

# ACCOUNTING FOR CHOCOLATE IN THE DOMINICAN REPUBLIC: *A Case Study in Volunteer Working Tourism*

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## Abstract

This paper focuses on the Chocal Cooperative in the Dominican Republic. The cooperative is of interest because paying visitors to the facility act as "volunteer working tourists." Specifically, tourists participate in activities that add value to the process of transforming cocoa beans into the products ultimately sold to customers. This raises the question of how to properly account for the visitor fees: are they revenue or a reduction of direct labor cost? The case study includes a discussion of how US Generally Accepted Accounting Principles and International Financial Reporting Standards (IFRS) might apply.

**Keywords:** revenue recognition, volunteer working tourism, working tourist, GAAP, IFRS.

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## Introduction

Uriely and Reichel first coined the term *working tourist* in referring to "tourists who engage in situations that combine work with tourism" (2000, p. 268). They defined three distinct groups: 1) *Professionals as Working Tourists* include those whose travel is motivated by work, but who may dedicate free time to tourist activities; 2) *Long-Term Budget Working Tourists* include those who engage in specific jobs primarily as a means to travel or to finance their tourist activities.; and 3) *Working Holidays*, a form of tourism where tourists engage in work (typically unskilled and manual labor) as a part of their vacation and tourism experience. Unlike the first two categories, those on working holidays view the work as an integral part of their vacation experience. The working holiday category can be further divided into *volunteer tourism* (or *Voluntourism*)<sup>1</sup> (Wearing, 2001) and *volunteer working tourist* (Brennan, 2018).

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<sup>1</sup> The terms "Volunteer tourism" and "Voluntourism" are used interchangeably in this paper.

Voluntourism is a specific kind of working holiday in which the tourists provides unpaid work on behalf of others in local communities as part of their travel (Sin, 2009).

More formally, Wearing states that the term volunteer tourism “applies to those tourists who, for various reasons, volunteer in an organized way to undertake holidays that might involve aiding or alleviating the material poverty of some groups in society, the restoration of certain environments, or research into aspects of society or environment” (Wearing, 2001, p.1). Tourists who engage in Voluntourism do so to support causes, personal beliefs or interests (Brennan, 2018). Volunteer tourism often focuses on humanitarian and environmental projects that serve communities in need and the projects are often hosted or operated by not-for-profit organizations. Voluntourism activities can include, but are not limited to: community welfare projects, teaching, environmental and conservation projects, providing medical aid, and business development (Callahan & Thomas, 2005).

Similar to volunteer tourism, providing free labor is an integral part of the travel experience for the volunteer working tourist. But in contrast, volunteer working tourists provide labor to a host. Operators may provide volunteer working tourists with lodging or food in exchange for their labor, or as in this case study, the operator may charge a fee. Thus, in the latter case, the host receives a form of income from the tourists while also benefiting from the free labor. In return, the volunteer working tourists receive some perceived adventure or experience (Brennan, 2018). Tourists providing labor in this capacity are not employees and are not protected by employment law. As Brennan (2018) notes, “These volunteers work in established companies without a formal work contract or agreement.” Tourists engage in this type of tourism to immerse themselves in local culture, to have an authentic experience, and/or to get a behind-the-scenes peek of the inner workings of a local industry or operation (Brennan, 2018).

Various forms of volunteer working tourism exist from dude ranches (famously depicted in the 1991 movie ‘City Slickers’) to farms. They are most often found in agriculture and rural areas. Volunteer working tourists’ activities can consist of short-day excursions or longer multi-day experiences. Most involve unskilled manual labor. Much of the literature on volunteer working tourism has focused on the host-guest relationship (Uriely & Reichel, 2000), host operations (McIntosh & Campbell, 2001; Pearce, 1990), and working conditions (Brennan, 2018).

The present article focuses on the accounting aspect of volunteer working tourism using the Chocal Cooperative in the Dominican Republic as a case study. Understandably, past labor research has focused on legal, formal employees. This article, however, focuses on volunteers who provide labor to entities after paying a fee. At Chocal, volunteer labor ultimately lowers the cost of manufacturing a product to be sold later by the enterprise to generate sales revenue. We raise the question of how to properly account for these fees.

Background information about the country and industry is provided followed by a review of the volunteer working tourism program at Chocal. We then illustrate the impact of two alternative methods for accounting for the fees collected from working tourists.

### **The Dominican Republic – An Overview**

The Dominican Republic (“DR”) shares the island of Hispaniola with Haiti in the Caribbean. It is the second largest nation in the Caribbean with an area exceeding 18,000 square miles, and is the home for over 11 million residents (*The Top Cocoa Producing Countries In The World*, 2022). Gross domestic product (GDP) is estimated to be approximately US\$ 217 billion for 2022 (*Dominican Republic/GDP/2022/Economic Data*, n.d.).

Approximately three-fifths of the Dominican population lives below the poverty level. This includes most farmers and landless agricultural workers. Farmers often supplement their income by selling handcrafts (*Dominican Republic|History, People, Map, Flag, Population, Capital, & Facts/Britannica*, 2023). High unemployment and income inequality are significant challenges for the nation (“Dominican Republic,” 2023).

The DR is the most-visited cocoa-producing<sup>2</sup> nation in the world with over 6 million North American and European tourists per year (*Dominican Republic/República Dominicana*, n.d.). In addition to tourism, major industries in the DR include gold mining and the manufacturing of medical instruments, representing 16% and 14% of its exports respectively. Some of its other agricultural exports are sugar cane, bananas, and rolled tobacco. Agricultural land is the DR’s most important economic resource. One-third of the land is used for permanent cultivation (“Dominican Republic,” 2023); (*Dominican Republic/History, People, Map, Flag, Population, Capital, & Facts/Britannica*, 2023); (*Dominican Republic Tourism Official Website*, 2023).

The United States is the destination for approximately US\$57.7 million of Dominican cocoa. Other countries importing cocoa from the DR include Netherlands (US\$35.8 million), Belgium (US\$21.8 million), and Italy (US\$15.4 million). The DR’s fastest growing cocoa export markets are Italy, Spain, and Indonesia (*Cocoa Beans in Dominican Republic/OEC*, n.d.).

### **Cocoa Production in the Dominican Republic**

The DR is widely known as a trustworthy source of sustainably grown, fine cocoa (*Dominican Republic/República Dominicana*, n.d.). It is a major global producer and exporter of organic cocoa, the plant used to make chocolate, along with various

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<sup>2</sup> The word ‘cocoa’ is the English translation of the Spanish word ‘cacao.’ Throughout this paper, the word ‘cocoa’ is used for consistency and ease of reading.

chocolate products. Approximately 150,000 hectares<sup>3</sup> of land in the DR are planted with cocoa trees (*The Top Cocoa Producing Countries In The World*, 2022). In 2021, its cocoa exports reached US\$203.9 million, representing 70.8 metric tons (*Dominican Republic Cocoa Bean Market Overview 2023*, n.d.). Further, the DR was ranked as the world's eighth largest exporter of cocoa beans in 2020 (*Cocoa Beans in Dominican Republic/OEC*, n.d.). In that same year, it exported 60% of the world's organic cocoa (*The cocoa, a key crop that keeps the Dominican Republic as one of the leading countries in the export of organic products in the world.*, n.d.). Among the DR's other exports, cocoa ranks tenth (*Cocoa Beans in Dominican Republic/OEC*, n.d.). The cocoa and chocolate products that are ultimately exported from DR are among the finest in the world.

With its uniquely marine soil, the DR has some of the world's lowest levels of the heavy metal cadmium. This contributes to the high quality of its cocoa beans. The DR has approximately 40,000 registered farms engaged in producing organic cocoa. The farms are owned by 35,000 families and farms range in size between 2 to 5 hectares in 70% of cases (*Dominican Republic/República Dominicana*, n.d.). The DR is the primary source of organic beans and fine cocoa (*Cocoa Beans in Dominican Republic/OEC*, n.d.), 40% of which is exported to premium markets (*The Top Cocoa Producing Countries In The World*, 2022). It is the world leader in producing organic cocoa and is ranked second in Fair Trade cocoa globally (*Dominican Cacao*, n.d.). The DR is also recognized as one of 15 countries that produce gourmet cocoa (*The cocoa, a key crop that keeps the Dominican Republic as one of the leading countries in the export of organic products in the world.*, n.d.).

In 2015, the Dominican government, the National Cocoa Commission, and the United Nations Development Program signed an agreement to strengthen the sustainability of the cocoa sector that employs approximately 40,000 farmers and provides additional employment for 350,000 members of the island nation's population. Their goal is to grow cocoa to the number two export after sugarcane. In order to do this, farmers need more training in the fermentation and drying processes to produce and an even finer grade of cocoa (Pendergracs, 2022).

### **The Chocal Cooperative and Volunteer Working Tourism**

Cooperatives play an important role in helping poor farmers reach high-value markets (Donovan et al., 2017). A cooperative ("coop") can be defined as:

*An autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise (Cooperative Identity, Values & Principles, n.d.)*

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3 One hectare equals 2.47 acres.

Coops of various types (e.g., coffee, cocoa, and produce) are common in rural areas of developing countries such as the DR, New Guinea and Peru (Donovan et al., 2017; Garnevska et al., 2014; Scott et al., 2015). Research in this area has focused on the dual-nature of coops: they are member-controlled organizations which are subject to economic constraints of “regular” businesses. In many cases, the coop is the only source of support for poor farmers who want to expand their production while maintaining quality standards (Donovan et al., 2017).

One such cocoa coop is Chocal. It is located in Altamira, a town in the north-east region of the DR, just outside of Puerto Plata. Chocal is female-owned and employs over 20 women. Altamira is a rural area with few job opportunities. Founded in 2007, the coop allows the women to work close to home and their families (Janke, 2016). One of the authors of the present paper had the opportunity to visit Chocal in person. As a volunteer working tourist, the author was able to participate in the cocoa manufacturing process.

Volunteer working tourists (tourists) participating in the Chocal experience begin at the farm where they watch a brief video about the coop’s operations. Most farms in the DR are polycultural, meaning that they grow multiple crops in addition to cocoa. These include avocados, bread fruit, and citrus (*Dominican Republic/República Dominicana*, n.d.). After watching the video, the tourists begin planting cocoa tree seedlings into paper bags. The farmers provide work gloves, small bags, soil, and planting tools. The planted seedlings will be kept in the nursery until they reach a size that is appropriate for transplanting in the fields. After three to five years, the trees produce 4- to 6-inch long pods which contain the cocoa beans. Wet beans are extracted from the pods and are then fermented. Later they are placed on sun-drying tables for a week, after which they are sent to chocolate companies.

Following the farm tour, tourists’ workers are transported to the Chocal manufacturing facility to participate in chocolate-making activities. Tourists work under the employee/owners’ supervision. Prior to working with the beans, tourists are given hair nets and shoe covers. The first task is tedious bean sorting. Beans that don’t meet the Chocal quality standard are discarded. After sorting, the good beans are roasted and then crushed into cocoa nibs by a winnowing machine which also removes large pieces of shell. Tourists next have the arduous task of removing the small pieces of shell that may be mixed in with the tiny nibs. All of this work is done by hand at Chocal to ensure quality and to allow older women in the area to have job opportunities.

The volunteer working tourists do not participate in the actual process of transforming the nibs into chocolate because of the specialized training necessary. The next tourist activity, therefore, is pouring the chocolate into molds. Chocal employees demonstrate the appropriate technique and then tourists each pour a tray of chocolates. The trays are then put on racks to allow the chocolate to solidify. The

resulting chocolate products are ultimately sold in the Chocal gift shop. Finally, tourists are guided to the packaging area. Here, tourist workers assemble boxes and then package the chocolate products that were made in-house by previous tourists. In the end, the amount of work provided by the tourists can be substantial. Each group can produce over 100 packages of finished product.

### Accounting for Chocolate

In order to participate in any of the above activities, volunteer working tourists have to pay a fee. Thus, the working tourists are paying Chocal to do the most labor-intensive work in the chocolate-making process. This allows the employees to focus on the more detailed work. The volunteer working tourist arrangement at Chocal is unique and raises an important question: should the tourist fees received by Chocal be considered revenue or should they offset manufacturing costs?

Visitors to Chocal do work that would be considered direct labor ("DL") if the employees were to do it themselves. Thus, an argument could be made for the fees being used to offset the cost of DL in the factory. Please see Figure 1 for a simplified, hypothetical example.

**Figure 1**

#### *Hypothetical Example*

<b>Assumed:</b>			
Entry fee	\$50	/visitor	
Direct labor (DL) for each bag (batch) of beans:			
Sorting beans	3.00	hrs.	
Separating nibs	3.00	hrs.	
Pouring molds	0.50	hr.	
Assembling boxes	0.50	hr.	
Packing product	1.00	hr.	
	8.00	hrs.	
Pay rate for each DL hour	\$ 10.00		
Total DL cost per batch	\$ 80.00		
Direct materials (DM)	\$ 100.00		
Manufacturing overhead (MOH)	\$ 30.00		
<b>Costs:</b>			
Per batch:	Standard	w/visitor	
DM	\$ 100.00	\$ 100.00	
DL	80.00	(50.00)	Fee paid
MOH	30.00	30.00	
Unit cost	\$ 210.00	\$ 80.00	
<b>Total for 10 batches per day:</b>			
10 batches standard	\$ 2,100.00	/day	
or			
8 batches standard, plus	\$ 1,680.00		
2 batches with visitor	160.00		
	\$ 1,840.00	/day	
<b>Savings per day</b>	<b>\$ 260.00</b>	<b>12%</b>	<b>of standard product cost</b>

In this example, assumed fictitious costs are provided along with an assumption that the facility processes 10 bags (batches) of beans per day. The example indicates that the \$50 entrance fee “income” replaces the \$80 direct labor cost per batch. The hourly DL rate is intentionally set low since most of the population lives below the poverty level. Based on the figures in this example, the coop could see a reduction in manufacturing costs of approximately 12% per day when two of the batches are processed by tourist workers.

The other option is to record the fees as revenue. The US set of Generally Accepted Accounting Principles (GAAP) does not apply to Chocal because the coop is located outside of the US. However, the revenue recognition standards are worth reviewing here because the US does have several coops in operation. The accounting issues described herein could become a question to which GAAP may need to be applied in the future.

Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers*, was issued by the Financial Accounting Standards Board (“FASB”) in 2014. It governs when revenue is to be recorded from transactions with customers. The standard requires five steps to be completed in order for revenue to be recognized on the income statement:

- Step 1: Identify the contract with a customer.
- Step 2: Identify the performance obligations in the contract.
- Step 3: Determine the transaction price.
- Step 4: Allocate the transaction price.
- Step 5: Recognize revenue when or as the entity satisfies a performance obligation.

When applying these criteria to the fees received by Chocal, we find that Steps 1, 3, and 4 are met in a straightforward way. Steps 2 and 5, however, give pause. On the surface, the cooperative does not appear to be providing an identifiable good or service to tourists. In fact, the opposite seems to be true: the working tourist is providing value-added services to the coop. Consider the following:

*“A performance obligation is a promise in a contract with a customer to transfer a good or service to the customer. An agreement between two or more parties that creates enforceable rights and obligations is considered a contract. For GAAP revenue recognition criteria, a reporting company or organization will only recognize revenue when (or as) it transfers a promised good or service to a customer, which is when the customer acquires control of the good or service.” (Oguche, 2022)*

Based on this discussion, the tourist fees might not result in revenue being recognized by Chocal. No clearly identifiable good or service is being transferred to, and controlled by, the customer. In fact, the customer provides service to the seller.

What good or service could the tourist be receiving by spending the day at Chocal? One could argue that the experience of participating in the chocolate-making



process is what the tourists are paying for. Thus, the service obligation would be satisfied as Chocal provides the experiences to visitors and the fees paid would be properly recognized as revenue.

## Conclusion

We do not have access to Chocal's financial records so we do not know how the fees are treated. Likely, the coop uses the easiest method which is to simply call the fees some type of revenue. Upon further analysis, as discussed herein, that may not be the most theoretically appropriate treatment.

Step 2 for revenue recognition under GAAP is to "identify the performance obligations in the contract." Likewise, Step 5 requires the entity to satisfy the performance obligation identified in Step 2 (FASB, 2014). Are these steps completed in the Chocal model? What is Chocal's performance obligation to the visitors? Proper accounting for the fees received depends on the answers to these questions. Note that the treatment is straight-forward if the visitors' activities do not affect the cost of manufacturing. In that case, the fees would be properly recorded as revenue.

Revenue recognition under International Financial Reporting Standards (IFRS) is based on the same five criteria described by US GAAP. We do not currently have clear answers to the questions posed by this paper. However, with the popularity of the various forms of volunteer tourism increasing worldwide, it may need to be addressed by the US Financial Accounting Standards Board and/or the International Financial Standards Board in the future.

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