AGROFORESTRY, A POWERFUL TOOL FOR COMMUNAL FORESTS

Paper presented at the 1St Congress Communal Forests of COMIFAC Hilton Hotel Yaounde, 3-6 May 2011.

Zac Tchoundjeu

Regional Director of ICRAF for West and Central Africa

Tel 77 70 75 82, Email: z.tchoundjeu@cgiar.org



ARTICULATIONS

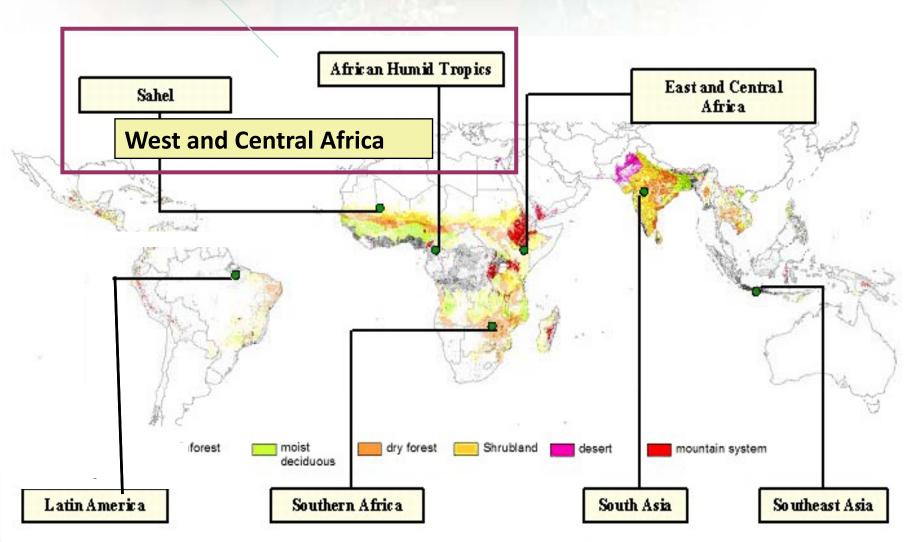
ICRAF IN WEST AND CENTRAL AFRICA REGION

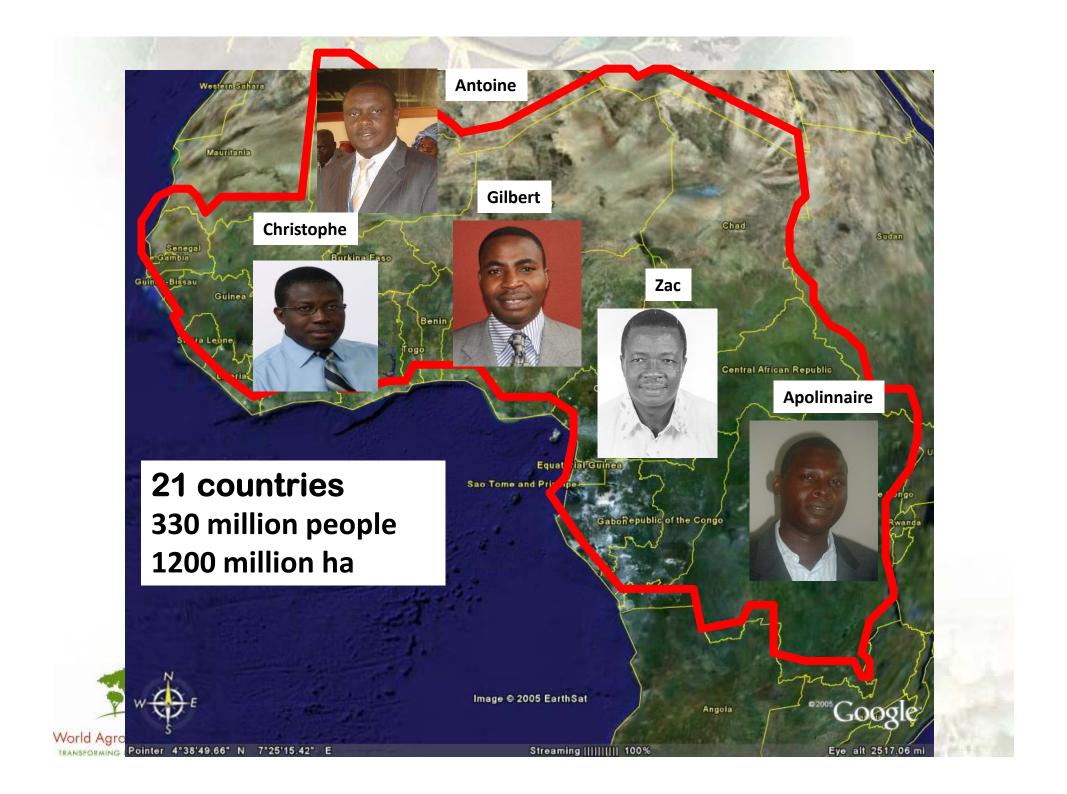
 APPLICATION OF CONCEPT OF PARTICIPATORY TREE DOMESTICATION IN COMMUNAL FOREST

 STRATEGIC RECOMMENDATIONS TO LOCAL COMMUNITIES FOR EFFICIENT WAYS OF CREATING THEIR FORESTS



ICRAF REGIONS





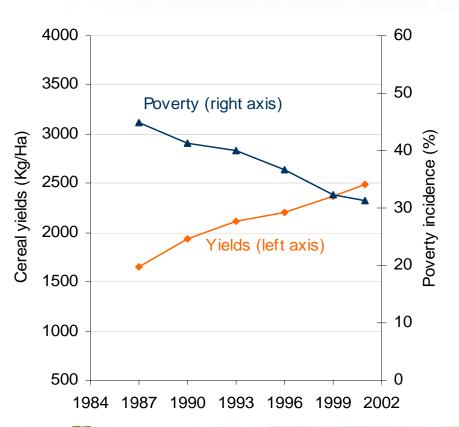
KEY CHARACTERISTICS OF WCA REGION

- Smallholder farmers of this region relay on rain-fed production systems and natural/traditional methods of soil fertility maintenance.
- Farmers have limited access to markets.
- Huge potential to intensify and diversify productivity with agroforestry as a primary delivery mechanism of multifunctional agriculture for food and export markets

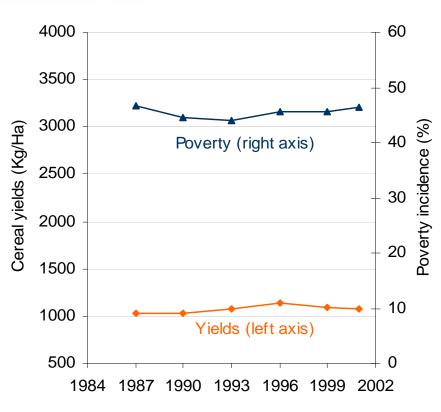


Increase Yields, Decrease Poverty

South Asia

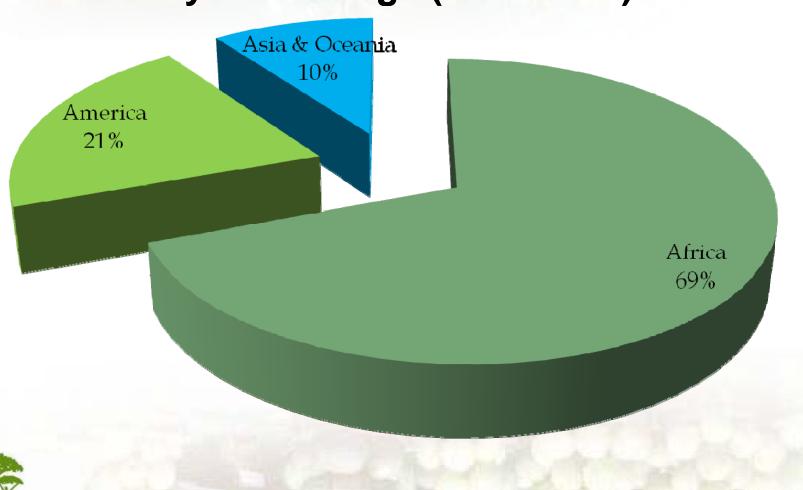


Sub-Saharan Africa:

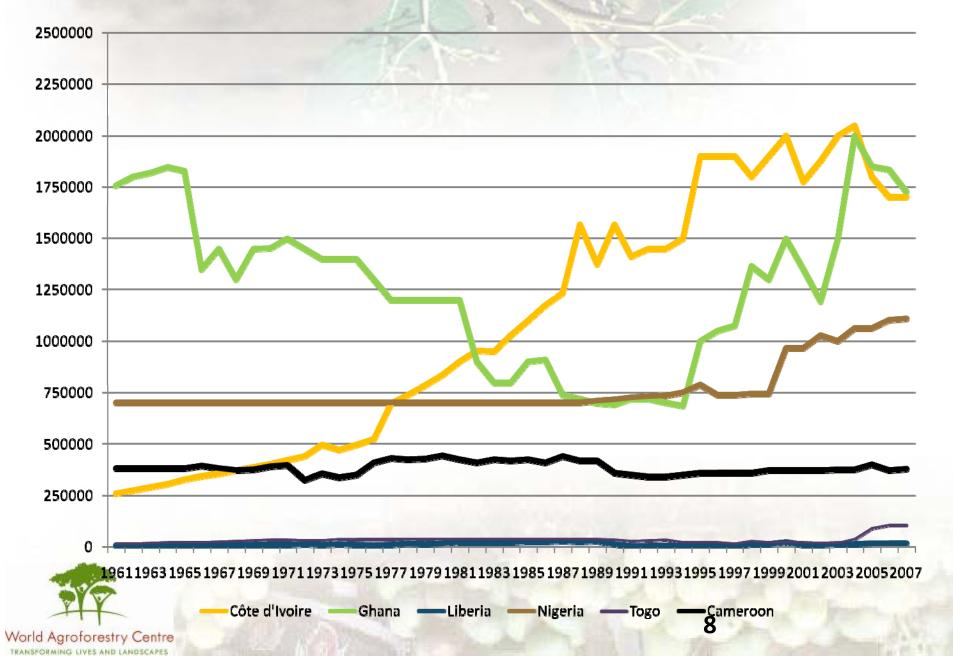


Source: Agriculture for Development, World Development Report, World Bank, 2008.

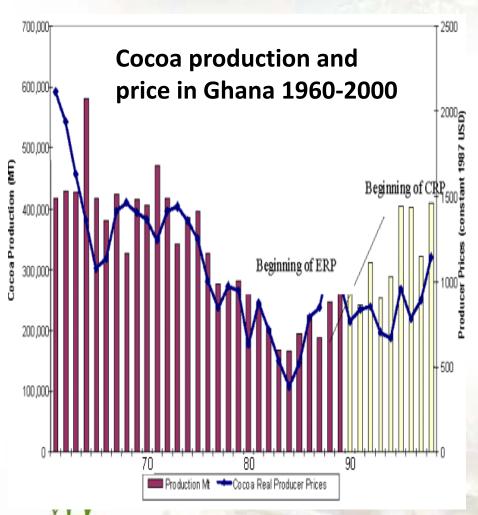
Distribution of Area under Cultivation By Zone 5-year Average (2003-2007)

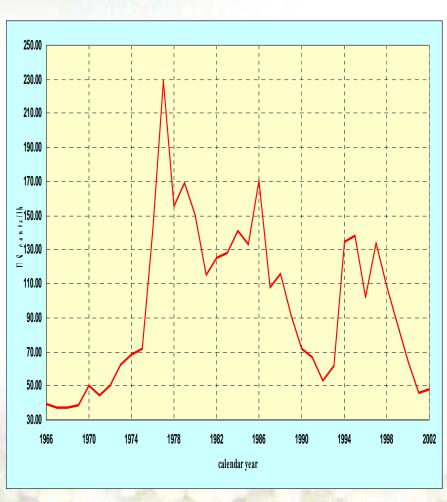


Area under Cultivation



Constant Fluctuation in cocoa/coffee prices





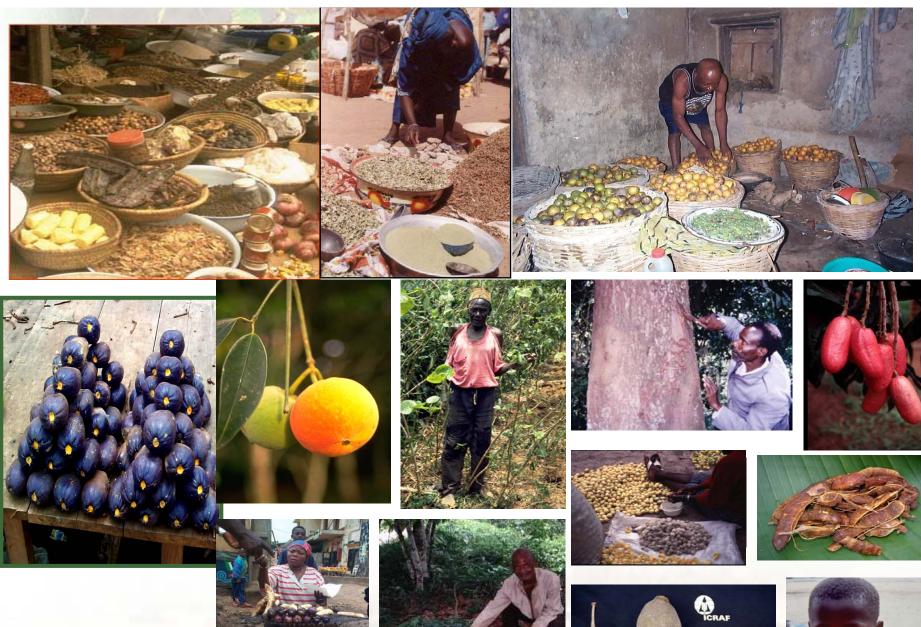


LES FORETS NE SONT PAS SEULEMENT LES GROSSES BILLES OU LES PLANCHES





Plus de 2/3 de 600 millions de peuple en Afrique dependent directement ou indirectement de la forêt pour leur survie.











SPECIES UNDER DOMESTICATION

Kola nitida





Ricinodendron heudeloti







Afrotyrax lepidophyllus



Parcinia cola (Bitter kola)



Monodora myristica



Zanthoxylum macrophylla



P. Johimbe cutting



Prunus. africana

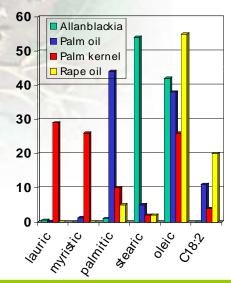


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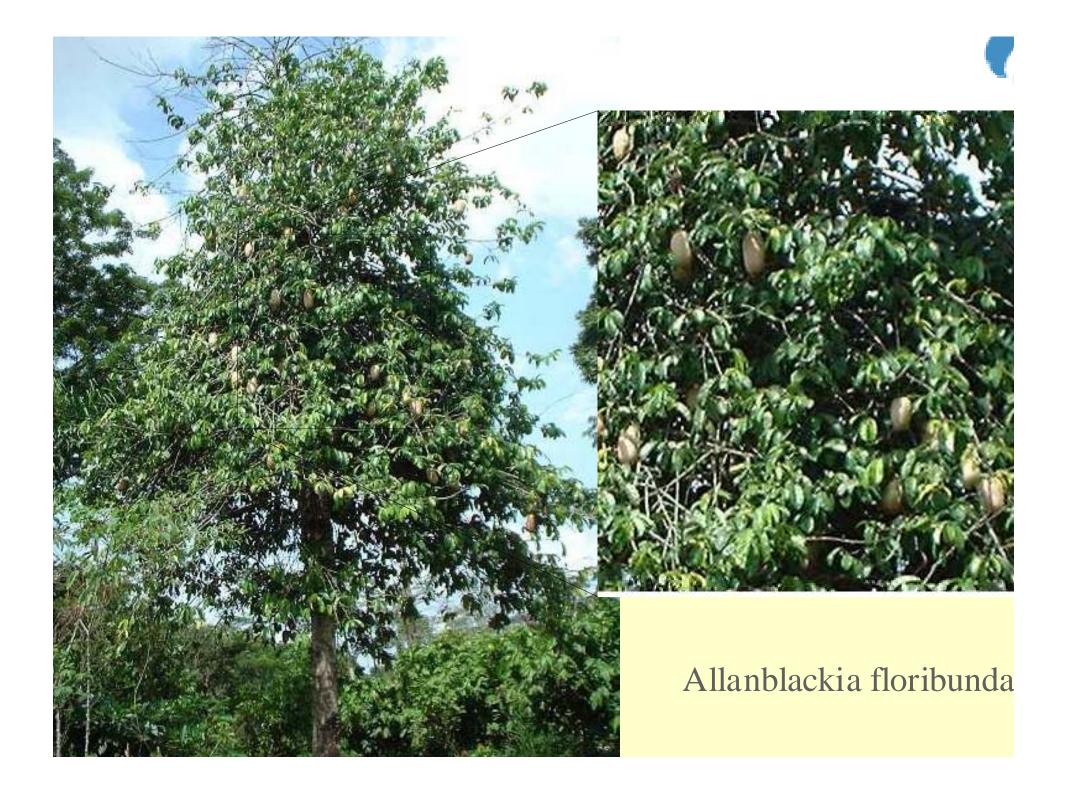


E. chloranta for hepatitis A, B, D, E

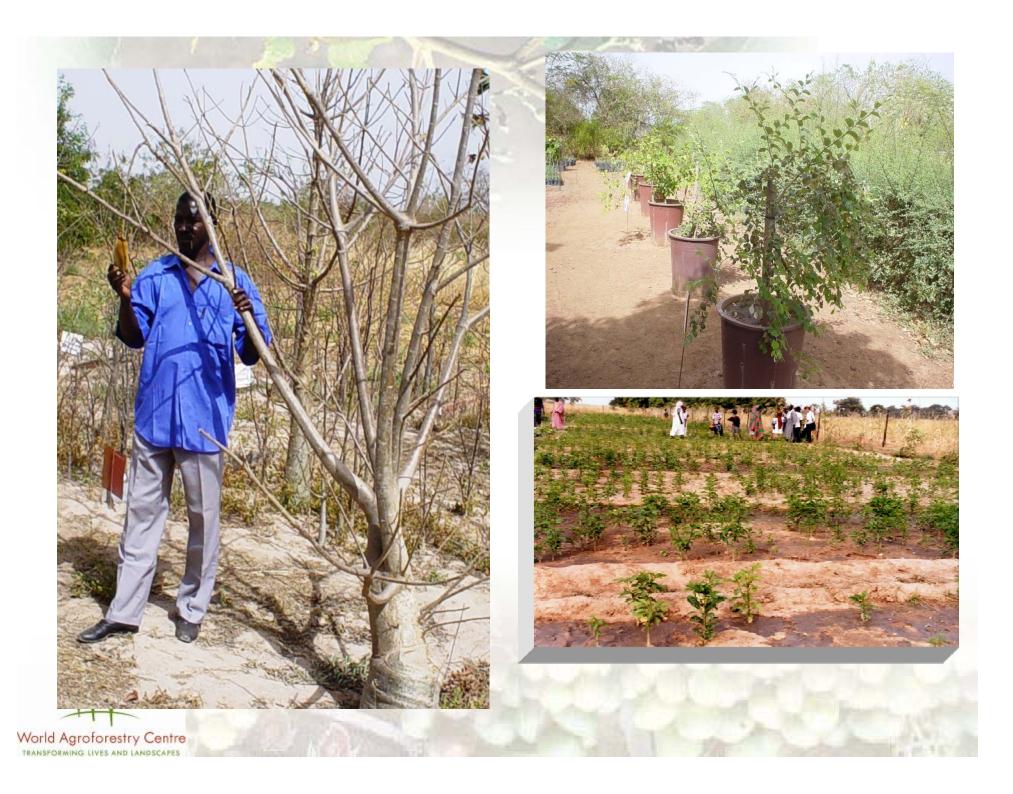








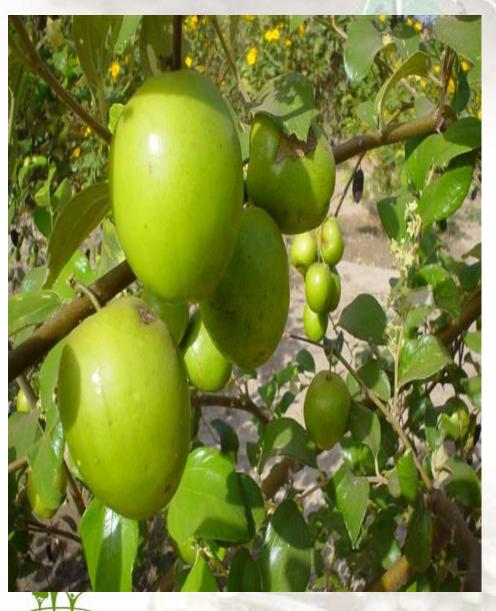




BAOBAB VEGETABLE BANK











ICRAF's INNOVATIVE APPROACH: the Participatory Tree Domestication



Participatory Tree Domestication (PTD)

Put simply PTD refers to:

- the means communities select, propagate and manage high-value indigenous fruit trees and medicinal plants and integrate them in the various farming systems,
- Species for domestication are mainly selected encompassing indigenous knowledge and genetic selection based on scientific principles
- A strong partnership is developed with scientists, civic authorities and private companies.
- PTD is a farmer driven and market lead process. It focuses on species farmers consume best with high potentials for local, regional and international markets









TRANSFORMING LIVES AND LANDSCAPES



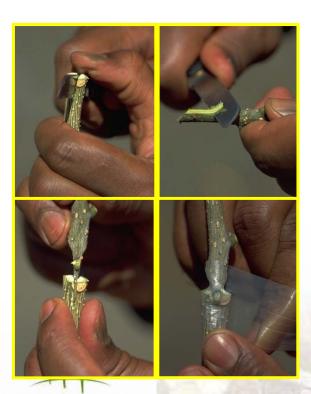
How to multiply the selected species: rooting cuttings

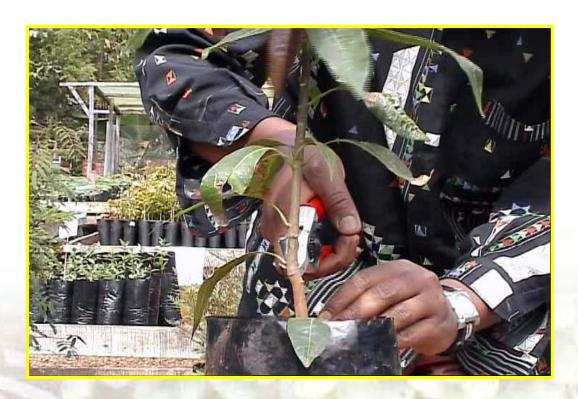
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GRAFTING TECHNIQUES

- No new secrets but skills normally reside with station or research staff
 - Farmers, extension services need the techniques











TRANSFORMING LIVES AND LANDSCAPES



How to multiply the selected species: air layering

Creation of a cultivar







Earlier fruiting, smaller trees and uniform quality





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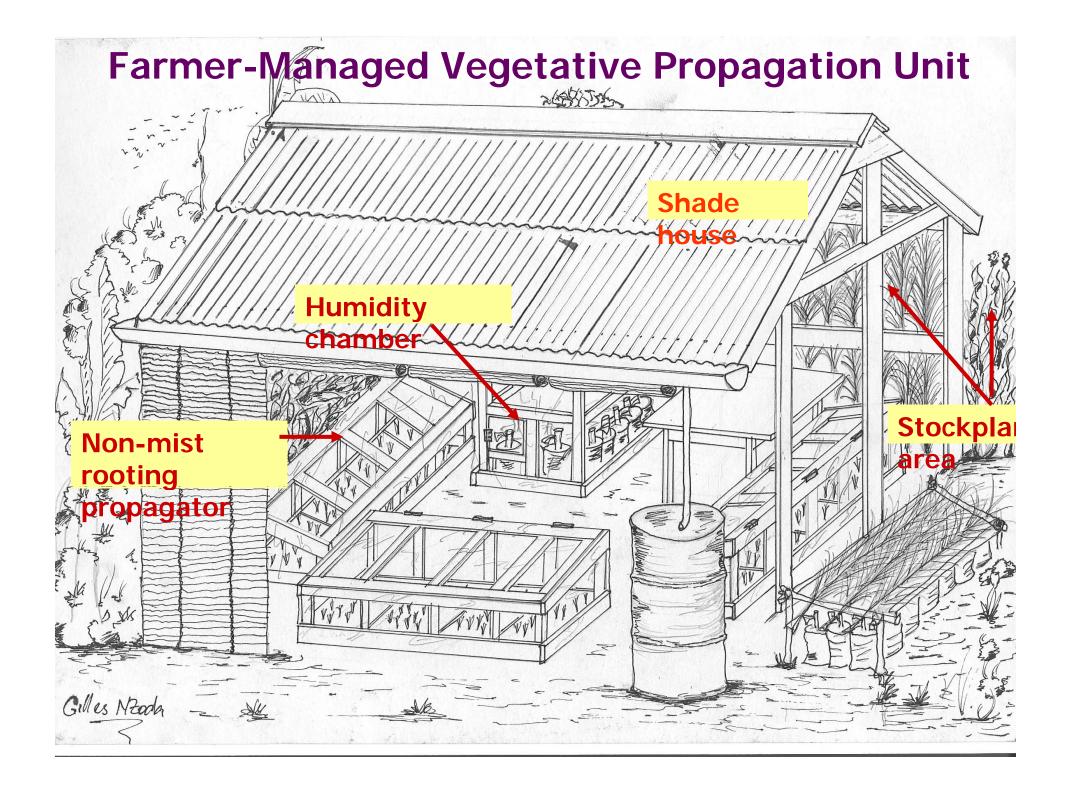








TRANSFORMING LIVES AND LANDSCAPES



ENTREPRENEURIAL SPIRIT IN PILOT VILLAGES



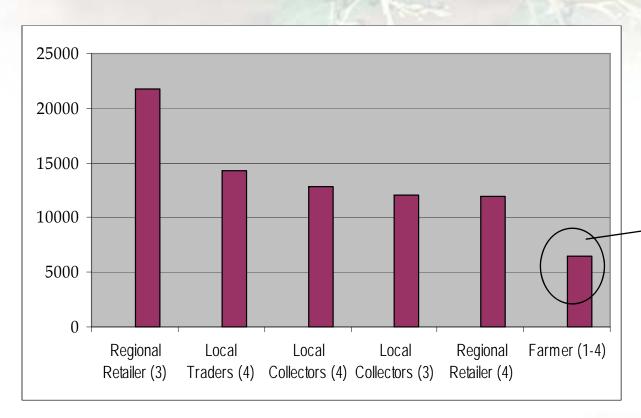






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Approaches for linking rural communities to markets

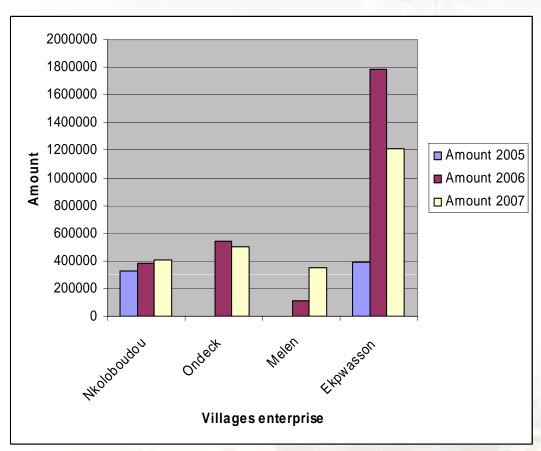


HOW TO INCREASE FARMER INCOMES

Profit margin received by market actors



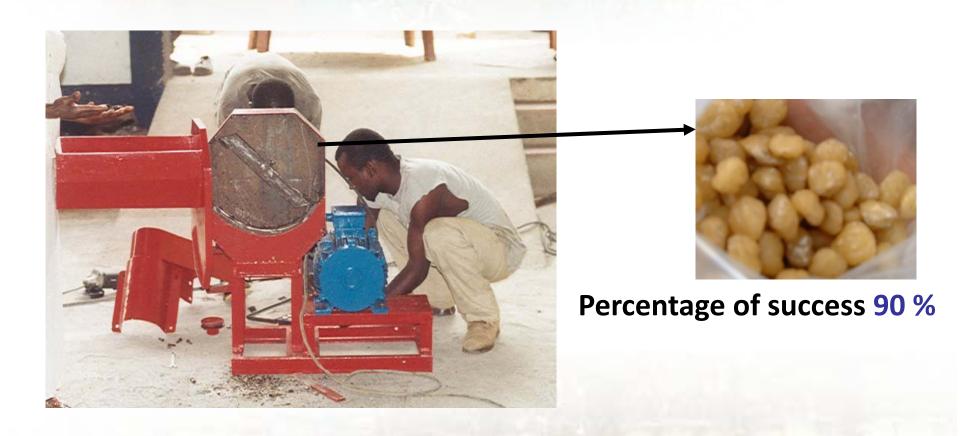
Some Results



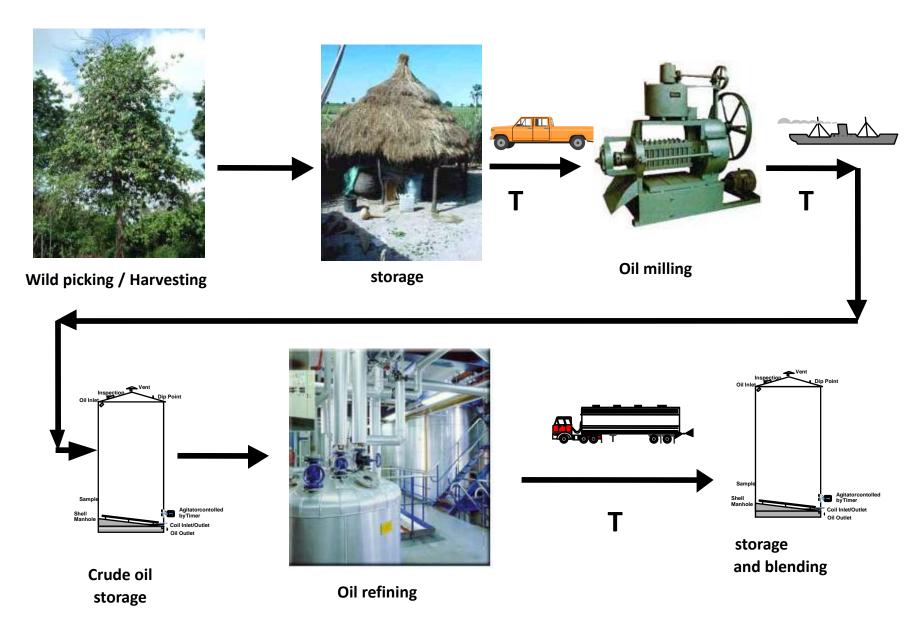
- In 2005, 4 farmers enterprises generates received 709,075 FCFA from the sale of njansang.
- In 2006, they generated **2,826,000FCFA.**
- In 2007 they generated 2,472,150FCFA.



The Njansang Kernel Cracking machine:







The supply chain of AB is very similar to other modern supply chains, like that of palmkernel oil, coconut oil or Shea nut oil.

The right tree for the right place

1. Trees for Products













fruit

firewood

medicine

income

sawnwood

fodder

2. Trees for Services

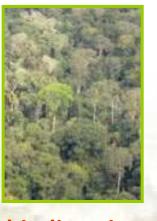












carbon World Agroforestration sequestration

soil erosion

watershed protection

shade

biodiversity

3-month old scion grafted on mature tree

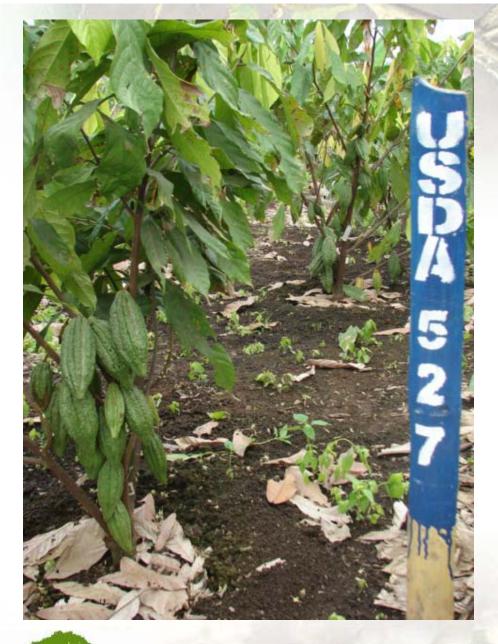






First flowers of 5-month old cocoa clones grafted





New cultivars at 1.5 (left) and 2.5

World A right years in Ecuador

TRANSFORMING LIVES AND LANDSCAPES



	LS Means BW	StdErr
USDA 484	7.28	0.4
USDA 374	6.90	0.34
CCN51	3.4	0.39









Outcome and Impact Assessment



Agroforestry Resource Centre Wins Equator Prize

The Riba Agroforestry Resource Centre in Kumbo, Northwest Region, has received the prestigious Equator Prize at a ceremony organised on the sidelines of the last General Assembly of the United Nations in New York, USA.

HE group leader, George Kangong, was invited to New York for the official award ceremony on September 20, 2010, as part of the United Nations General Assembly and Millennium Review Summit.

The agroforestry resource centre located some 120 km from Bamenda is the brainchild of the World Agroforestry centre, ICRAF, and since 2003 scientists from ICRAF have ensured the day-today follow-up.

Due to the hard work and the adoption of the technologies introduced by ICRAF, the number of farmers planting nitrogen-fixing crops in the locality has risen from 208 to 360, crop yields (wheat and potatoes) have increased by 200 and 300 percent, and the average number of trees planted per household has risen

"I give the credit to the ICRAF team us over the years ... they guided us on farming and soil fertility restoration

best practice," says Kangong.

The resource centre is dedicated to that has been working relentlessly with the promotion of sustainable tree-based

> with the objective of improving equity, and improving agricul-

The Equator Prize is awarded

The award is, therefore, a special recognition to the initiative that best exemplifies indigenous peoples' use of traditional knowledge and the initiative that best exemplifies ecosystembased adaptation to climate change.

A community-funded rural resource centre provides training in agroforestry, tree nursery management, watershed protection, apiculture, micro-finance, and market supply chains for tree seedlings and farm produce.

www.thepostwebedition.com



Prize award at UN summit at NY

STRATEGIC RECOMMENDATIONS TO LOCAL COMMUNITIES

- Involve local population in establishment and management of communal forests
- Participatory Tree Domestication is a powerful tool for regeneration and management of communal forest
- It helps farmers to be fully integrated in the management of the ecosystems as farmers could understand the rational between seeds and mature trees

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STRATEGIC RECOMMENDATION TO LOCAL COMMUNITIES...

 It helps farmers to solve the problem of erratic seeds

 It helps farmers to plant known and desired materials

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 It helps farmers to have quick returns in investments due to early fruiting materials

STRATEGIC RECOMMENDATION TO LOCAL COMMUNITIES...

- It helps farmers to achieve diversification which is the most stable system
- Farmers trained to participatory tree domestication could easily accept to plant forest species as their immediate needs are already satisfied
- Use new approaches in creation of plantations
- Rural Resource Centers are appropriate areas where farmers could be exposed and learn the participatory tree domestication and agroforestry technologies so far developed by the research.



KEY Donors and Partners

- Key donors are: Belgian Cooperation (DGDC), CFC, EU, IDRC, IFAD, RRIN, UNEP/GEF, USAID, USDA, DFID, ACDI, Government OF Finland, MARS COMPANY, Australian Government, etc.
- Key partners include universities and related networks (ANAFE, AU) and regional bodies including CORAF, COMIFAC, ECOWAS, FARA, NGOs, NARS from 8 countries, Farmers organizations and different ministries involved in Agroforestry, Forestry and Agriculture.
- Research activities of the region cover the 6 GRPs with active participation of scientists in CRPs particularly CRP 1.1, 1.2 and CRP6.
- Joint projects being implemented with IUCN, WWW, AWF and CARPE

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MANY THANKS FOR YOUR ATTENTION

