How Fine and Flavour Cocoa can increase farmer Income, Productivity and Profitability

XOCO
GOURMET COCOA
EST. 2007

WCC, April 2018
www.xocogourmet.com
XOCO

- Private company founded 2007 focused on fine cocoa
- Honduras, Nicaragua, Guatemala, Belize
- Selected cocoa varieties for flavour
- Planted 1.25m+ trees with 600 outgrower farmers and on own farms
- Expanding with own high yielding farms
XOCO BEANS FOCUSED ON HIGH END FLAVOUR EXPERIENCE

XOCO
- Grafted for flavour
- Good post harvest processing

Hi End

"Normal" fine cocoa
- Seed planted mix, mostly
- Variable quality of processing

- Less roast
- More consistent
- More flavour

• Harder roast to achieve consistency
• "Blander" flavours
CONSIDERABLE OPPORTUNITY

Percentage specialty market of total market
Value

Sources: Specialty Coffee Association (2012, US); Brewers´Association (2015, US); SFSU; USDA Dairy products 2000, CBS-Global (2010, US); Market Realist 2014 US tea market; Statista (2013), wine selling for more than $15 a bottle). Note that the very high end coffee market is estimated at 7% of total. Specialty or gourmet chocolate market estimated based on consumption of fine beans.
2017 CONSUMERS LOOK FOR PREMIUM CHOCOLATE

Do you look for specialty or normal products? % of consumers responding “specialty”...

<table>
<thead>
<tr>
<th>Product</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chocolate</td>
<td>38%</td>
</tr>
<tr>
<td>Coffee</td>
<td>35%</td>
</tr>
<tr>
<td>Alc. drinks</td>
<td>33%</td>
</tr>
<tr>
<td>Ice cream</td>
<td>32%</td>
</tr>
</tbody>
</table>

AND THEY LOOK FOR FINE INGREDIENTS (BEANS?)…

What defines a “premium product”?...top answers from consumers interviewed…

- 58% Uses finest ingredients
- 44% Stand-out appeal
- 38% Expensive
- 37% Environmental packaging

...BUT MANY OBSTACLES

- Little supply and little consistency of supply makes fine flavour not viable for large companies and mainstream public
- Craft cannot drive the market
- Consumers not educated and very confused
- High costs to produce
...CHICKEN OR EGG DILEMMA

- No consistent supply leads to no “market maker” entering
- No consistent demand and transparent pricing makes it very risky for suppliers (farmers) to enter
COCOA NOT GRAFTED FOR FLAVOUR => TENS OF THOUSANDS OF VARIETIES MIXED

Crops grafted for flavour

...not so in cocoa
MIX OF BEANS MEANS IN-CONSISTENCIES AND LOSS OF QUALITY

• Fermentation and drying protocols are not optimized
• Huge variability from batch to batch
• Chocolate maker has to over-roast to make a consistent chocolate
• When over-roasting less important if chocolate maker uses cheap “bulk” beans or more expensive “fine” beans => fine beans under-valued
• Also, grinding/conch not optimized for one variety and will vary from batch to batch
CRAFT CHOCOLATE VERY SMALL COMPARED TO BULK => NO MARKET POWER

Craft chocolate (app. 500 small companies) vs. Bulk industry USD

CONSUMER CONFUSED: WHICH CHOCOLATE TO BUY?
WHICH ONE?

$3.5

$9
WHICH ONE?

Duffy’s Dark Chocolate
HONDURAS INDIO ROJO
72%
XOCO CRIOLLO BEANS

$10

Cacao Reserve
65%
EXTRA DARK CHOCOLATE
by Hershey’s

$3
WHICH ONE?

$8

$3
“Choosing our chocolate is one way you can honor farmers and support sustainable farming practices. We pay a social premium for our ingredients to ensure that farmers are supported and species are protected. Please take a look at our certifications by clicking on the logos below.”
CHOCOLATE MAKERS NEED TO BE PRODUCTIVE

Cost of manufacturing 100g bar – cocoa beans NOT included
USD

<table>
<thead>
<tr>
<th>Plant Type</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small, artisan plant</td>
<td>$0.50</td>
</tr>
<tr>
<td>Medium sized plant</td>
<td>$0.35</td>
</tr>
<tr>
<td>Large plant</td>
<td>$0.10</td>
</tr>
</tbody>
</table>

Note: Numbers are estimated based on interviews and, for medium and bulk players, ratios from Annual Reports, and are therefore indicative rather than exact. Each chocolate maker will have a unique situation, especially in manufacturing and distribution.
FARMERS ALSO NEED TO INCREASE PRODUCTIVITY AND PROFITABILITY

Price per kilo dry for new project NPV = 0
FOB bean producer price, USD

"Super" hi yielding 500 ha. farm $2.5
Hi yielding 100 ha. coop $6
Avrg. yielding 100 ha. coop $8

Realistic?

Productivity key

Source: Team analysis
Note 1: Super high=1.6/kg. Per tree, 1,300 trees per ha.; hi yielding=1.2 kg/tree, 1000 trees per ha.; avrg. Yielding=0.5 kgs. Per tree, 800 trees per ha.
Note 2: Discount rate: 16.6%. Labor rate USD 9 per day
CONCLUSIONS

Growers should **only enter market if they have high productivity** => small farmers with fine cocoa probably Value Destruction.

Growers should consider **only entering if partnering with market maker** company that can buy the production at fixed prices.

**Don’t get fooled** into this by **NGOs/politicians** with no ”skin in the game”.