Creating Political Stability in Yemen through Importing Yemeni Coffee to the United States: A Country and Market Analysis

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Abstract

Yemen's coffee industry faces general economic and coffee specific challenges that impede its growth. In this paper I apply the economic development models of William Easterly and Paul Collier to show how Planner solutions, a Conflict Trap, a Natural Resource Trap, and a Bad Governance Trap prevent development. I show how a Searcher strategy, aid, military intervention, laws and charters, and trade policy can create growth. Applying my own analysis, I find inadequate marketing and lack of protection of the Mocha name has kept the market for Yemeni coffee small. By combining these general and specific findings, particularly Planner strategies and smart marketing, Yemen's coffee economy can grow creating thousands of jobs, thus encouraging economic development, supporting Yemen's stability, and advancing U.S. strategic interest.

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With Bordeaux, we think a heady French wine. With mocha, we think an espresso and hot chocolate blend, perhaps from Starbucks. Though all is not as it appears. This latter cozy beverage with kick, is a thief. It appropriated the name Mocha in a linguistic legerdemain.

In 15th century Arabia, in what is now Yemen, Sufi monks cultivated a bush that produced seed-bearing red cherries, from which they made a stimulating tea. In a marvelous discovery, the monks learned that the seeds contained in the cherries could be removed and roasted, transforming a bitter, green seed into a caramelized, brown bean. Grinding these beans and adding hot water, the monks created a dark, smokey brew, which invigorated their studies deep into the night.

Knowledge of this heavenly beverage slowly spread, later developing into a brisk trade in Yemeni beans. Buying and shipping from the port of Al Mokha, traders brought coffee first to Egyptians and Turks, and by the 17th century, to Dutch, English, and European peoples. Bearing the name of the port from which the beans departed, the name Mokha was tied to this new beverage, which had dark chocolate undertones.[1]

Today, with various strains of coffee grown worldwide, some coffee continues to exhibit darker flavor profiles similar to this historic beverage, while others exhibit acidic and floral flavors. While the heirloom Yemeni coffees grown today continue to exhibit earthier and darker notes, with less than 1% of global trade—as opposed to 100% 500 years ago—the Mokha name has lost the geographic connection. Though while that was lost, the chocolate connection persists.

This paper is about Yemen and coffee and how to expand Yemen's global trade. Though first, I share an illuminating anecdote.

1 Mark Pendergrast, *Uncommon Grounds: The History of Coffee and How It Transformed Our World* (New York: Basic Books, 2010), 5–16.

Mohammed Hareth, a Yemeni entrepreneur for Aqarmap.com, a real estate startup, lives in Alexandria, Egypt. Wanting a taste of home, a sign in front of a coffee store tempted him. It read, “We have #1 Yemen coffee”. He bought some. Later communicating with me via Skype and Facebook, he described the coffee as, “The taste is [terrible] man...I don't think this is from Yemen but people are crazy about it.” Mr. Hareth returned to the store and told the proprietor that the coffee was not Yemeni. As way of explanation, he noted he was from Yemen and that his family owns a coffee farm. The owner said, “I want to buy coffee from your farm.” And in Mr. Hareth's final words to me, he said, “It's sad how people are fooling others by selling coffee that is not from Yemen.”[2]

With demand for Yemeni coffee outstripping supply, unscrupulous traders have taken advantage of the situation. Importing Ethiopian, Indian, and Brazilian coffee into Yemen, the coffee is mixed with Yemeni beans, repackaged, and sold as 100% Yemeni, where it can sell for a 50% – 100% premium. Mr. Hareth's attestation that the he bought fraudulent Yemeni coffee is well supported, and highlights a key difficulty with conducting business in Yemen. The country lacks institutions, making business operations unreliable and expensive. In this particular example, imported coffee bypasses customs and enters the black market. At the export and sale side, without institutions to authenticate the provenance of Yemeni coffee, dishonest sellers can easily adulterate their stock.

There are many difficulties impeding the expansion of Yemen's coffee trade. Weak political institutions and bad governance are only one of them. In this paper I explore these difficulties, first by applying the development models of William Easterly

2 Mohammad Hareth, “Personal Interview via Facebook Messenger,” October 25, 2011.

and Paul Collier, development economists at New York University and Oxford University, respectively.[3] Using these analytical tools, I show that Yemen contends with unproductive Planner solutions and three poverty traps. These retard all parts of Yemen's economy, *including its coffee industry*. Delving deeper, I show how the coffee industry faces particular additional challenges including poor marketing, a fragmented production chain, and an unprotected yet valuable Mocha name.

The solution to these challenges are varied, but most generally include market efforts that encourage Yemen's growth. Rather than implement policy, solutions should be discovered within the testing ground of the market. This strategy will find those solutions most suited for the political and economic climate. Such solutions might include marketing that leverages Yemen's compelling coffee history. Or marketing that shows that the development of Yemen's coffee sector will have outsides benefits in developing and stabilizing the country and deterring terrorism. The premises of all these efforts are not preconceived solutions but rather lithe, market-oriented discovery of what is most effective. I call this a Searcher strategy.

Throughout this report I use the term Searcher and Planner. I have adopted these terms from William Easterly who, in 2006, coined this dichotomy[4]. He did so in part as a reaction to Jeffrey Sachs, a Columbia University development economist. Sachs, heavily involved with the United Nations (UN) Millennium Development Goals, argues in *The End of Poverty,*[5] that the poorest countries suffered a poverty trap, from which they could not reach the bottom rung of the development ladder. The purpose of aid was lifting those

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3William Easterly, *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*, 1st edition (Penguin Press HC, The, 2006); Paul Collier, *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It*, 1st edition (Oxford University Press, USA, 2007).

4Easterly, *The White Man's Burden*, chap. 1.

5Jeffrey Sachs, *The End of Poverty: Economic Possibilities for Our Time* (London: Penguin, 2005).

nations, through efforts such as public health and infrastructure development, just enough to escape poverty and be on the ladder of prosperity. William Easterly disparaged this model, arguing that poverty's causes were not given to such platitudes. “A Planner believes outsiders know enough to impose solutions. A Searcher believes only insiders have enough knowledge to find solutions, and that most solutions must be homegrown.”[6]

Previous efforts in Yemen have been of the preconceived, Planner variety. The best example of this, falling within the coffee industry, are efforts by the United States Agency for International Development (USAID). In 2005 they published *Moving Yemen Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade.*[7] The scope of my report is the same, though my solutions are drastically different, of the Searcher variety.

The importance of effective development strategies in Yemen are twofold. First, the country is stuck in poverty: per capita GDP rests at $1400, in sharp contrast to the $25,000 of neighboring Oman and Saudi Arabia; 46% of the population lives on less than two dollars per day, purchasing power parity; and 43% of the population suffers from food insecurity.[8] This income disparity and food deprivation is a political and moral challenge that demands solutions. Beyond this argument for assistance to Yemen, the United States has a strategic interest in the region. With the founding of Al-Qaeda in the Arabian Peninsula, the U.S. has spent millions of dollars in aid, to stabilize the region and fight terrorism. Since late 2011, this economic assistance has totaled over $600 million,[9]

6 William Easterly, “Planners versus Searchers in Foreign Aid,” *Asian Development Review*, 2006, 23: 2 edition, 3.

7 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade* (US Agency for International Development, December 2005).

8 “Yemen | WFP | United Nations World Food Programme - Fighting Hunger Worldwide,” accessed December 17, 2013, http://www.wfp.org/countries/yemen/overview.

9 Bureau of Public Affairs Department Of State. The Office of Website Management, “Yemen,” Press Release|Fact Sheet, *U.S. Department of State*, August 28, 2013,

of which about $250 million has gone directly towards fighting terrorism and violent extremism.[10] In 2012, U.S. military activity included hundreds of drone flights and forty-two strikes. The $350 million of non-military aid has been divided, with $221 million supporting humanitarian assistance, $39 million supporting an ongoing political transition, and $100 million supporting economic growth and development.[11] With effective development solutions, the United States can advance its national security while simultaneously alleviating Yemeni poverty. Ineffective solutions puts this in jeopardy.

As an American and keeping with the theme of Searcher solutions, I have sought a way to encourage Yemen's development while also securing American interests. I see an opportunity to accomplish this through importation of Yemeni coffee. Currently, the U.S. imports about five million dollars of Yemeni coffee per year.[12][13] If this domestic demand could increase, Yemen's economy would grow. And not only would the economy benefit, which would provide some stability and bolster the security situation, but coffee in particular could have surgical benefits. Namely, coffee is labor intensive and provides employment opportunities. Yemen, with a 60% young, male unemployment rate following the Arab Spring,[14] desperately needs jobs. The coffee industry, which currently provides income and support for over 650,000 people,[15] could provide thousands, or even

http://www.state.gov/r/pa/ei/bgn/35836.htm.

10 "Inside Yemen's Shadow War Arsenal," accessed December 10, 2013, http://www.foreignpolicy.com/articles/2013/08/07/inside_yemens_shadow_war_arsenal#sthash.SIfxTVbW.l6e6TIHr.dpbs.

11 "U.S. Support for Yemen," accessed December 17, 2013, http://www.state.gov/r/pa/prs/ps/2013/08/212649.htm.

12 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade*, 15.

13 I have been unable to find reliable data on who imports this five million dollars of coffee and where it is being sold. Speaking with coffee exporters, importers, wholesalers, coffee roasters, and coffee shops, it appears that many players deal Yemeni coffee in small quantities. I surmise the U.S. market, like the Yemeni farmers, is highly fragmented.

14 "Innovative Approach for Youth Employment Generation in Yemen | UNDP," accessed December 15, 2013, http://www.undp.org/content/rbas/en/home/presscenter/articles/2013/02/18/government-of-yemen-with-undp-and-government-of-japan-present-on-the-ground-to-support-job-creation-for-youth/.

15 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to*

hundreds of thousands, of new jobs for this unemployed demographic that foments instability.[16]

This goal to expand U.S. demand for Yemeni coffee has a solid foundation in Yemen's coffee production capacity. During the 1950's, Yemen exported about three times as much coffee as today.[17][18] And production between 1996 and 2004—averaging 10,000 to 12,000 tons grown on 28,000 hectors—has been the smallest in recent history[19] This contraction can be reversed with increased demand. USAID, examining this production decline, argues that it is caused by water shortages and an increase in farming of qat[20], a mildly narcotic plant illegal in the western world. In tandem, this is odd reasoning. Although Yemen has water shortages, described later, qat is a water intensive crop. If qat production can expand, there is certainly water for coffee production. In my examination of shrinking production, economic pressures seems to be the main driver. Simply, qat production pays more. This is illustrated by the production explosion, between 1970 and 2008, where 7000 hectors under cultivation soared to 147,000 hectors.[21] A second cause, within coffee, affects farmers. While they receive a relatively high price for coffee compared to elsewhere in the world, they are not remunerated for producing higher quality beans. With friction in the Yemeni supply chain, prices haven't been high enough to encourage reform. I see a nudge from higher demand pushing reform and increasing the competitiveness of coffee versus qat. Undoubtedly capacity

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Sustainably Improve Incomes and Expand Trade, 2.

16 Therese F. Azeng & Thierry U. Yogo, *Youth Unemployment and Political Instability in Selected Developing Countries* (African Development Bank, May 2013).

17 *Republic of Yemen Economic Opportunities Programme* (International Fund for Agricultural Development, Near East and North Africa Division, n.d.).

18 Whether production was three times higher as well is unclear.

19 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade*, 7.

20 Ibid., iii, 7, 21.

21 *Republic of Yemen Economic Opportunities Programme*, 2.

exists, it's just at a higher price.

In this paper I show how Searcher solutions can accomplish Planner goals of foreign investment and job opportunities. Rather than Planners telling Yemen what to do and face low adoption rate and wasted assistance money, I flip the interaction. Instead, I describe the problem, thus allowing the reader to find and pursue possible opportunities.

Before advancing to my argument, I will first introduce coffee and its status in the world market. According to legend, Kaldi, a sixth century goatherd in Ethiopia, first discovered coffee. Late one afternoon as he prepared to return home, he played his pipe to call his goats. None came, so Kaldi went looking for them. Upon coming to a clearing, Kaldi saw his goats dancing about with great energy. Confused, he then noticed them eating both leaves and berries from a squat shrub. Kaldi picked some leaves and chewed on them gingerly. He felt a bit of energy. Biting into some of the red berries he tasted a sweet flesh, and soon felt further energized. Not long thereafter, Kaldi began frisking about as well.

The plant that Kaldi ate from is what is known today as *Coffea Arabica.* It grows at altitudes above 2000 feet, roughly between the Tropic of Capricorn and the Tropic of Cancer. Growing to medium height, it is the size of a large shrub or small tree. The plant bears small cherries that turn red when ripe. Inside are a pair of green, raw seeds.

To transform coffee cherries to a final product, there is a multi-step process. First, berries are hand picked and then dehusked in either a dry or wet process to remove the outer pulp, leaving the seeds free. The seeds are then consolidated and passed along the supply chain to the end consumer. This can involve consolidators, exporters, importers, wholesale sellers, roaster, and then your local coffee shop.

In Yemen specifically, coffee has been grown nearly the same way over the last 500 years. Farmers in western, mountainous regions terrace their property, growing heirloom varieties of coffee, many of which are ancient and uncategorized by geneticists. Farming methods, while not certified organic, are essentially so.[22] Irrigation is generally absent, with the exception of a small minority of well-financed and larger farms.[23]

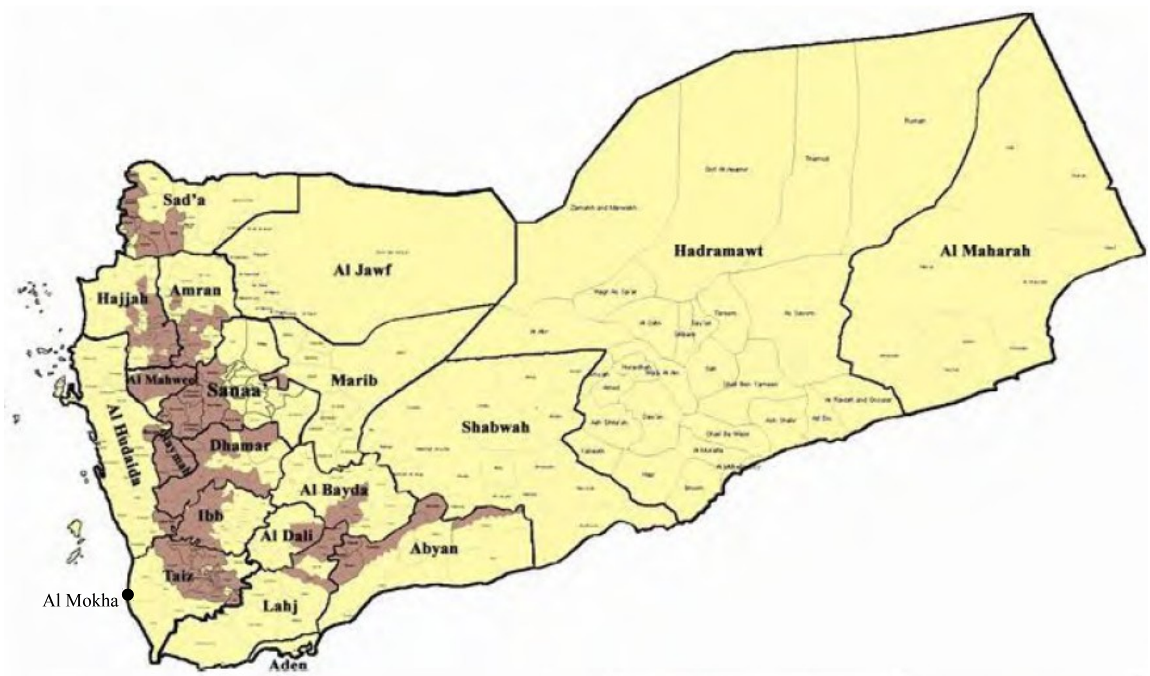

Figure 1: Yemen's Coffee Growing Regions, in brown. *USAID Yemen, Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade* (US Agency for International Development, December 2005), 37.

With established fruit-bearing Arabica plants, the process for most of Yemen's 99,000 farmers, who produce an average of 115 kg of green coffee[24], is as follows. During harvest time, family and seasonal labors pick the crop over a period of weeks. These cherries are then spread on roofs for drying, taking ten to twenty-one days. Once dry and now brown colored, farmers gather and store their crop. Consolidators,

22 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade*, iii – vi, 5.

23 Ibid., 4–5.

24 Ibid., 9.

sometimes using pack mules, pass from farm to farm, buying this product. The consolidators pass the unmilled coffee to middleman who mill and remove the husk. The green beans are then sold to internal distributors or exporters.[25]

This process of transforming a raw commodity to an export-ready product has many steps during which the coffee can degrade in quality. In Yemen, many mistakes are made. Farmers are not always careful about picking only the ripest cherries. Green and orange ones are picked as well. And during the drying process, sometimes the cherries are not turned and aerated, which can result in mold. Beans also deteriorate during storage that is at times overly long or in damp conditions. Once passed on to the mills, poorly sorted coffee and poorly calibrated mill stones result in many broken beans. Finally, the exporter receives the product. Of the original beans, only thirty to fifty percent meet international standards.[26]

More personally, while tasting five Yemeni coffees in Boston, December 8, 2013, I saw and tasted some of these shortcomings. Looking at the coffee, I could see a disproportionate number of flawed beans and poor sorting by size. And tasting the coffee, one of them had slight flavor contamination from the jute sack, which the beans had been stored in. While part of the excitement of Yemeni coffee is this more wild, unpredictable side, this forgiving attitude towards flaws should not encourage their proliferation.

The previously mentioned USAID report describes Yemen's coffee industry, much as I have done. From this backdrop, the report's author, coffee consultant Daniele Giovannucci, draws a range of conclusions. While I believe the analysis of the

25 Ibid., 2–7.

26 USAID, *Expanding Yemen's Specialty Coffee Industry: Strengthening the Role and Capacity of the Yemen Coffee Association and Coffee Producer Associations*, March 2008, 2–3.

shortcomings to be accurate, I strongly disagree with the suggested solutions. With my report examining the same issue, it is natural for me to use this 2005 report as a starting point, to which I will later return.

In *Moving Yemen Coffee Forward,* Giovannucci argues for a range of short, medium, and long term interventions at the farmer and market level. I would categorize these interventions as the Planner variety. An example of this, in the short term, includes a recommendation for the establishment of a coffee board. In 2007 under encouragement of USAID, exporters, middlemen, and farmers created the Yemen Coffee Association. The following year, with the association hardly functioning, USAID cataloged the problems and published a 2008 report. Buried deep within was the insightful comment, “Board members are unsure of benefits that could be derived from an association.”[27] Based on difficulty gaining traction, the irrelevancy of the association was obvious. Namely, coffee players *did not want it.* Yet, rather than focus on this critical piece on which the success of the association rested, USAID had only one sentence on this shortcoming in the sixty-page report. Other recommendations to make the association more relevant ranged from increasing meeting frequency to once per week to creating auxiliary producer associations. With such a Planner mentality, the gulf between external recommendations and internal needs remains yawning. It is no surprise that in 2013 the association continues to limp along.[28]

While I do agree that Yemen's lack of a coffee board indicates the weakness of the coffee sector, rather than intervene and establish one, I believe a coffee board should only be encouraged. Ultimately, the utility is a decision Yemenis must make for themselves.

27 USAID, *Expanding Yemen’s Specialty Coffee Industry: Strengthening the Role and Capacity of the Yemen Coffee Association and Coffee Producer Associations*, 8.
28 Visit their website, http://yemencoffee.org/english/index.html, to see its inaction.

Returning to USAID's enduring question, how to expand the coffee trade, I eschew the Planner model of Sachs and instead, drawing on the work of William Easterly and Paul Collier, apply a hybrid Searcher model.

William Easterly, writing in *The White Man's Burden,* spends nine chapters of eleven detailing the failings of aid efforts. In his final two chapters, he looks to the future and asks how Searcher solutions can be encouraged.

Easterly's first recommendations is “homegrown development,” tailored to a particular country's history, situation, and inclination. Citing examples of Japan, China, East Asian Tigers, India, Turkey, Botswana, and Chile, Easterly shows how these nations developed through indigenous action. Some were democracies, some were not; some had natural resources, some did not; others were colonized and one was landlocked. Despite this range of starting points, all developed, overcoming a variety of challenges. The common thread among them was that “all of them subjected their development searching to a market test, using a combination of domestic and export markets.”[29] In contrast though, none implemented standardized solutions, such as those eagerly pushed by institutions such as the International Monetary Fund (IMF) and World Bank. Structural readjustment, floating currencies, and liberalized trade policies were not part of the dialogue.

This lesson can be applied to Yemen in two ways. First, Yemen does not need to conform to a preconceived, western model. For example, democracy is not necessary for growth to occur. Easterly cites China in this category. Similarly, and proximate to Yemen, are Oman and Saudi Arabia, both governed by benign autocrats. If Yemen is so inclined

29 Easterly, *The White Man's Burden*, 363.

to such authoritarian, this will not necessarily impede growth. Second, with sizable oil revenue that comprises 25% of GDP and 70% of government revenue,[30] this windfall could adversely affects on development. Though again, Easterly has an example of success with mineral wealth, citing Botswana and diamonds. And looking within the region, Oman and Saudi Arabia again are examples of nations that successfully manage oil riches.

A second lesson that can be drawn from Easterly's "homegrown development" recommendation is that any proposed efforts should be held against a market test, which provides feedback and accountability. Applying this lesson to autocratic leaders and oil wealth, we must ask if the average individual benefits from this political system and from this mineral wealth. While the answer is not obvious, there is ample space for debate. Among this ambiguity, we can draw the conclusion that political leadership and oil wealth does not necessarily require reform.

Holding the Yemen Coffee Association up against this market test quickly indicates that perhaps is should be discontinued. As detailed in *Expanding Yemen's Specialty Coffee Association,* board members had difficulty obtaining funding for the organization. This feedback indicates that the association is irrelevant in this particular iteration.[31]

More anecdotally, messaging with Mohammed Hareth in 2011, we discussed my idea of starting a business or NGO that would provide job opportunities in Yemen. He had this to say: "Your idea is great i will tell you why, most of NGOs here training people

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30 CIA, "The World Factbook," *Yemen*, accessed December 11, 2013, https://www.cia.gov/library/publications/the-world-factbook/geos/ym.html.

31 USAID, *Expanding Yemen's Specialty Coffee Industry: Strengthening the Role and Capacity of the Yemen Coffee Association and Coffee Producer Associations*, 9.

and in the end they get a certificate but they can't find a job? [*sic*] people here sick of training they want just jobs?" This is a telling example of a Planner strategy that fails. First, an NGO sees unemployed youth and decides to provide job training. The training occurs, but in the end, there are no available jobs. If the NGO held its operations to a market test, they would either charge for the training, which if they obtained clients would mean Yemen people found the training relevant, or would train people for a job with which they needed help. Instead, the NGOs run on outside funding and miss the mark.

Specific to the coffee industry, USAID had the following Planner story in *Moving Yemen Coffee Forward.* In the Taiz area an NGO observed farmers drying cherries piled several layers deep on their roofs. Under this practice, with more than one layer, cherries dried unevenly and occasionally molded or fermented. The NGO decided to show farmers in the Taiz area mechanical coffee dryers. This seemed a reasonable solution that would allow the farmer to produce a better product. But like so many Planner ideas, this one failed.

Figure 2: Mechanical Coffee Dryer, Taiz, Yemen. USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade* (US Agency for International Development, December 2005), 6.

First, the mechanical dryers, made from wood, cost an exorbitant $1400. As the report notes, "The devices appear simple and it is difficult to comprehend why they cost $1400 each." I surmise the NGO overpaid as they had ample funding but little market feedback.

Once overpaying, the problem did not end there—and arguable it compounded. The farmers did not adopt use of the dryers. The report doesn't explain why, though elsewhere notes that farmers are not paid for the quality of the beans but for their weight. While it is not clear why middlemen pay the same price for all beans, this simple fact encourages farmers to continue their imprecise methods.[32]

A possible explanation for middlemen paying the same price for all dried cherries is the distance they are from exporters, making it difficult to communicate standards. Regardless of whether this is the specific reason or not, Searchers will experiment with various strategies until finding one that works.

Of course neither Yemen nor the U.S. wants to wait and see if Searcher solutions lift the economy. A desire to take concrete steps to actively encourage development is natural. Easterly provides some.

Supplementing local Searchers who experiment and drive development, foreign aid Searchers can do the same. Easterly argues that broad development schemes must be dropped, and targeted, measurable efforts must be the norm. NGOs and institutions, rather than working with kleptocrats and autocrats, must focus on the population and specific steps that serve and measurably reduce a need. This could be vaccines, bed nets or better seeds. Progress and efficacy could be measured through randomized control trials, as described by development economists Abhijit Banerjee and Esther Duflo in *Poor Economics*.[33] These measurable steps directed towards the poor would not make them dependent on foreign aid. Rather, this would simply give access to health, nutrition,

32 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade*, 6.

33 Abhijit V Banerjee and Esther Duflo, *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty* (New York: PublicAffairs, 2012).

and other basic human needs. These steps are not buying development—only internal Searcher efforts can accomplish that—instead, these steps are building a base from which individuals can focus on other pursuits.[34]

Easterly finds his recommendations reasonable only in light of the current system which is unacceptable. He is not proposing a solution—that is a Planner mentality—rather he is a Searcher looking for incremental improvement. But his recommendations are not, *The Way.* Only one way. This incremental improvement argument and counterargument can be seen in what he calls possible "Cream Skimming". Aid agencies, searching for measurable projects that directly benefit the poor, may select only the most promising projects. These same projects may otherwise have been accomplished by the government. With the fungibility of aid, this frees government dollars for other projects, possibly something opposed by the NGO, such as military armament. Or the funds are embezzled. Easterly wisely notes that aid is part of a complex system. This fear of aid dollar leakage is well founded. But if the poor at least benefit during "cream skimming", they can demand change. And with a government with so many other problems, it is unlikely that dollars will flow from one cream project directly to the military or an autocrats purse.[35]

In Yemen, these lessons can be applied in a variety of ways to coffee efforts sponsored by NGOs. To ensure relevancy of coffee associations, mechanical dryers, or any of the various efforts promoted by NGOs, their operations must be subjected to either market forces or to specific, measurably steps. I have previously discussed how the former two efforts, while reasonable, did not meet needs of farmers and thus suffered

34 Easterly, *The White Man's Burden*, chap. 9.
35 Ibid., 371.

from limited to no success. With a Searcher strategy, these projects could be sold in multiple ways, until finding one that ultimately worked. Or with a Planner strategy, if insisted, measurable steps that aided individual farmers could be pursued. In the case of the Yemen Coffee Association, did its existence increase prices paid to farmers for their beans? Did the association provide better coffee varieties that farmers eagerly adopted? In the case of mechanical dryers, did farmers eagerly adopt and use them? If NGOs paid $1400 for the dryers but farmers competed for their use, despite the absurd price, then the NGO would be achieving a useful and measurable outcome.

Applying Easterly's concepts in a broader sense, I propose a market effort—importing and promoting Yemeni coffee in the U.S.—to affect market tested solutions to Yemen's coffee industry. If demand for Yemen's coffee goes up, the farmers, middlemen, and exporters will seek effective ways to streamline operations and expand supply. If mechanical dryers and a coffee association can do this, okay. If better post-harvest milling is more valuable than mechanical dryers, and coffee cooperatives move valuable than a coffee association, even better. The list of reasonable USAID proposals to improve farmer outcomes is long. Rather than pushing all, or an arbitrary selection of some, if a market demands reform, the producers are best positioned to select measures that will have the greatest impact. With this wider coffee industry encouragement, based on a U.S. business importing Yemeni coffee and founded on market principles is persuasive, such a business can seek NGO funding to subsidize operations. An NGO, rather than pay for interventions in Yemen, can instead pay for interventions with a broader outlook. But the NGO can still demand specific outcomes as if they were operating in country. Are the farmers receiving higher prices for their coffee? Are farmers eagerly adopting better post-harvest processes? The list of possible measurable outcomes are many.

Exploring beyond the bounds of development economist William Easterly lies those ideas of Paul Collier. Collier believes in four development traps that can trap a country in poverty, with limited hope of escaping. I will explore these four traps as they pertain to Yemen, and suggest ways they can be overcome. As these traps are of the general sort, they apply to the coffee industry and other industries equally.

Before discussing the traps, I will briefly introduce Collier, a professor of Economics at Oxford University and former director of development research at the World Bank. Collier is a centrist economist with Easterly to his right, and Jeffrey Sachs to his left, within the development debate[36] Collier is well-known for his phrase, “the Bottom Billion”, which he uses to describe the citizens of about sixty of the word's poorest nations. The people of these “developing” countries are trapped in poverty and are not actually developing. This is in contrast to nearly six billion citizens of other developing nations which are actually on the ascendency. Consider a place like China or India, and we can expect them to be better off in thirty years. Take the bottom billion countries collectively, and they were worse off in 2000 than they were in 1970. On this list are countries such as Haiti, Democratic Republic of Congo, Kenya, and Yemen. If we look thirty-years ahead, these nations could improve or they could further decline.[37]

Colliers first trap is the Conflict Trap. Most generally, the poorer the society, the more likely it is to suffer from conflict. And the more frequently conflict occurs, the less likely the economy will grow. Putting a number on this, seventy-three percent of people

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36 Niall Ferguson, “The Least Among Us,” *The New York Times*, July 1, 2007, sec. Books / Sunday Book Review, http://www.nytimes.com/2007/07/01/books/review/Ferguson-t.html; James H. Mittelman, “Review,” *Population and Development Review* 33, no. 4 (December 1, 2007): 821–822.

37 Collier, *The Bottom Billion*, chap. Introduction.

among the world poorest billion have recently been through a civil war or are still in one. Looking beyond a correlation between poverty and conflict, we see that slow growth, stagnation and decline also affect risk of civil war.

> As an approximation, a typical low-income country faces a risk of civil war of about 14 percent in any five-year period. Each percentage point added to the growth rate knocks off a percentage point from this risk. So if a country grows at 3 percent, the risk is cut from 14 percent to 11 percent; if its economy declines at 3 percent, the risk increases to 16 percent.[38]

Once a civil war starts, it last on average six to seven years. And once it is over, the future risk of conflict roughly doubles. On the average, only half of post-conflict countries manage to make it through a decade without relapsing into conflict.[39]

The financial costs of war are development in reverse. This is how conflict can become a trap. The average civil war tends to "reduce growth by 2.3 percent per year, so the typical seven-year war leaves a country around 15 percent poorer than it would have been."[40]

Holding this model up to Yemen, we observe the following. Since Yemen's creation in 1990, the country has suffered from three intra-state conflicts according to Correlates of War (COW) data, current through 2007. Those discrete conflicts began in 1994, 2004 and 2007. Arguably, the 2007 conflict and an additional one that began in 2011 have only been a continuation of the 2004 conflict. Paul Collier used the same data set. For my purposes, COW may revise data, perhaps reclassifying the 2004 and 2007 conflicts as one. Regardless of this adjustment, with Yemen, we can see that Colliers assertion that conflict begets conflict holds true.

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38 Ibid., 20.
39 Ibid., chap. 2.
40 Ibid., 27.

Looking at Yemen's GDP we see annual growth has slowly declined over twenty years. And during the past decade it has hovered around 4%, with an obvious exception during the Arab Spring when growth plummeted to -10% in 2011. Factoring in population growth, GDP growth *per capita* has tracked annual growth, but about 2.5% to 4% lower. During the past decade, this has hovered around 1%.[41] Based on Collier's analysis, had Yemen been free of conflict, these growth rates would have been 2.3% higher. Over the last ten years, this difference would have engender a powerful and different outlook. Rather than observing a nearly imperceptible increase in standard of living, the typical Yemeni would have had reason for optimism, as growth marched forward.

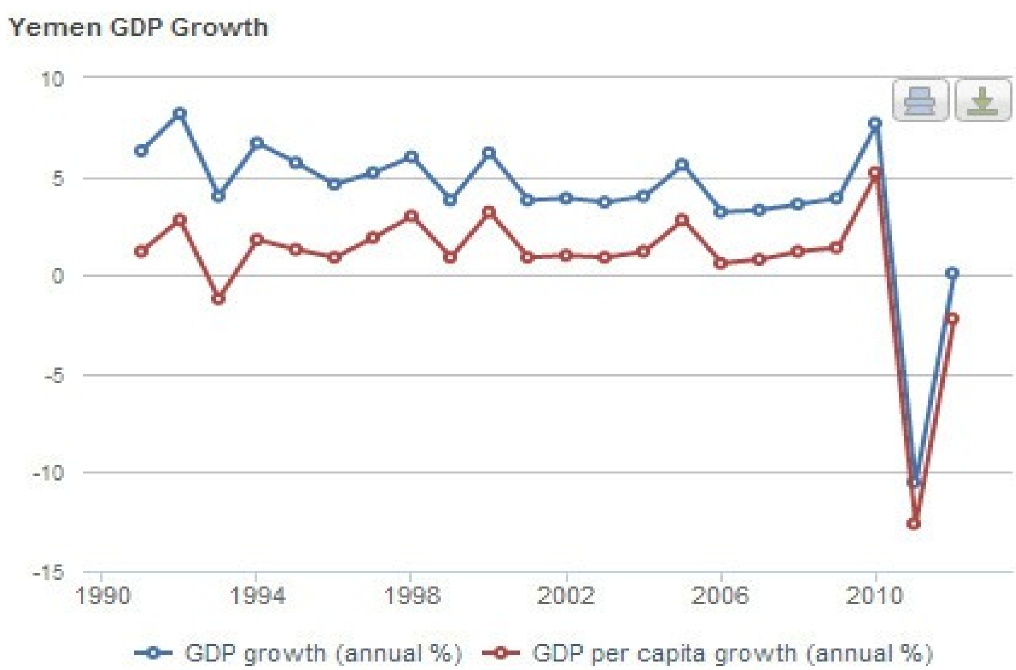

Figure 3: Yemen's GDP Growth and GDP per capita Growth**.** "The World Bank DataBank, accessed December 12, 2013, http://databank.worldbank.org/data/views/reports/chart.aspx#.

Collier's second trap is a Natural Resource Trap. It can occur in a nation with

41 "The World Bank DataBank," accessed December 12, 2013, http://databank.worldbank.org/data/views/reports/chart.aspx#.

natural resources wealth, which paradoxically can impede development despite the windfall. Approximately 29 percent of people in the bottom billion live in countries where this wealth dominates. This includes Yemen, which, as mentioned, derives 30% of GDP and 70% of government funds from oil.[42]

Natural resources create three main problems. The first, Dutch disease occurs when a nation exports its oil, minerals or other natural resource. This causes currency values to rise against foreign currencies, making exports more expensive and less competitive. Take for example a country without resource wealth. To buy foreign goods, something must be exported to earn foreign currency. When a resource is discovered, selling that item abroad can earn foreign currency, discouraging the need for an export industry. And with currency values appreciating, those same exports become more expensive. So while the natural resource provides easy wealth, it also discourages innovation and production for foreign markets.[43] Collier explains it as, "Dutch disease can damage the growth process by crowding out export activities that otherwise have the potential to grow rapidly."[44]

Easterly has argued that natural resources are not necessarily a curse. Botswana was one example. Paul Collier considers this an exception.

A second problem with resource wealth is volatility. As prices of oil and minerals climb and plummet, governments are forced to try adopting to a shifting and unpredictable bottom line. This creates unique budget difficulties, particularly when prices fall.

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42 CIA, "The World Factbook."
43 Collier, *The Bottom Billion*, chap. 3.
44 Ibid., 40.

The third problem is what Collier terms, “survival of the fattest.” In resource rich economies patronage politics trumps honest politics. Essentially, in a functioning political system, politicians strive to win votes through provision of public services. In countries where politicians can embezzle public funds, buying votes is frequently easier. The connection between resource rents and corruption is complex. For my purposes, I will highlight one major factor. With resource revenue, taxes are lower and the public is less likely to scrutinize how government funds are being spent. Without this accountability, checks and balances are gradually eroded. This paves the way towards corruption.[45]

In Yemen, petroleum products account for about 90% of total exports.[46] With this causing the Dutch disease, we can expect that coffee exports are more expensive than they otherwise would be. And based on price volatility of petroleum and patronage politics, government institutions are weaker, which would have a range of affects on coffee. Most notable, the previously mentioned illegal importation of Ethiopian, Indian and Brazilian coffee that are used to adulterate Yemeni coffee.[47] With better institutions, this practice could be reduced.

Another challenge in Yemen, thus far unmentioned, is a water crisis, particularly acute in the capital. Within the next ten years, scientists predict that Sana'a could become the first capital in the world to run out of water.[48] Better institutions could alleviate this problem, which has a direct affect on agriculture, in which 50% of crops are irrigated and

45 Ibid., chap. 3.

46 “The Observatory of Economic Complexity :: Yemen Exports, Imports and Trade Partners,” accessed December 13, 2013, http://atlas.media.mit.edu/country/yem/.

47 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade*, 13; USAID, *Expanding Yemen's Specialty Coffee Industry: Strengthening the Role and Capacity of the Yemen Coffee Association and Coffee Producer Associations*, 41.

48 Azmat Khan, “You Aren’t Hearing About Yemen’s Biggest Problems – Al Qaeda In Yemen,” *FRONTLINE*, accessed December 13, 2013, http://www.pbs.org/wgbh/pages/frontline/foreign-affairs-defense/al-qaeda-in-yemen/you-arent-hearing-about-yemens-biggest-problems/.

account for 90% of water usage.[49] Within coffee, irrigation is largely absent, likely in part due to coffee farmers having small landholdings. As noted previously, only well-funded farms have irrigation. Though small farms could benefit from drip irrigation, especially if there is increased demand for coffee. Under the current political system, water woes are likely to only worsen.

Finally, placing Yemen's recent political history next to Colliers “survival of the fattest” model, we do see one slight divergence. From 1990 to 2012, President Abdullah Saleh governed Yemen and faced limited electoral competition. So while corruption existed, the lack of competition generally obviated patronage politics.

Colliers third trap is Landlocked with Bad Neighbors.[50] This trap does not affect Yemen, which has the ports of Aden, Al Hudaydah, and Al Mukalla, and sits on the Bal el Mandeb strait, which links the Gulf of Aden and the Red Sea, one of the busiest shipping lanes in the world.[51]

Colliers fourth and final trap is Bad Governance in a Small Country. I will only briefly describe it, as Yemen is not considered badly governed per Collier's criteria. Nevertheless, Colliers recommendations can likely be applied to Yemen with good effect. Though this is an area for additional research. To measure bad governance Collier has twenty governance and policy criteria on which he measures a state. Based on this model, countries such as Angola, Central African Republic and Sudan are considered failing. The Democratic Republic of Congo is on the borderline.[52] Within these failed states, Collier looked to see what made a turnaround more likely. He found three characteristics:

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49 *Republic of Yemen Economic Opportunities Programme*, 2.
50 Collier, *The Bottom Billion*, chap. 4.
51 CIA, “The World Factbook.”
52 Collier, *The Bottom Billion*, 67–69.

> Starting from being a failing state, a country was more likely to achieve a sustained turnaround the larger its population, the greater the proportion of its population that had secondary education, and—perhaps more surprisingly—if it had recently emerged from civil war. Among the many characteristics that did not seem to matter one way or the other were democracy and political rights.[53]

If we apply this lesson to Yemen, the one factor we can more easily affect is the proportion of the population with a secondary education. In 2008, Yemen's secondary Gross Enrollment rate was 38.3%, which is low by international standards.[54] In my solution section I will discuss a clever method for improving this rate, beyond Planner education initiatives.

In the preceding pages I have described and applied Easterly's findings and Collier's four traps to Yemen, to better understand the countries development difficulties. In some cases, I have applied their model directly to the coffee sector. I will now move beyond general ailments that affect all parts of Yemen's economy, *including* the coffee industry; I will now describe ailments *specific* to the coffee industry. In the following pages you may feel I am prescribing Planner solutions, though I will note that I am simply raising possible solutions. Searchers can be persuaded by my reasoning or not. From my perspective, as an individual looking to import Yemeni coffee, I find all the following worthy of pursuit. On the export, Yemen side, these same solutions may too be reasonably pursued.

In *Moving Yemen Coffee Forward*, Daniele Giovannucci, suggests a range of interventions. His summary chart is below. I encourage farmers, importers and exporters alike to consider these measures. I similarly have recommendations. Though rather than tell, I will show how these could be valuable.

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53 Ibid., 70–71.

54 The World Bank, *Secondary Education Development and Girls Access Project.*, February 9, 2008, 2.

FARMER LEVEL		MARKET LEVEL
• Post-harvest technology and infrastructure	SHORT TERM	• Establish Coffee Board • Sectoral "Business Meeting"
• Water infrastructure and management • Cultivation technology.	MEDIUM TERM	• Grading & Characterization
• Nurseries improved and private • Improve varietals	LONG TERM	• Establish DOC • Local Institutions

Figure 4: USAID Planner Recommendations for Yemen's Coffee Industry. USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade* (US Agency for International Development, December 2005), 24.

Possible Searcher Solutions

The most basic failure and also opportunity to sell Yemeni coffee is through better marketing. Currently, the Mocha name is unprotected and unconnected to Yemen. Yet virtually every consumer knows the term. It is on Starbucks menus across the United States; it is found on Folgers, Maxwell House, Dunkin, and Green Mountain coffee bags in supermarkets; it is the name of the Museum of Children's Art (MOCHA) in Oakland, California; and it is part of the name Livemocha, the world's largest online language learning platform with 16 million members.[55] In speaking with individuals, coffee lovers, and coffee roasters, it is only the rarefied connoisseur who connects the Mocha name to Yemen. With branding, Yemeni Mocha could become the next $50/pound coffee like Jamaica Blue Mountain or Kona Coffee. Or Yemeni Mocha could shift perceptions, such that consumers demanded Yemeni coffee in their mocha beverages at over 16,000 Starbucks counters in 60 countries around the world.[56]

Another market segment, likely easier to enter, is that for Mocha-Java coffee

55 "Livemocha - About Us," accessed December 13, 2013, http://livemocha.com/pages/about-us/.
56 "Starbucks Corporation News - The New York Times," accessed December 13, 2013, http://topics.nytimes.com/top/news/business/companies/starbucks_corporation/.

blends. This blended coffee, as the names indicates, combines coffee from Yemen and coffee from Java. As the world's oldest blend, it began in the years after 1699 when the Dutch started cultivating coffee in Java. During the 1700's these two regional coffees were the most sought after and famous, and were sometimes combined, creating an earthy and fruity coffee.[57] In recent years, cheaper Ethiopian Harar coffee, which tastes similar to Mocha, has been substituted. In this market opportunity, the change is simply putting mocha coffee into the mocha half of the blend.

I surmise that this second opportunity may be easier, as the task is a matter of replacing one regional coffee—Ethiopian—with the correct Mocha coffee. In contrast, the first opportunity requires redefining a word for consumers, namely reclaiming the definition of Mocha from a coffee and chocolate blend, to a regional, Yemeni coffee.

As I have alluded to, either strategy could be accomplished by educating consumers and having them demand Yemeni coffee for Mocha. This effort could start today. Though this is not the only strategy. A perhaps obvious solution is legislation and establishing the Mocha name as a domain of origin. This would be akin to a Napa wine coming from Napa, California or a Kona coffee coming from the Kona District of Hawaii. The obvious difference, however, is Mocha has taken on additional linguistic meaning. A better comparison, perhaps, would be to Champagne. Within the European Union, Champagne must come from the Champagne region of France, and meet appellation rules. Abroad, though, rules vary by country depending on trade treaties. Within the United States, most winemakers use the term sparkling wine to describe this new-world bubbly. Though some wineries have an exception if they used the term on their labels prior to 2006. In these wine cases, the winery can label their product by state,

57 Pendergrast, *Uncommon Grounds*, 7.

such as California Champagne, under a semi-generic designation.[58]

The protection of such nomenclature does not come easily. The Comité Champagne is a trade association established in 1941, with the support of the French government, as a semi-autonomous public body. Today, the Comité has 16 bureaus worldwide to protect their name and promote their agenda, "Champagne only comes from Champagne, France."[59]

With this brief example, it is easy to see the difficulty Yemen would face trademarking and protecting a Mocha name. Unlike France, Yemen lacks political clout, expertise, grower associations, trade associations, and money. Such challenges are reflected in their difficulty preserving the authenticity of coffee even within their own borders. Nevertheless, Yemen could attempt to trademark Mocha, not so much for the end result, but for publicity, which could help them put Yemeni Mocha back on the global stage.

Up to now I have examined challenges facing Yemen's coffee industry, and for some of those challenges, targeted solutions. I will now step back and discuss broad solutions that address a range of those problems.

Paul Collier, in part 4 of *The Bottom Billion,* discusses four impressive instruments to fight poverty. I mention them below. Though as the affects on the coffee industry *specifically,* are limited, I keep this section brief. For example, while Collier argues military intervention can help stabilize a country, arguing military intervention

58 "26 USC § 5388 - Designation of Wines | Title 26 - Internal Revenue Code | U.S. Code | LII / Legal Information Institute," accessed December 14, 2013, http://www.law.cornell.edu/uscode/text/26/5388.

59 "Champagne Bureau Champagne around the World China Russia United-States Brazil Europe Asia Australia," accessed December 14, 2013, http://www.champagne.fr/en/comite-champagne/bureaus/bureaus.

solely to help coffee farmers attain fair prices is absurd. Second, I am brief as a nuanced application of these instruments requires expertise in economics, which I lack. While the tools here would assist Yemen's coffee industry, this is nevertheless an area for further research.

The first instrument is simple aid. Using statistical analysis, Collier shows when aid hurts and when it helps. In countries prone to coup, aid dollars make it more likely. In countries early in the reform process, aid is counterproductive and slows momentum. In post-conflict countries, however, it provides stability and reduces the incidence of relapse. In poorly governed countries aid can provide incentives and develop human capital. In applying these findings to the political situation in Yemen, we see that aid can have targeted benefits.[60]

The second instrument is military intervention, which can help restore order, maintain post-conflict peace and protect against coups. Collier cites a range of examples, including British military intervention in Sierra Leon in 2000. In this instance, the Sierra Leonean government and population asked for the intervention. British troops arrived, ousted the Revolutionary United Front, and imposed peace.[61]

The third instrument is laws and charters, which can be promulgated by any institution from the United Nations (U.N.) down to a trade association. This step creates and promote norms, and in some instances, enshrine them in law. An example of this is the U.N. Declaration of Human Rights. The power of these charters is not so much forcing states to comply as it is to give a country's population something concrete to organize around and to demand. And if a country refuses to adopt a charter, the

60 Collier, *The Bottom Billion*, 99–123.
61 Ibid., 124–134.

government leaders still must answer, "Why not?"

The fourth and final instrument is trade policy and using it to support the development of the bottom billion. Collier cites a range of adjustments, from tariff policies to export diversification. For tariffs, he shows how the typical, regional free-trade areas in Africa—on average every African nation is in four—harms bottom billion development. For example, low regional tariffs among developing nations and high external tariffs against developed nations create *divergence.* This occurs as skill-intensive goods are excluded, so the most skilled and richest of the poor countries in the trade area benefit. And the poorest remain poor. Applying Colliers trade insights to coffee in Yemen could have impressive outcomes. With my lack of expertise in economics though, this is a particularly important area for further research. Regarding labor-intensive manufacturing, bottom billion nations require preferential treatment. China, for example, has developed manufacturing, such that Africa is at a competitive disadvantage, that is unlikely to be overcome until China moves from a manufacturing economy to a service economy. Again, an insight such as this could be used to develop trade policies that would assist Yemen.[62]

A final trade policy, directly applicable to Yemeni coffee and previously unmentioned, is Fairtrade. In brief, Fairtrade is a certification that promotes sustainability and fair wages for producers. Collier argues against this measure as it amounts to what is essentially a charity transfer encouraging what has locked producers into poverty.[63] While I don't take such an extreme view, I do question the merits of the program.

More persuasive and a reason against unnecessarily pushing Fairtrade in Yemen,

62 Ibid., 157–172.
63 Ibid., 163.

is the requirement that producers must be democratically organized in cooperatives. This is a reasonable measure, though encouraging it smells of a Planner intervention. Previously, cooperatives have existed, but mostly in name only. As Giovannucci observed,

> Coffee farmer cooperatives exist in many of the governorates, but their functions and viability appear to be quite limited. All of those contacted or researched appear to have been formed in order to manage some government or donor contributions...[there is] lack of evidence that these organizations are coalescing of their own volition to provide for the common needs of their farmer constituent.[64]

To measure the utility of cooperatives for Yemeni farmers, such initiatives should be aligned with the Searcher principle of Easterly. If not, they will likely continue to fail.

Now that we have observed Yemen's coffee industry from afar, scrutinized it up-close, and examined a range of interventions, I want to combine these insights into specific, actionable steps. And I want these steps more effective than the sum of their parts. I call these clever solutions.

As a base, I want to return to William Easterly's concept of homegrown development. It has two parts: (1) tailored to a country's history and situation, and (2) held against a market test to provide feedback and accountability. These factors are the foundation of Searcher solutions and the key difference between my coffee proposal and the proposal of USAID.

Within this framework, I encourage market efforts so Yemen selects the most valuable and appropriate strategies. In Figure 4, some of the possibilities are seen. But the Yemeni coffee market can also be improved as Collier's traps are tackled. This is where

64 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade*, 18.

the coffee industry can be part of clever efforts that have outsized effects. Growing the economy fights all four of Collier's traps. But that is not all.

The conflict trap is exacerbated by men who are young, uneducated, without dependents and unemployed.[65] In Yemen today, 60% of young males are without jobs[66], having a massive destabilizing effect. This is the opportunity and coup for *labor intensive* coffee production. With 99,056 farm households engaged in coffee production, and an average rural family size of 6.5, that is nearly 650,000 people directly impacted by coffee.[67] With industry growth, this number would climb upwards, providing thousands of job opportunities for low-skilled men. In addition to farm-level jobs, there would also be an increase in demand for seasonal labor, middlemen, processors, and exporters.[68] This expansion in job opportunities would stabilize the country and reduce the probability of conflict relapse.

A second clever opportunity is encouraging coffee players to organize around marketing, branding, and reclaiming the Mocha name. While the chance that various parties join such an effort depends on whether Searchers favor it, the opportunity seems evident. By demonstrating a market for Yemeni coffee, this effort could find traction. And then there's the secondary benefit, beyond economic growth. Such an organization could transform and shift efforts towards advocating for more favorable trade policies, possible international certifications, charters, or any other valuable efforts that have outsized impacts on Yemen's economic growth.

65 Collier, *The Bottom Billion*, 30; Therese F. Azeng & Thierry U. Yogo, *Youth Unemployment and Political Instability in Selected Developing Countries*, sec. Abstract.

66 “Innovative Approach for Youth Employment Generation in Yemen | UNDP.”

67 USAID Yemen, *Moving Yemen Coffee Forward: Assessment of the Coffee Industry in Yemen to Sustainably Improve Incomes and Expand Trade*, 2.

68 A 2002 U.N. Food and Agricultural Organization survey reported that were 250 to 300 middlemen, so job creation there would be minimal. For other positions, I could not find employment data among any of the USAID or Yemen Ministry reports. This is an area for further research.

As I have shown, Yemen has an established coffee industry with capacity to expand. By focusing on hybrid Searcher solutions in the mold of William Easterly and Paul Collier, rather than Planner solutions like those proposed by USAID, the sector can place money and effort where most effective.

There still remains many areas for further study. This includes: To what degree will expansion of the coffee industry create jobs for otherwise unemployed males? How many jobs will be created? How can lessons from Collier's Bad Governance Trap be applied to Yemen? How can Colliers four instruments be tailored to Yemen's situation, particularly the fourth instrument, better trade policy.

The answers to these questions will allow for more nuanced and clever solutions to fighting poverty and advancing U.S. strategic interest in Yemen. The paradigm is Searcher but the strategy can be tweaked to accomplish multiple goals with singular efforts.

Finally, I leave you with this thought: development aid will never create growth. For that, a country needs homegrown solutions.

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Banerjee, Abhijit V, and Esther Duflo. 2012. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: Public Affairs. A persuasive argument for double blind randomized control trials—like those conducted for testing new pharmaceuticals—in the field of development. For example, MIT's Abhijit and Duflo argue that bed nets have an overall positive effect, despite leakage to unintended uses. This is an argument that Sachs and Easterly fall on either side. While these MIT economists advance the field, they still do not respond to Easterly (and Colliers) assertion that efforts such as these may, in a greater sense, undermine governmental institutions. To learn more, be advised that Banerjee and Duflo teach a course centered on their book at MIT; and this course is available for free through Edx, a free, online, university level learning platform. I took this course in Spring 2013.

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