispensable qu’on renforce les bases de production du *Prunus africana*. Cela ne peut être possible qu’en domestiquant davantage. Les firmes pharmaceutiques présentes à cette réunion seraient disposées à
accroître leur prix d’achat au kilogramme pour participer à cet effort. Cela pourrait se faire à travers les contrats avec les partenaires nationaux étalés sur trois ans par exemple, avec la possibilité de préfinancement. Les opérateurs économiques camerounais pour leur part ont fait savoir qu’ils étaient déterminés à accompagner la domestication du Prunus pour que les conditions d’exploitation soient claires. On pourrait imaginé la mise en place d’un fond de soutien à la plantation du Prunus au Cameroun

En définitive, pour des besoins transitoires, il y a lieu de prendre des mesures urgentes pour sortir le Prunus africana de ses difficultés actuelles. Pour autant, il faut capitaliser sur les résultats des inventaires disponibles et sur la base des unités de production qui auront été définies, pour définir les quotas pour 2010. Ceci éviterait non seulement la fermeture de certaines compagnies avec tout ce que cela comporterait comme perte d’emplois, mais aussi le sevrage des malades de la prostate des médicaments et le découragement des populations productrices qui pourraient privilégier d’autres utilisations tels l’artisanat et le bois de chauffe qui passent par l’abattage de l’arbre. Par ailleurs il faudrait poursuivre des actions efficientes pour actualiser les données des inventaires faits notamment dans la région de l’Adamaoua pour éviter que le potentiel de cette région soit mis en doute du fait des évolutions internes aux écosystèmes.

Compte rendu
Abdon Awono CIFOR,
20 April 2009
### Annex 10: Overview of research gaps

<table>
<thead>
<tr>
<th>Factors</th>
<th>Minimum standards required</th>
<th>Ongoing Research Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploitable area and management strata.</td>
<td>Map showing known range of species, and identifying the sites under management and exploitation. Where possible these areas should be sub-divided into management strata, where more information on localised population density is available.</td>
<td>Explore how remote sensing methods can be combined with existing knowledge of populations, both to estimate total area of natural range, and to assist with the stratification of forest areas for inventory and management. Where RS data is absent, propose statistical methods to estimate the geographical extent of species occurrence.</td>
</tr>
<tr>
<td>Density of productive trees (excluding dead or over-exploited trees).</td>
<td>Inventories should be of sufficient intensity to ensure that the results are within acceptable confidence limits. This inventory must be prepared by a professional body independent of the licensee. The results should be reviewed by the newly appointed Scientific Authority and recommended for approval to the Management Authority. Inventories adequate for reviewing and revising Forest Management Plans should be repeated at least every 5 years.</td>
<td>Reliable Minimum Estimate (RME = mean - 1-tailed 90% confidence limit) of population density based on a sound sampling methodology should be used for establishment of quotas; Test, compare, and document innovative sampling designs that are cost-efficient and suitable for inventories of single, clumped species such as <em>Prunus africana</em>.</td>
</tr>
<tr>
<td>Tree health</td>
<td>Estimate the proportion of the population that is healthy based on crown condition scoring or other accepted indicators of tree health.</td>
<td>Carry out research into the physiological effects of (repeated) bark removal on the long-term health and bark regeneration of <em>Prunus africana</em> trees.</td>
</tr>
<tr>
<td>Best method and frequency of exploitation</td>
<td>There is debate on the best method of exploitation of Prunus (either minimum exploitable diameters for felling, or partially debark tree in a temporal cycle). For non-destructive harvesting methods, estimate the frequency and extent of exploitation possible that allows full recovery of the tree between harvests.</td>
<td>Extend the study on tree health to look at the effects of repeated bark removal from different sites, size classes and debarking methods. This work was once discussed as what can be carried out in Cameroon by the Natural History Museum, Paris, in collaboration with, and funding from, industry and CITES. Need to recontact the interested parties.</td>
</tr>
<tr>
<td>Recruitment, mortality, &amp; growth rates of P. Africana</td>
<td>Where exploitation results in increased levels of mortality of productive trees, develop population model to determine the long-term impact of exploitation on population structure and regeneration.</td>
<td>Use existing inventory data and establish long term monitoring plots to determine the population dynamics of <em>Prunus africana</em> under different management regimes, particularly natural, and perturbed forest and monocrop plantation/Agroforestry schemes.</td>
</tr>
<tr>
<td>Provenance and Yield per tree</td>
<td>Determine average yields per size class from accepted exploitation methodology (destructive or non-destructive) and apply to yield estimates for each of the different sites (at which P. africana displays significantly different growth habit, probably due to a combination of climatic &amp; edaphic conditions, and possibly genetic difference between populations)</td>
<td>Carry out controlled exploitation of <em>Prunus africana</em> to assess the relationship between yield and tree size (and method/frequency of harvest), for each site. Need to assess effect of alternative harvesting methods (total bark removal, leaves, roots etc) and effect on natural regeneration potential</td>
</tr>
<tr>
<td>Monitoring of yield per exploitation Zone / management unit.</td>
<td>National estimates should be the sum of the yield estimates by PAU. Evidence (e.g. from periodic independent monitoring) of its effective implementation should be given for each area under exploitation.</td>
<td>From the above factors, develop a method to calculate a &quot;Reliable Minimum Estimate&quot; of yield for <em>Prunus africana</em> both for local management units, and determine how these can be built up into a national quota.</td>
</tr>
<tr>
<td>Factors</td>
<td>Minimum standards required</td>
<td>Ongoing Research Objective</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cost of sustainable management</td>
<td>The costs and responsibilities for management need to be carefully assessed to ensure that the management system is sustainable and the product is competitive on the world market. A major problem is that the management costs make the resulting bark much more expensive than unsustainably exploited bark.</td>
<td>From the above work, calculate the estimated cost of achieving sustainable management in comparison with the value of the product, and other costs of production. The overall aim must be to deliver a system that is efficient and economically viable for dissemination to other situations.</td>
</tr>
<tr>
<td>High active ingredient yielding varieties for domestication</td>
<td>Identification of fast growing variants, identification of active ingredient yielding varieties, suitability for domestication, knowing yields of</td>
<td>Selection of fast growing, high active ingredient yielding varieties for domestication- taking into account pharmaceutical and health product industries requirements</td>
</tr>
<tr>
<td>Alternatives to bark harvest</td>
<td>Yield levels of tree parts (1. felling total tree, 2. berries, 3. roots, 4. Leaves), quantities harvestable, wet and dry weight, extract levels</td>
<td>Assess optimum harvest method and sustainability scenarios</td>
</tr>
<tr>
<td>Differentiate planted from wild prunus</td>
<td>Establish (if there are) methods to differentiate wild and planted Prunus</td>
<td>Provide methods (technical, visual, chemical, genetic or other) to distinguish between variants</td>
</tr>
</tbody>
</table>

(Adapted from: Acworth, 2000)
### Annex 11: Plantations

#### North West

<table>
<thead>
<tr>
<th>Village</th>
<th>Altitude 1 (m)</th>
<th>Coordinates (GPS)</th>
<th>Owner</th>
<th>Area (ha)</th>
<th>Year of plantation</th>
<th>No trees planted (^2)</th>
<th>No trees present</th>
<th>Nursery</th>
<th>Density ha/average</th>
<th>State of trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bamonti (Noni)</td>
<td>1051</td>
<td>32669488E 0701678N</td>
<td>Fabian Baba</td>
<td>0,37</td>
<td>1990 / 1998</td>
<td>200 (^3)</td>
<td>57</td>
<td>0</td>
<td>154.1</td>
<td>Harvested</td>
</tr>
<tr>
<td>Kankeize (Noni)</td>
<td>1160</td>
<td>32668685E 0699173N</td>
<td>Ndi John</td>
<td>-</td>
<td>1998</td>
<td>200</td>
<td>150</td>
<td>0</td>
<td>Not harvested</td>
<td></td>
</tr>
<tr>
<td>Bamonti (Noni)</td>
<td></td>
<td>32669185E 0699588N</td>
<td>V N Mbenkum</td>
<td>-</td>
<td>1992</td>
<td>900</td>
<td>300</td>
<td>50</td>
<td>Not harvested</td>
<td></td>
</tr>
<tr>
<td>Feking</td>
<td></td>
<td>G S Feking</td>
<td></td>
<td>-</td>
<td>1992</td>
<td>100</td>
<td>25</td>
<td>0</td>
<td>Not harvested</td>
<td></td>
</tr>
<tr>
<td>Mbam</td>
<td></td>
<td>G S Mbam</td>
<td></td>
<td>-</td>
<td>1992</td>
<td>100</td>
<td>4</td>
<td>0</td>
<td>Not harvested</td>
<td></td>
</tr>
<tr>
<td>Oku</td>
<td></td>
<td>32669875E 0691383N</td>
<td>G S Ngvenkai</td>
<td>-</td>
<td></td>
<td></td>
<td>36</td>
<td>0</td>
<td>Harvested</td>
<td></td>
</tr>
<tr>
<td>Tadu (Kumbo central)</td>
<td>2111</td>
<td>32676246E 0689105N</td>
<td>Tadu Water Community</td>
<td>1,07</td>
<td>1997 / 2002</td>
<td>500</td>
<td>100</td>
<td>0</td>
<td>93.5 44.1</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Dzembo (Jakiri)</td>
<td>1794</td>
<td>32683748E 0680259N</td>
<td>Elias Tata</td>
<td>1993</td>
<td></td>
<td>475</td>
<td>100</td>
<td>0</td>
<td>Not harvested</td>
<td></td>
</tr>
<tr>
<td>Sop (Jakiri)</td>
<td>1766</td>
<td>32682035E 0678872N</td>
<td>Eric T. Verkijika</td>
<td>1994</td>
<td></td>
<td>1000</td>
<td>600</td>
<td>0</td>
<td>705.9</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Mengu Vekovi (Jakiri)</td>
<td>2095</td>
<td>32675888E 0677453N</td>
<td>Charles L. Lukong</td>
<td>1977 / 1998</td>
<td></td>
<td>100</td>
<td>30</td>
<td>0</td>
<td>Harvested</td>
<td></td>
</tr>
<tr>
<td>Mantum 1 et 2 (Jakiri)</td>
<td>1634</td>
<td>326828235E 0672296N</td>
<td>Bui Beans Corn &amp;</td>
<td>1992</td>
<td></td>
<td>1900</td>
<td>250</td>
<td>0</td>
<td>362.3</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Nyu (Jakiri)</td>
<td></td>
<td>C. Lavla</td>
<td></td>
<td>-</td>
<td>1989</td>
<td></td>
<td>60</td>
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</tr>
<tr>
<td>Aboh (belo)</td>
<td>1816</td>
<td>32654796E 0684592N</td>
<td>Joseph Chioh</td>
<td>-</td>
<td>1989</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Harvested</td>
</tr>
<tr>
<td>Aboh (Belo)</td>
<td></td>
<td>-</td>
<td>Djindo Moussa</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>harvested</td>
</tr>
<tr>
<td>Bandjong (Fundong centre)</td>
<td>1528</td>
<td>32640031E 0694084N</td>
<td>Sylvester Ngeh</td>
<td>-</td>
<td>1992</td>
<td></td>
<td>200</td>
<td>100</td>
<td>Not harvested</td>
<td></td>
</tr>
<tr>
<td>Fundong</td>
<td>1608</td>
<td>32642717E 0693809N</td>
<td>Chair Ngham</td>
<td>-</td>
<td>1993 / 2002</td>
<td></td>
<td>900</td>
<td>0</td>
<td>Not harvested</td>
<td></td>
</tr>
<tr>
<td>Njinikejem</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1997</td>
<td>47</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Njinikom</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1992</td>
<td>600</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>-</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>1656m</td>
<td>7925</td>
<td></td>
<td>2962</td>
<td>450</td>
<td>272</td>
<td></td>
<td></td>
<td>56% NR 1992</td>
<td>33% R 11% U</td>
</tr>
</tbody>
</table>

Source (Foaham, Dagobert et al., 2009)

---

1. Mesurée au GPS au point central de la plantation
2. Mentioned by the planter or in literature
**APPENDIX 1**

**PRIVATE PRUNUS AFRICANA PLANTATIONS IN BUI DIVISION**

The table below shows the owners of some private Prunus plantations in the Divisions:

<table>
<thead>
<tr>
<th>Name</th>
<th>Year Planted</th>
<th>No. of trees (Prunus) planted</th>
<th>Remarks</th>
<th>Locality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Emla Ignitus</td>
<td>2003</td>
<td>400</td>
<td>Mixed stand</td>
<td>Tada - Kumbo Central Sub Division</td>
</tr>
<tr>
<td>2. Godlove Nangla</td>
<td>1988</td>
<td>70</td>
<td>Mixed stand</td>
<td>Tada - Kumbo Central Sub Division</td>
</tr>
<tr>
<td>3. Augustin Yambe</td>
<td>2002</td>
<td>302</td>
<td>Mixed stand</td>
<td>Tada - Kumbo Central Sub Division</td>
</tr>
<tr>
<td>4. Sve Jospeh N.</td>
<td>1996</td>
<td>152</td>
<td>Mixed stand</td>
<td>Tada - Kumbo Central Sub Division</td>
</tr>
<tr>
<td>5. John Ngombe</td>
<td>1999</td>
<td>80</td>
<td>Mixed stand</td>
<td>Tada - Kumbo Central Sub Division</td>
</tr>
<tr>
<td>6. Gwem Samuel Chang</td>
<td>2004</td>
<td>219</td>
<td>Mixed stand</td>
<td>Tada - Kumbo Central Sub Division</td>
</tr>
<tr>
<td>7. Fidelis Nimo</td>
<td>2001</td>
<td>342</td>
<td>Mixed stand</td>
<td>Kumbo Central Sub Division</td>
</tr>
<tr>
<td>8. Kumbo Nangla</td>
<td>1990</td>
<td>70</td>
<td>Mixed stand</td>
<td>Kumbo Central Sub Division</td>
</tr>
<tr>
<td>9. Fai Polis</td>
<td>1992</td>
<td>52</td>
<td>Mixed stand 1ha</td>
<td>Kumbo Central Sub Division</td>
</tr>
<tr>
<td>10. Fai Polis</td>
<td>1992</td>
<td>52</td>
<td>Mixed stand 2ha</td>
<td>Kumbo Central Sub Division</td>
</tr>
<tr>
<td>11. Kumbo Nangla</td>
<td>2000</td>
<td>219</td>
<td>Mixed stand</td>
<td>Kumbo Central Sub Division</td>
</tr>
</tbody>
</table>

**APPENDIX 2**

**PRUNUS AFRICANA NURSERIES IN BUI DIVISION**

<table>
<thead>
<tr>
<th>Sub Division</th>
<th>Name of Nursery</th>
<th>No of Prunus Seedlings raised for 2007</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kumbo Central Sub Division</td>
<td>ANAFOR - Kumbo Cooperative Union - Kumbo Council</td>
<td>1600</td>
<td>Distributed to individuals and farmers</td>
</tr>
<tr>
<td>Jakri Sub Division</td>
<td>1. Laval Levi</td>
<td>22500</td>
<td>Sold to interested farmers and the rest planted in their farms/plantations</td>
</tr>
<tr>
<td></td>
<td>1. Paul Elia</td>
<td>10000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Ndzerma Group</td>
<td>6025</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Efeji Fenta Group</td>
<td>8450</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Efekwi Community Forest</td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>Oko Sub Division</td>
<td>1. Effek - Mh Community Forest</td>
<td>4800</td>
<td>All planted in community forest</td>
</tr>
<tr>
<td></td>
<td>2. Rupi Shiga</td>
<td>3200</td>
<td>All planted in their community forest</td>
</tr>
<tr>
<td></td>
<td>3. Nlori Joseph</td>
<td>400</td>
<td>For sale</td>
</tr>
<tr>
<td></td>
<td>4. Ekom Aaron</td>
<td>1625</td>
<td>For sale</td>
</tr>
<tr>
<td></td>
<td>5. Mhk Henry</td>
<td>2685</td>
<td>For sale</td>
</tr>
</tbody>
</table>

*In addition most of the farmers had small nurseries where prunus and other seedlings are being raised to plant in their individual farms or plantations.*
### South West

<table>
<thead>
<tr>
<th>Village</th>
<th>Altitude(^4) (m)</th>
<th>Coordinates (GPS)</th>
<th>Owner</th>
<th>Area (ha)</th>
<th>Year of plantation</th>
<th>No trees planted(^5)</th>
<th>No trees present</th>
<th>Nurser y</th>
<th>Density ha/average</th>
<th>State of trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ekonjo</td>
<td>680</td>
<td>32517928E 0449351N</td>
<td>P. K. Njumba</td>
<td>1998</td>
<td>-</td>
<td>130+50</td>
<td>150</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Moliwé</td>
<td>247</td>
<td>32530079E 0453171N</td>
<td>C D C</td>
<td>1997</td>
<td>7</td>
<td>9 500(^6)</td>
<td>Densément peuplé 1357</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Saxenhof</td>
<td>558</td>
<td>32523878E 0453171N</td>
<td>C D C</td>
<td>1997</td>
<td>1,7</td>
<td>-</td>
<td>En mélange avec Eucalyptus</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Likombé 1</td>
<td>954</td>
<td>32521988E 0454707N</td>
<td>M. Boua Ndivé</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Likombé 2</td>
<td>-</td>
<td>-</td>
<td>Ebel Ekéma</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>500</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Bova I. 1</td>
<td>946</td>
<td>32528592E 0462304N</td>
<td>D. Kingé Molongé</td>
<td>1996</td>
<td>-</td>
<td>500</td>
<td>350</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Bova I. 2</td>
<td>-</td>
<td>-</td>
<td>S. Embola Mosima</td>
<td>1996</td>
<td>-</td>
<td>350</td>
<td>300</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Bova II. 1</td>
<td>897</td>
<td>32529655E 0463451N</td>
<td>Njité</td>
<td>1994/1996</td>
<td>1,8</td>
<td>1000</td>
<td>850</td>
<td>472</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Bova II. 2</td>
<td>926</td>
<td>32529494E 0463626N</td>
<td>Njité</td>
<td>1996</td>
<td>0,17</td>
<td>100</td>
<td>100</td>
<td>588</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Bova II. 3</td>
<td>932</td>
<td>32529356E 0463454N</td>
<td>W. Ndivé Ewulé</td>
<td>1996</td>
<td>-</td>
<td>100</td>
<td>30</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Bokwango 1</td>
<td>837</td>
<td>32525037E 0456205N</td>
<td>Martin Luma</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>Not harvested</td>
</tr>
<tr>
<td>Bokwango 2</td>
<td>-</td>
<td>-</td>
<td>Dead Elumbé Njoh</td>
<td>-</td>
<td>-</td>
<td>1500</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Abattus pour la plupart</td>
</tr>
<tr>
<td>Mambea</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>13355</strong></td>
<td><strong>2355</strong></td>
<td><strong>805</strong></td>
<td><strong>0</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Average**

| 755m | 261 | 98 | 0 | 85% NR (1645) | 8% R 8% U |

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Source (Foaham, Dagobert et al., 2009)

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\(^4\) Mesurée au GPS au point central de la plantation

\(^5\) Mentioned by the planter or in literature

\(^6\) Cunningham A. B. and Mbenkum F. T. (1993)