

Cocoa farmers ageing ...for four centuries

A model and its potential bifurcations



World Cocoa Conference
Amsterdam, 9-13 June, 2014.

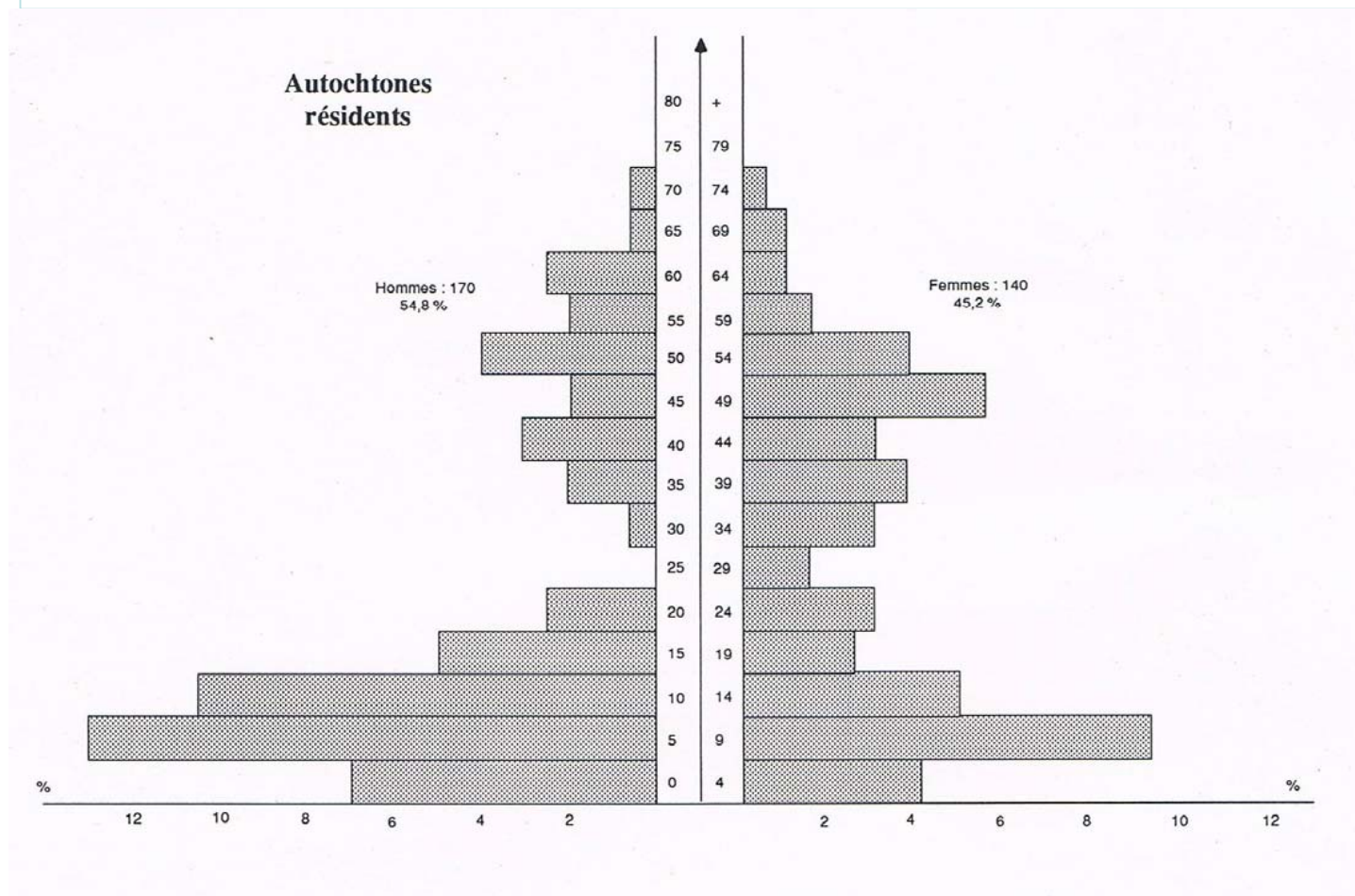
**Session « Attracting a new
generation of cocoa farmers and
addressing gender issues**

François Ruf

CIRAD

UMR Innovation

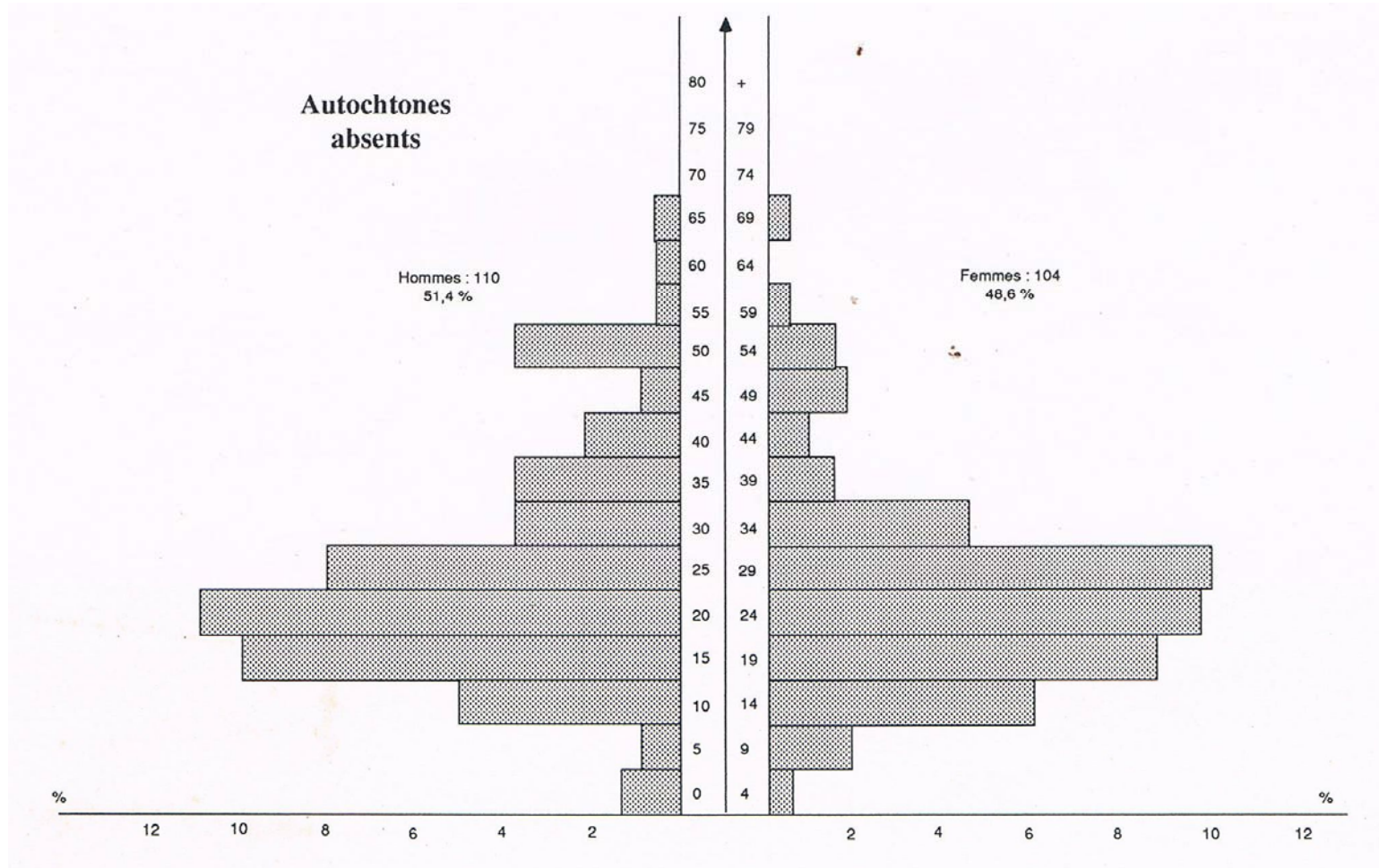
« **My farmers are old** » (Dr Nyamkey, DG of SATMACI, in Côte d'Ivoire, complaining about the difficulties faced by his extension agents, in **1986**)
The farmers' ageing problem is an old complain. What was/ What is the reality?



Actually, in the 1980s, there was a true ageing problem in all **autochthon** villages.

Here the age pyramid in autochthon villages in the centre-west in **1981**), showing a huge deficit of young people aged between 15 and 40

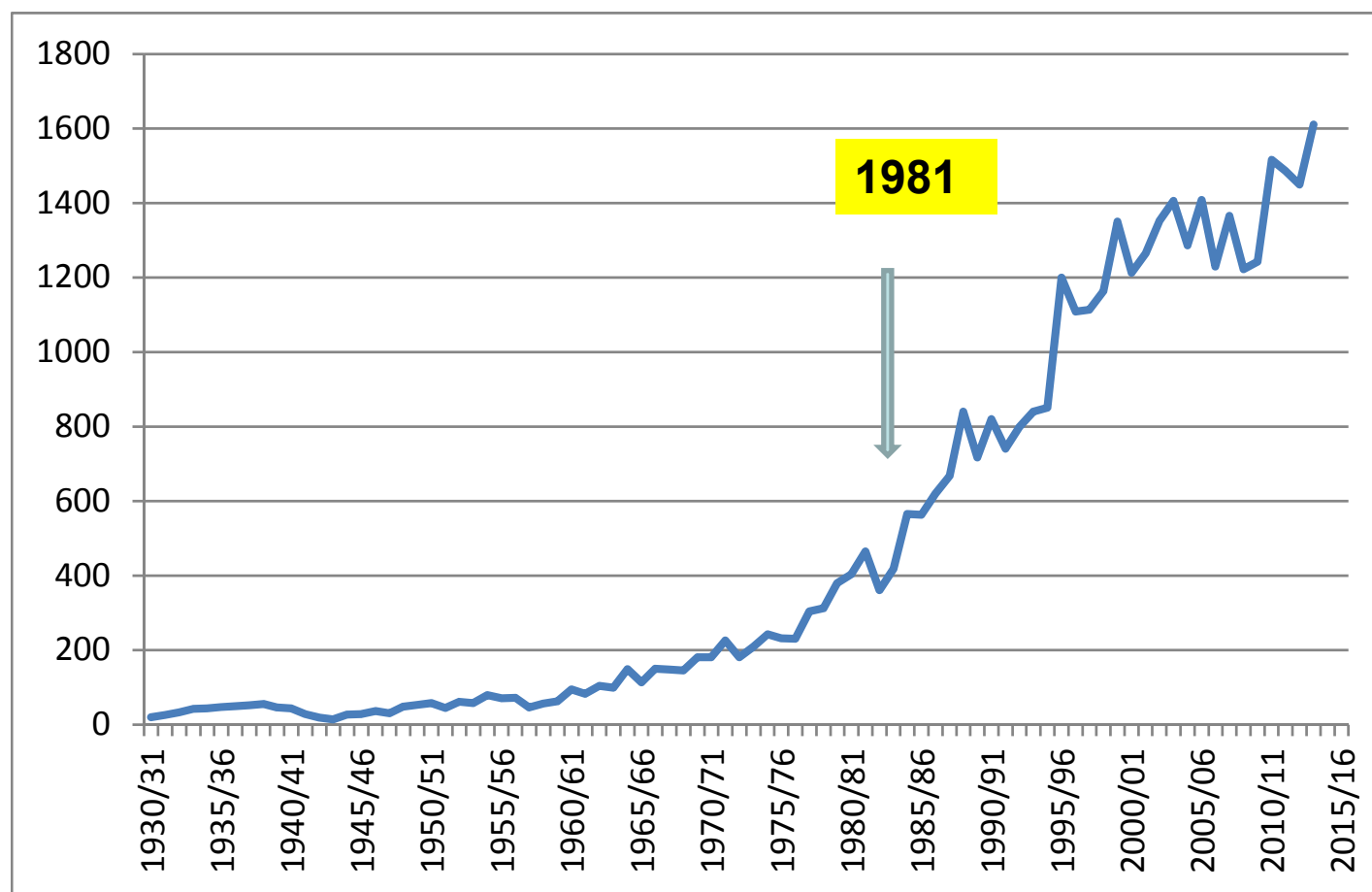
1981. All the youth had left the autochthon villages, most of them had emigrated to Abidjan and other cities



Sources: Ruf 1988

Meantime, Côte d'Ivoire experienced the most powerful cocoa boom in history
1981, the beginning of the visible cocoa boom :

With ageing farmers? A paradox? Was cocoa grown in Abidjan?

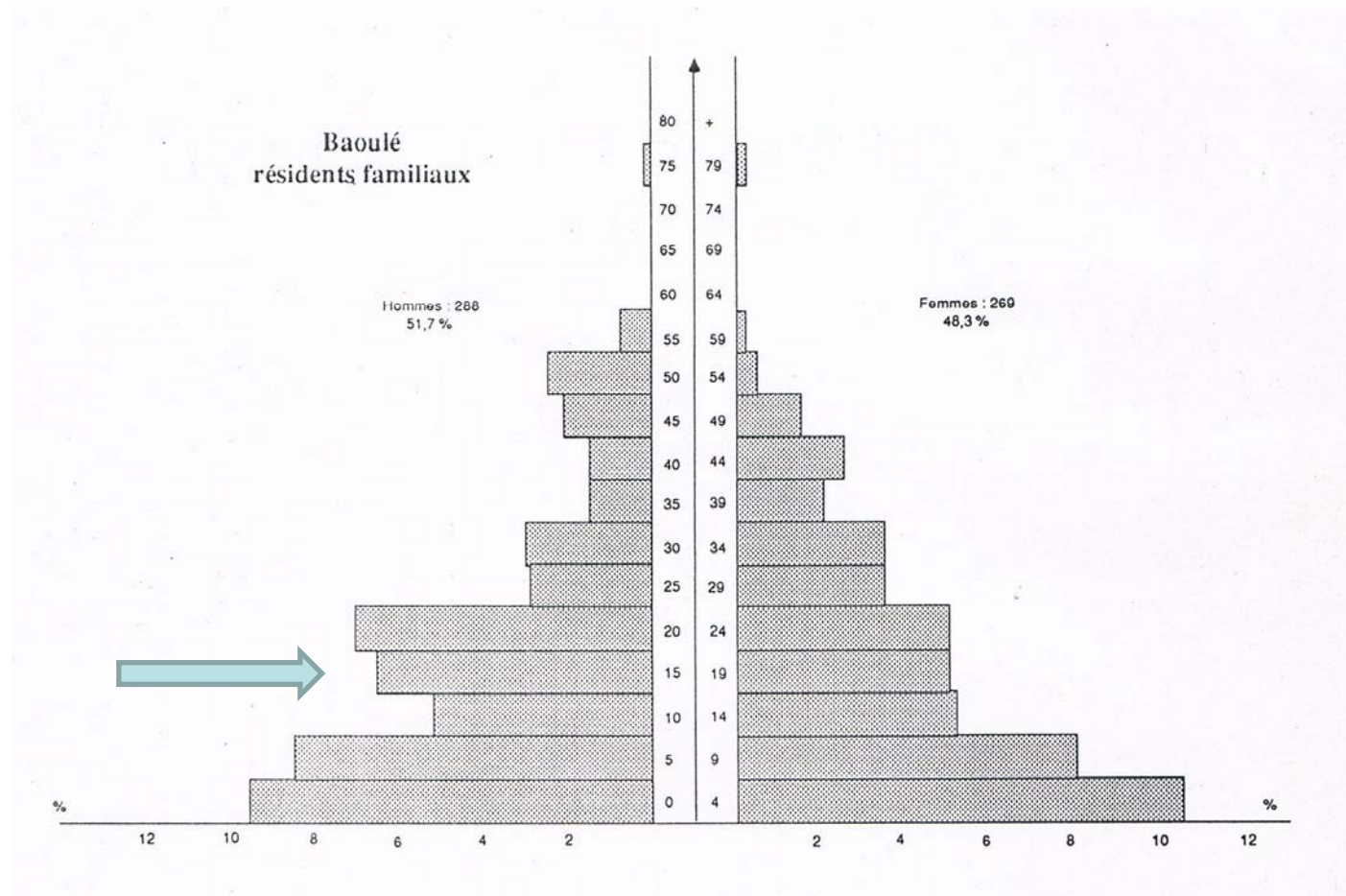


Sources : ICCO

1981. How such a powerful boom could be achieved with a supposed 'ageing population of farmers'?

2014. How the two neighbours, Côte d'Ivoire and Ghana, could produce 2,5 million tonnes of cocoa with 'old farmers'?

1981. The paradox is explained by a 'demographic symmetry' between autochthons and migrants: a typical symmetry in most cocoa stories
Migrant farmers massively brought youth and labour



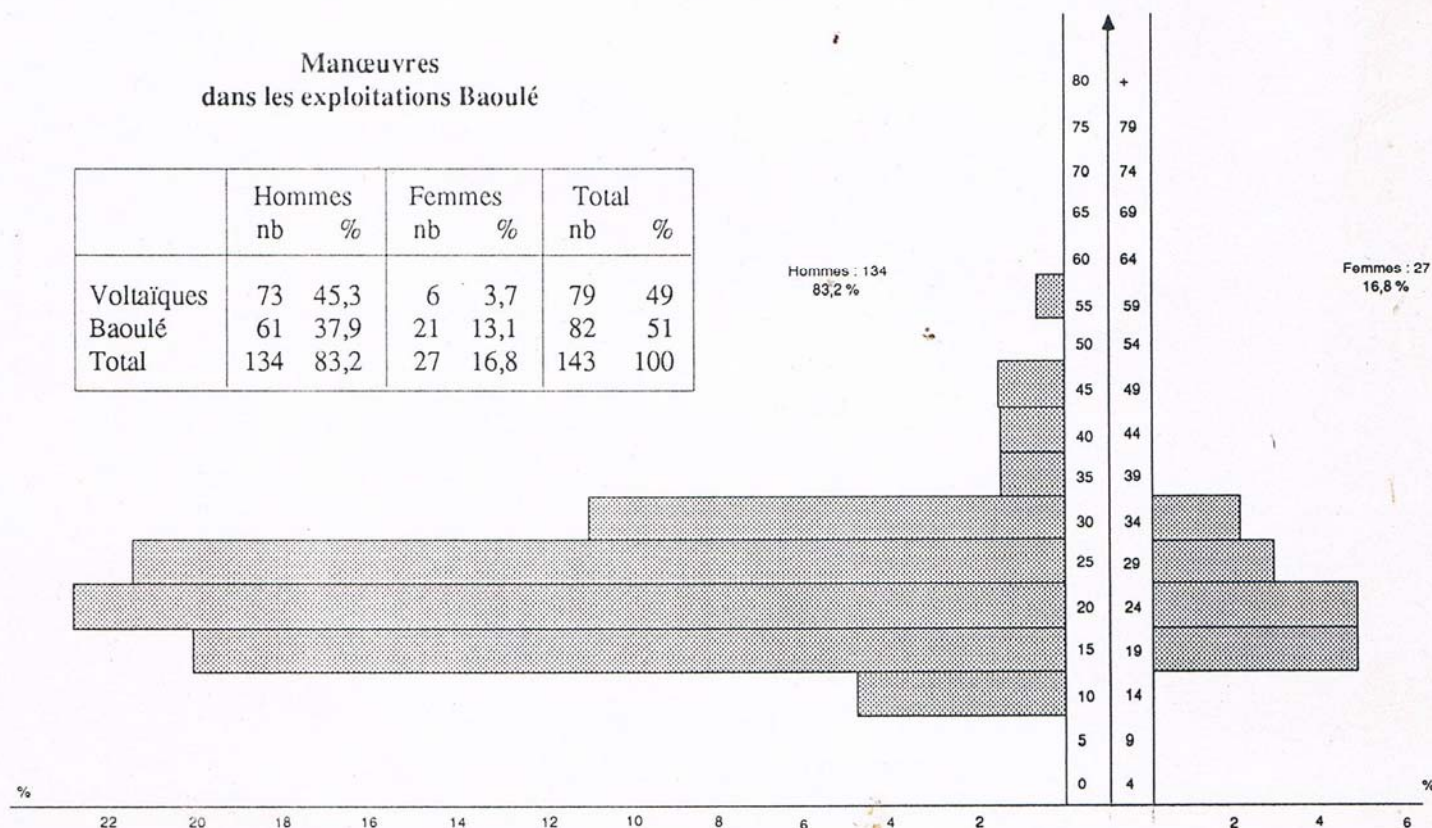
Here, still in the centre-west, in the 1980s, **in migrant villages**, the age pyramid is symmetric to the autochthons' one

Huge migrant waves brought a surplus of young men and abundant labour force

1980's. The 'migrant farmer' effect: an investment multiplier itself enhanced by labour migration.

Manœuvres
dans les exploitations Baoulé

	Hommes		Femmes		Total	
	nb	%	nb	%	nb	%
Voltaïques	73	45,3	6	3,7	79	49
Baoulé	61	37,9	21	13,1	82	51
Total	134	83,2	27	16,8	143	100



Here, the age pyramid of workers hired by Baoulé migrants in the early 1980S in the centre-west

Hardly established as cocoa farmers, migrants call 'brothers' from their home villages to take care of their young and productive farms.

They keep hiring young workers from an abundant market of migrant labour.

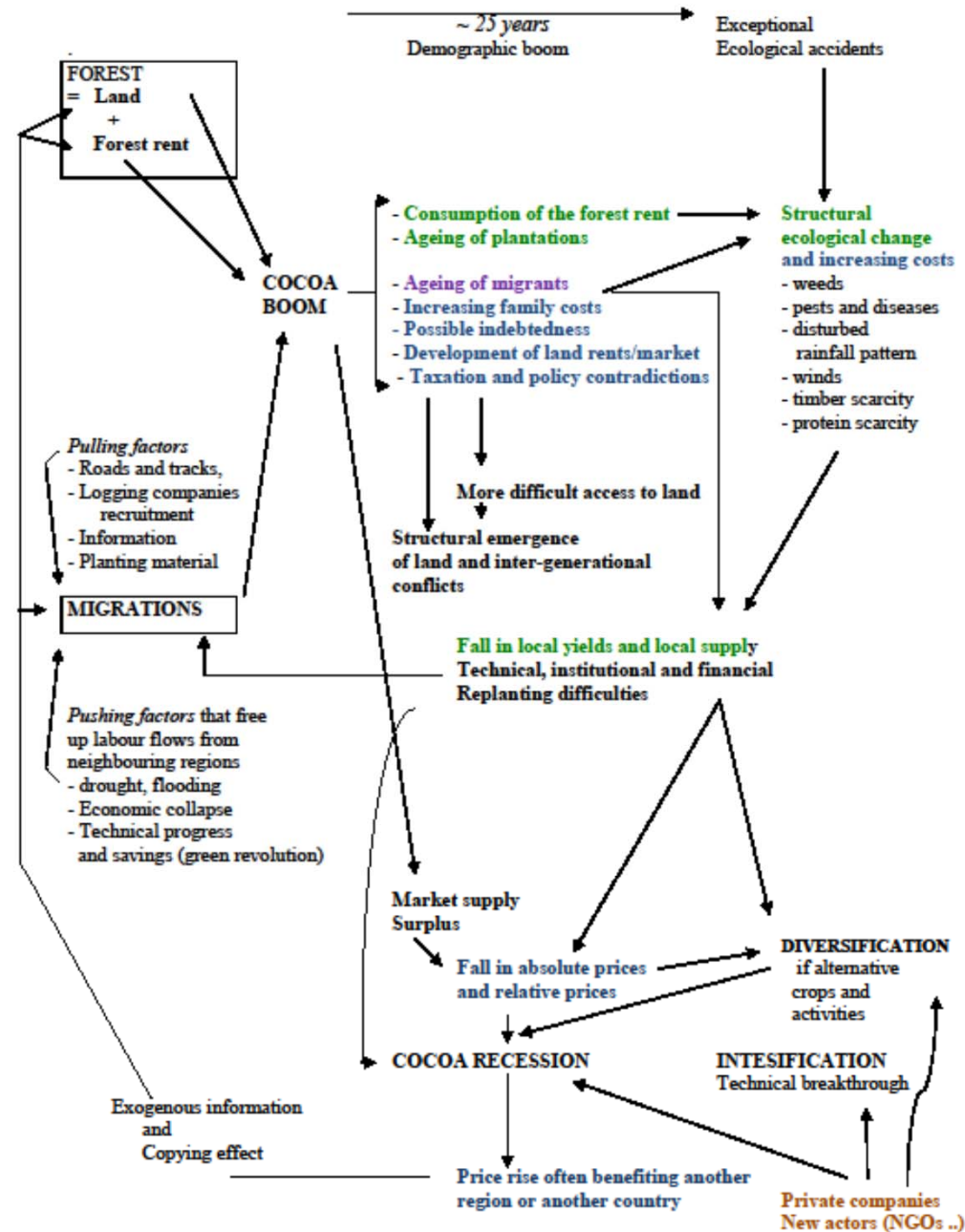
The inherent logic of a pioneer front

A Universal model

Young migrants
and Young cocoa

Then, they start ageing
together

until a new cycle starts
in another region with
another wave of young
migrants



A conceptual model of cocoa cycles

Finally, although repetitive complains about the ‘cocoa farmers’ ageing’ is not always true, although the age of the chief of the household is not the only variable to consider, this ‘cocoa cycle model’ shows that

- Cocoa farmers’ population remain young as long as land and forests are available to attract migrants willing to plant cocoa to get out of poverty.
- Once the forests have gone, once the land availability decreases, the ageing fo cocoa farmers and farms looks unavoidable (according to this model/theory)

.....
Which factors may help to bring more young people to the cocoa sector?

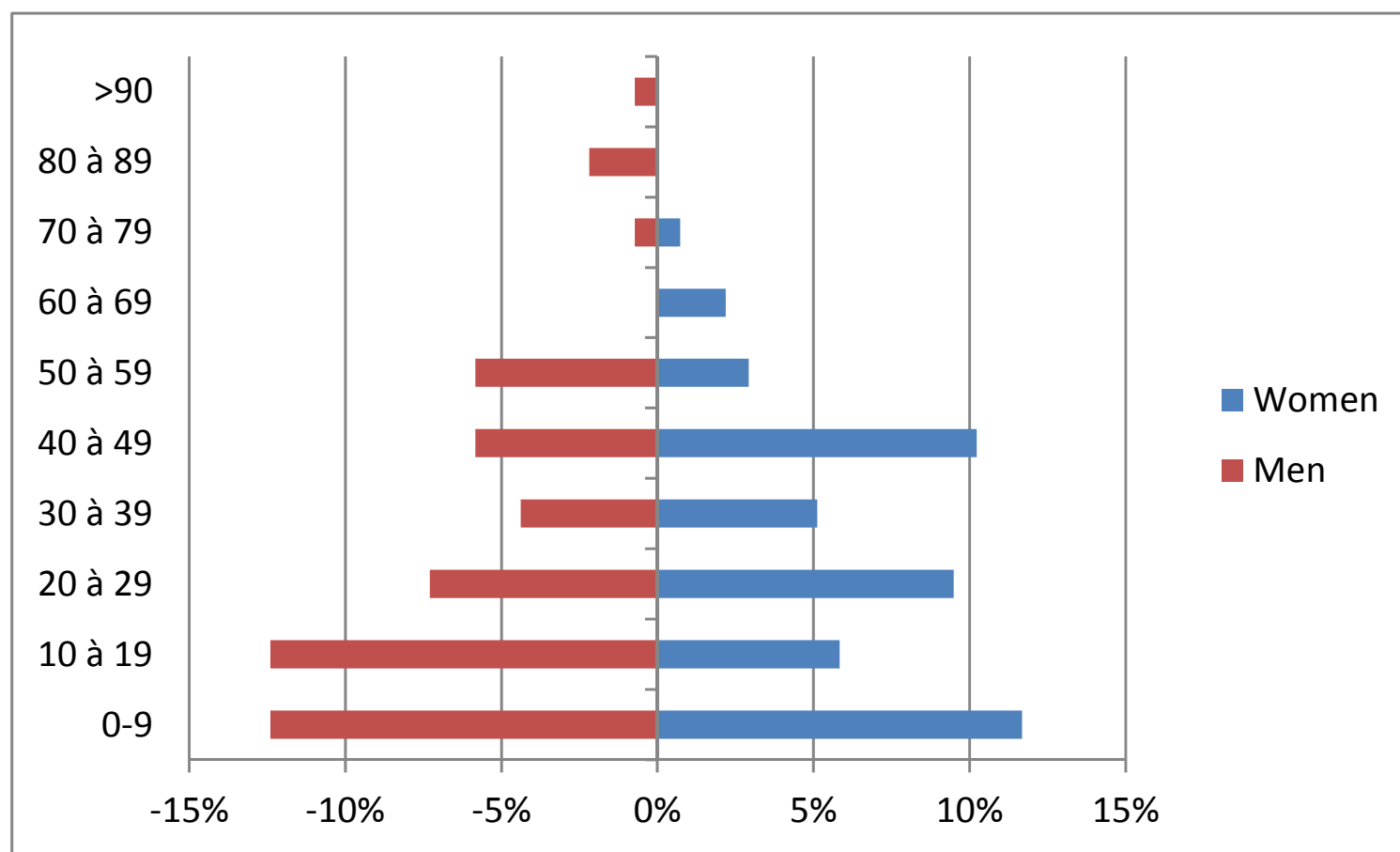
1. A repetition of the model : more young migrants ... encroaching further forests. A way to keep young migrants interested in cocoa

2. Potential bifurcations of the model: change the logic with demographic, economic, technical, social, political changes

2010s A first bifurcation of the model.

Demographic and economic change turn the cocoa sector as a refuge

A lack of alternatives in cities bring young autochthons back to villages



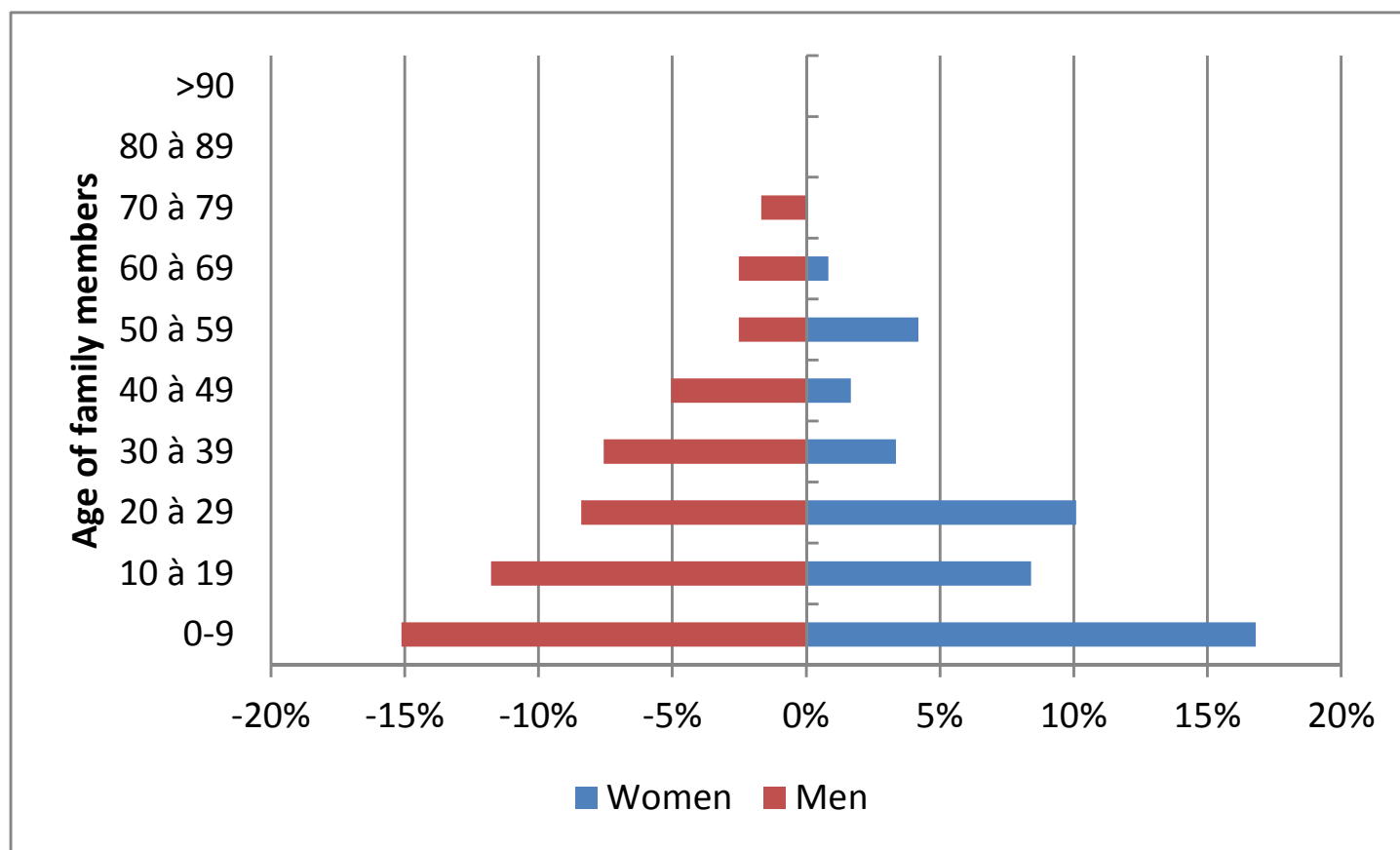
2014. The age pyramid in the same autochthon villages of the centre-west

**The autchtons' age pynamid is less unbalanced than in the 1980s
= more young people in the villages, even if they are not always farmers themselves**

Sources: Author's survey, 2014

**However, a symmetric trend is logically observed
among the ‘migrant population’**

**The migrants’ age pyramid (here in the centre-west) is getting close
to that of a ‘standard population’**



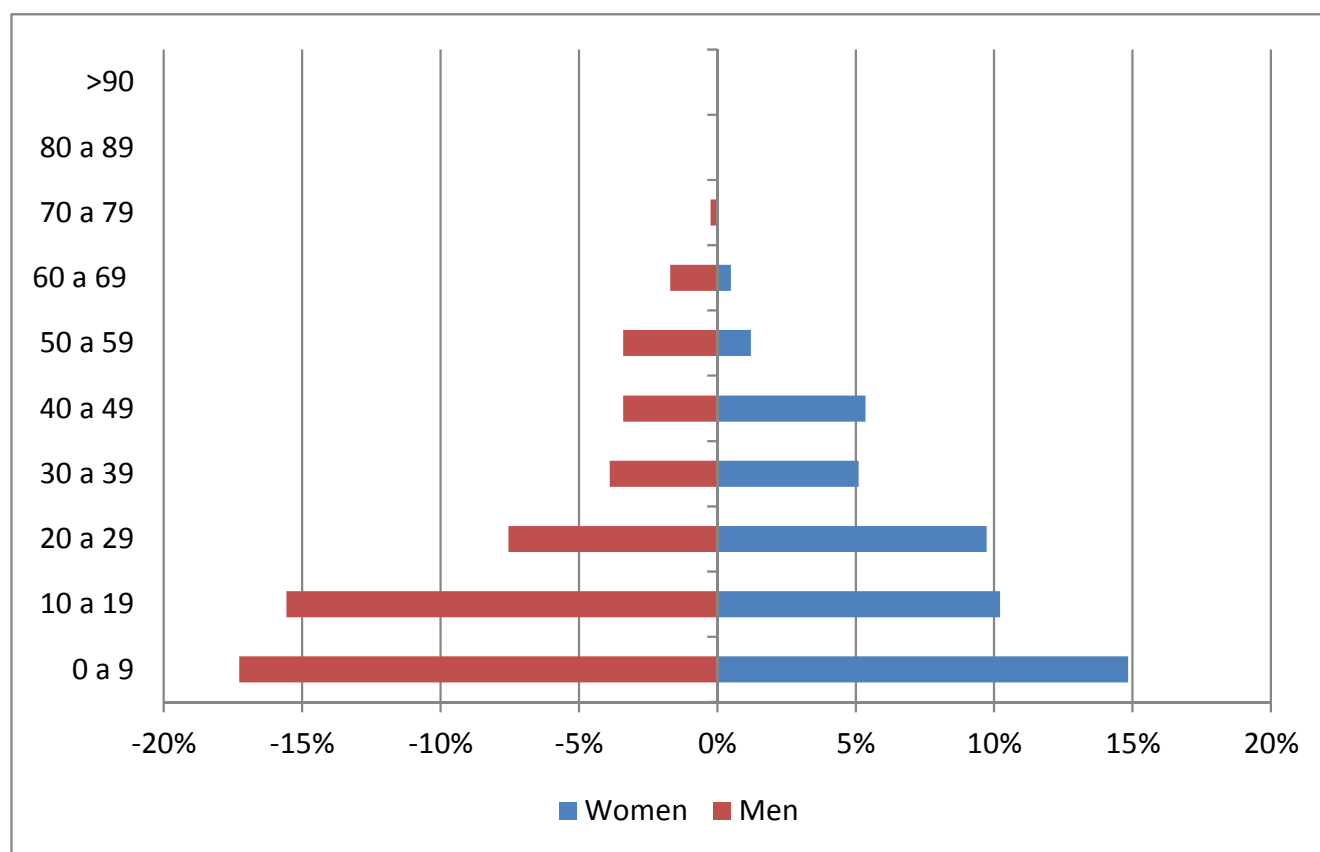
Sources: Author's survey, 2014

**2014. The age
pyramid in the
same migrant
villages of the
centre-west**

**The migrant
age pyramid no
longer shows a
surplus among
the 20-40.**

**We also get a
more balanced
age pyramid**

The migrants' age pyramid (here in the Soubré region) may even get close to the 'autochthons' pyramid with a deficit among the 20-40
A convergence with autochthons



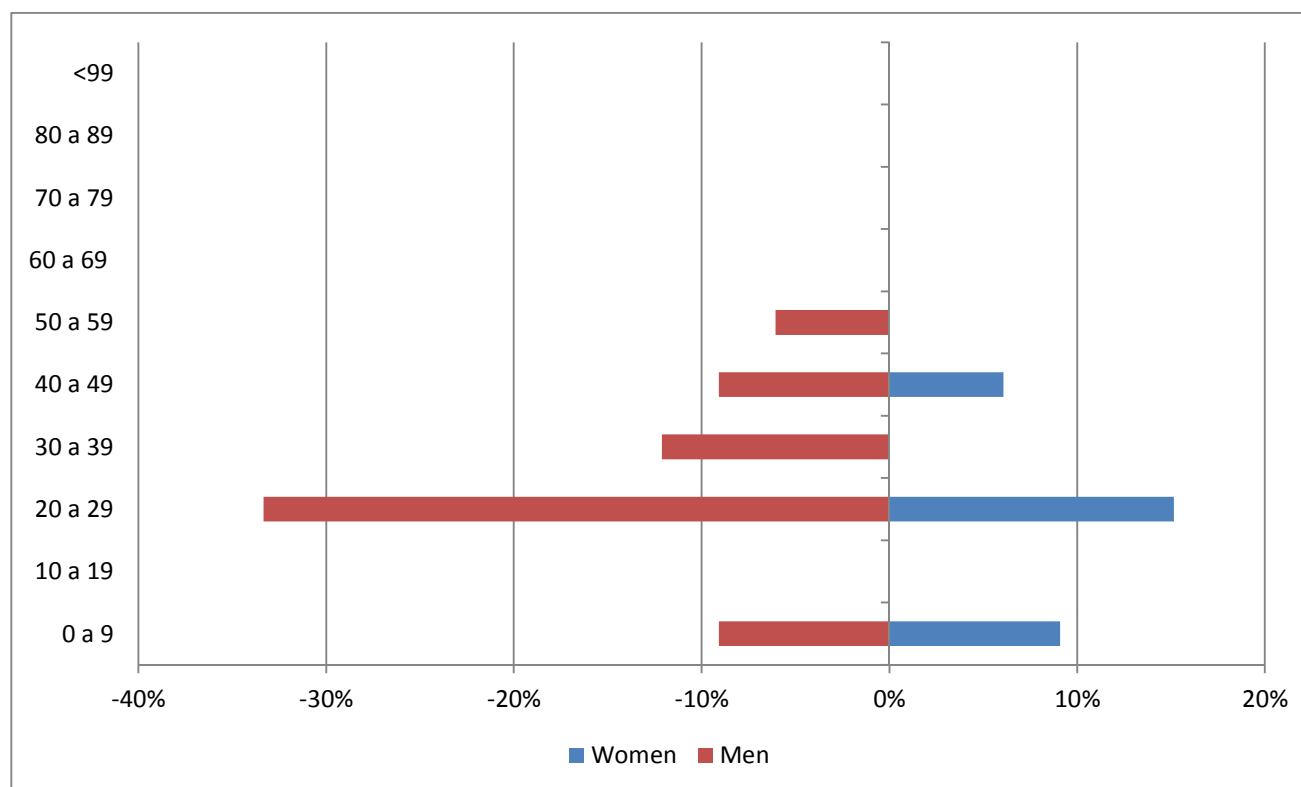
2014. The age pyramid in the migrant villages of the south-west (San Pedro)

Migrants' age pyramid may start being hit by the ageing process, with a shortage of young men between 20-40

If true, the question raised above is coming back. With 'ageing migrants', how Côte d'Ivoire could reach 1,6 million tonnes of cocoa in 2013/14?

With 'ageing farmers', how Côte d'Ivoire could reach 1,6 million tonnes of cocoa in 2013/14? Two to three main answers

1. Repetition of the model : pioneer fronts are still developped by young migrants in remote regions .
2. Bifurcation of the model: in old cocoa villages,
 - Some young autochthons and migrants stay in -- or come back to -- their parents' farms due to a lack of economic alternatives
 - Smallholders keep hiring 'external' labour from their home villages or other poor villages

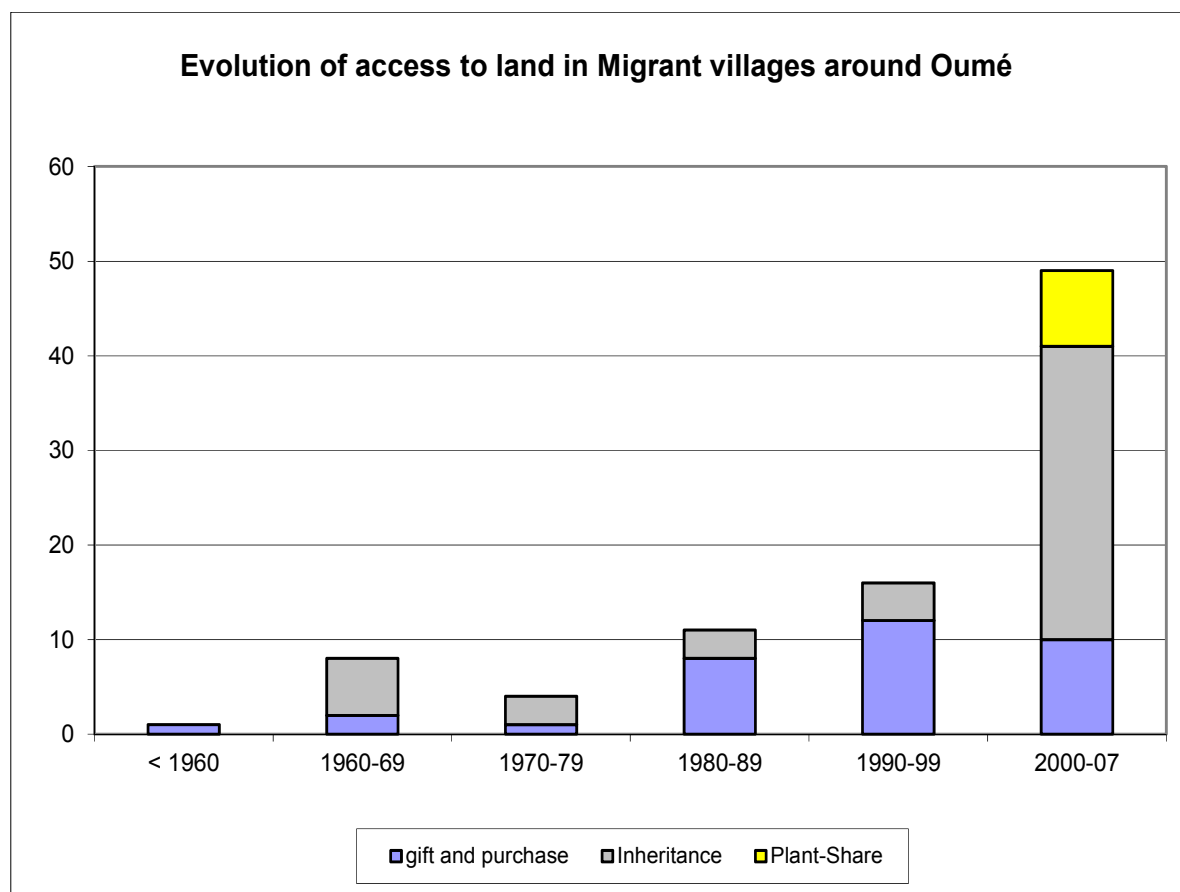


2014. The age pyramid of workers hired by migrant villages of the south-west (San Pedro)

Sources: Author's survey, 2014

2000s. Bifurcation: Change in Generation and Institutionnal innovations

The Plant-and-Share contract



Sources: Colin and Ruf 2009 and 2011

«Travailler/Partager »

«Planter/partager »

....

The Plant-and-Share Contract

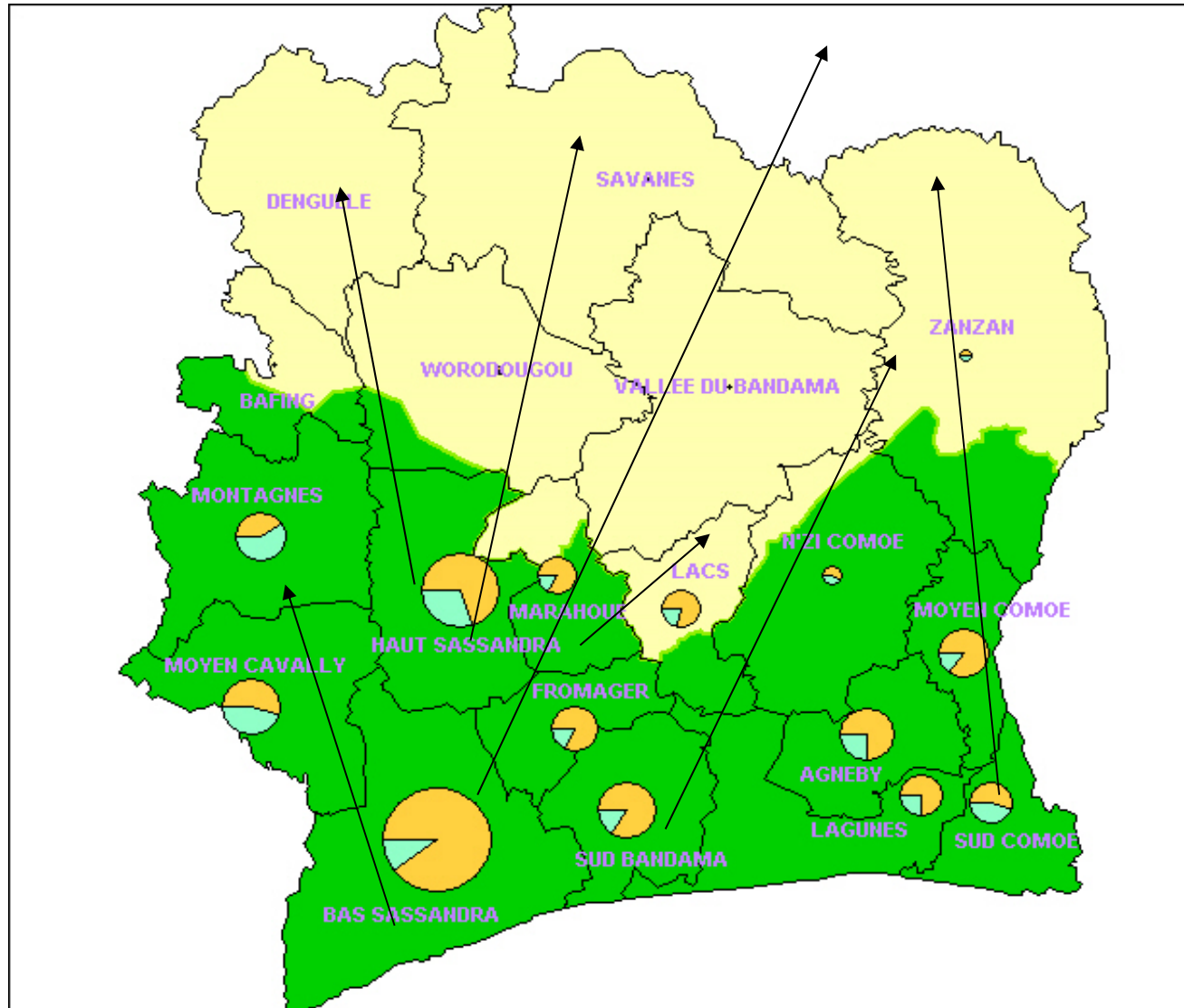
brings together an assignor (usually autochthonous) and a taker (almost always a migrant) for the creation of new cocoa, (also palm or rubber)

The assignor provides the land and the taker provides the capital, labour and expertise needed to establish the perennial plantation. The taker is responsible for maintaining the plantation until it becomes productive; once this happens, they usually share the 'farm' equally.

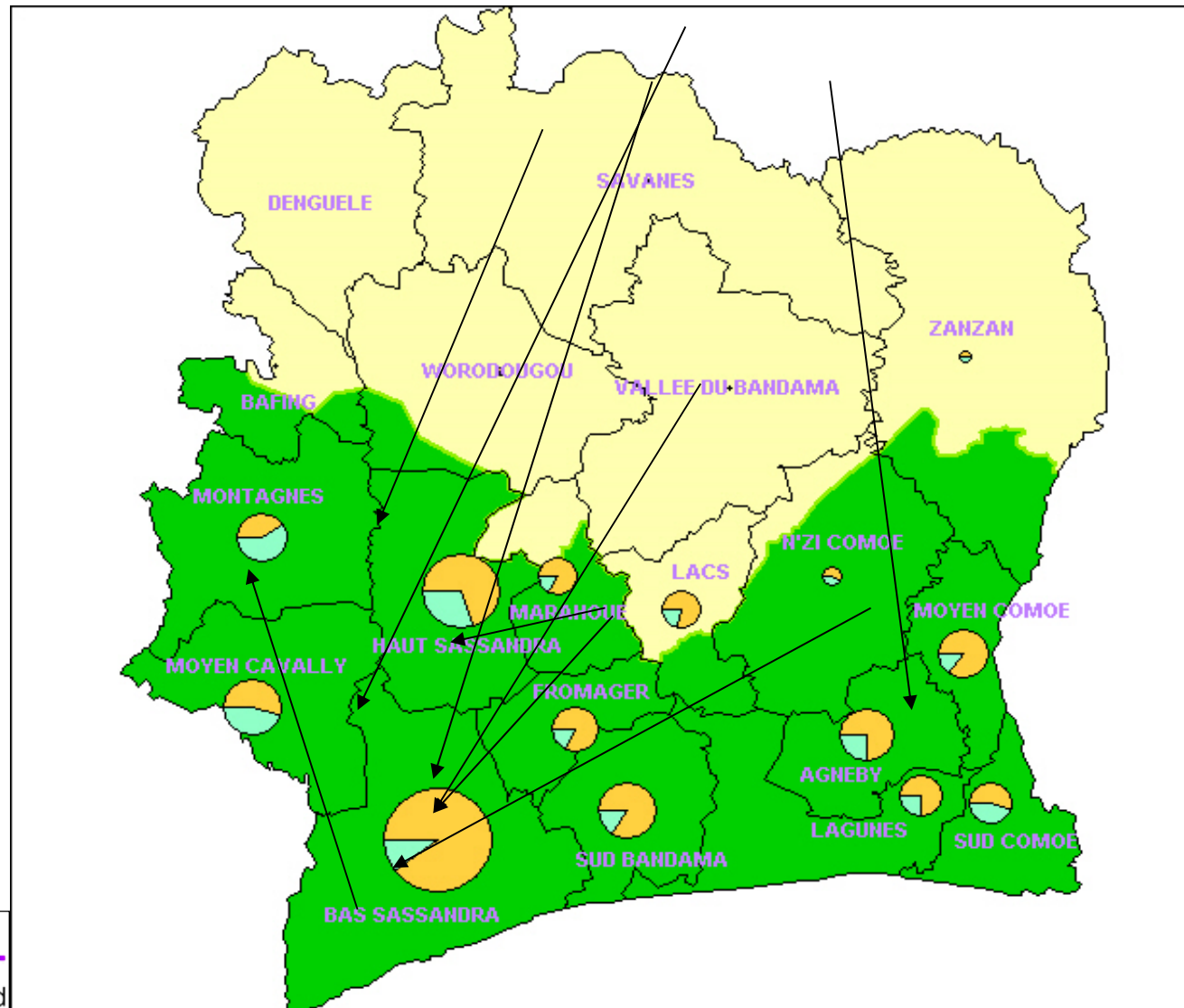
Among other advantages, this social innovation helps young migrants to overcome the shortage of capital and may ease the process of rehabilitation/replanting.

Potential bifurcations of the model.

Strong social and family connections and networks may be maintained by migrants with their home villages



These connections help to maintain the labour migration flows even after the forest has disappeared. The 'Family Plantation Economy' may manage to keep attracting young people





And finally, the main potential bifurcation of the model should be a major **technological breakthrough**

With a price increase, the adoption of 'new' technologies such as **clonal material** and **adapted fertilizer** may attract more young people to cocoa .. in established cocoa countries.