Cocoa farmers ageing …for four centuries
A model and its potential bifurcations

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« 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

Sources: Ruf 1988
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?

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.

Sources: Ruf 1988
1980’s. The ‘migrant farmer’ effect: an investment multiplier itself enhanced by labour migration.

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.

Sources: Ruf 1988
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

Sources: Ruf 2000 updated
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 of 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 pyramid 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’

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

Sources: Author’s survey, 2014
The migrants’ age pyramid (here in the Soubré region) may even get close to the ‘autochtons‘ 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?

Sources: Author’s survey, 2014
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 developed 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

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.

Sources: Colin and Ruf 2009 and 2011
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.