

Septiembre 2021

ART3\_A1\_2022\_2

N° de serie

Artículo Científico

# One step ahead of the law: The net effect of anticipation and implementation of Colombia's illegal crops substitution program

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**ALIANZA EFI**  
Economía Formal e Inclusiva



## Short communication

# One step ahead of the law: The net effect of anticipation and implementation of Colombia's illegal crops substitution program <sup>☆</sup>



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## ARTICLE INFO

## Article history:

Received 31 May 2021

Revised 23 August 2021

Accepted 24 August 2021

Available online 14 September 2021

## JEL classification:

D74

K42

## Keywords:

Policy announcement

Unintended consequences

Illegal markets

Coca

Colombia

## ABSTRACT

Pre-announced policies often generate unintended consequences due to individuals' acting to take advantage of the policy conditions. Little is known about the extent to which unintended consequences from the early announcement of a policy can be larger than the implementation effect, especially in contexts of weak state capacity. We use detailed 1 km grid square data on coca cultivation to estimate the net effect of the announcement and implementation of coca crop substitution payments in Colombia. Our fine-grain data also enable us to estimate geographical spillovers of the program to non-targeted neighboring areas. Using a difference-in-differences empirical strategy, we find that program recipients reduced coca acreage. Surprisingly, the reduction in neighboring grid areas is of a similar magnitude. However, the effectiveness was reduced by half, because farmers increased coca cultivation in order to be eligible for the program after the announcement and before implementation. But the policy's net effect is negative: due to weak state capacity, the program could not be implemented in every region of the country.

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## 1. Introduction

Unintended consequences can reduce the benefits of public programs or, in extreme cases, may undo the intent of those programs altogether. These issues can be particularly severe in contexts where there is weak state capacity. A government might pay individuals to divert them from a prohibited activity without achieving the intended result, as happened with "gun buyback" programs (Ferrazares et al., 2021). However, there are worse situations, in which government payments incentivize people to take actions contrary to those the government seeks to prevent.

In this article, we study unintended consequences and policy effectiveness in the context of PNIS, a program of payments for

illegal crop substitution in Colombia.<sup>1</sup> The program grew out of peace negotiations between the government and the Fuerzas Armadas Revolucionarias de Colombia (FARC) guerrillas. FARC, the most prevalent illegal armed group in the country at the time, used coca crops for cocaine production and trafficking to fund their operations. The PNIS program includes subsidies to individual coca growers of up to USD 10,000, conditional on eradication of their crops. PNIS was announced years before its implementation, generating incentives for individuals to grow coca to increase the chances of getting the subsidies (Lopez et al., 2019; Prem et al., 2021). In this article, we compare the magnitude of the coca increase after the program was announced with the program's effectiveness in reducing coca cultivation once implemented.

The anticipation to policy implementation (announcement effects) can happen under three conditions: when individuals (i) have access to information about future treatment, (ii) can benefit from acting before the treatment, and (iii) are forward-looking.<sup>2</sup> In the PNIS context, FARC members and the government conducted discussions about the design of the coca substitution program behind closed doors. Consequently, FARC had more information than other

<sup>☆</sup> We would like to thank the editor and anonymous referees for their useful and constructive suggestions. We would also like to thank Pascual Restrepo and the seminar participants at RATA, REDESAL, and Universidad Nacional. We are grateful to Procuraduría General de la Nación for data access. Nicolas Cristancho provided excellent research assistance. Replication code and data for this article can be found at <https://dataverse.harvard.edu/dataverse/pnis/>.

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<sup>1</sup> The acronym comes from the name in Spanish: Programa Nacional Integral de Sustitución de cultivos de uso ilícito.

<sup>2</sup> Malani and Reif (2015) provide an illustrative description of these conditions and real-world examples of each.