

QUICK LOOK:

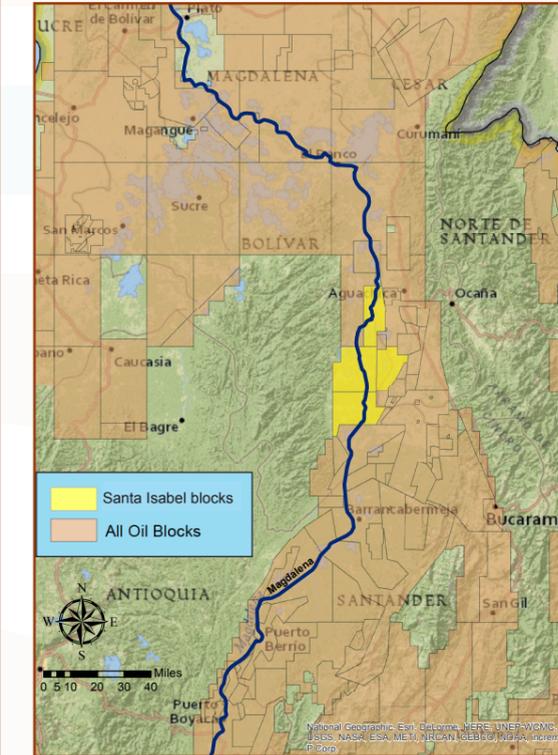
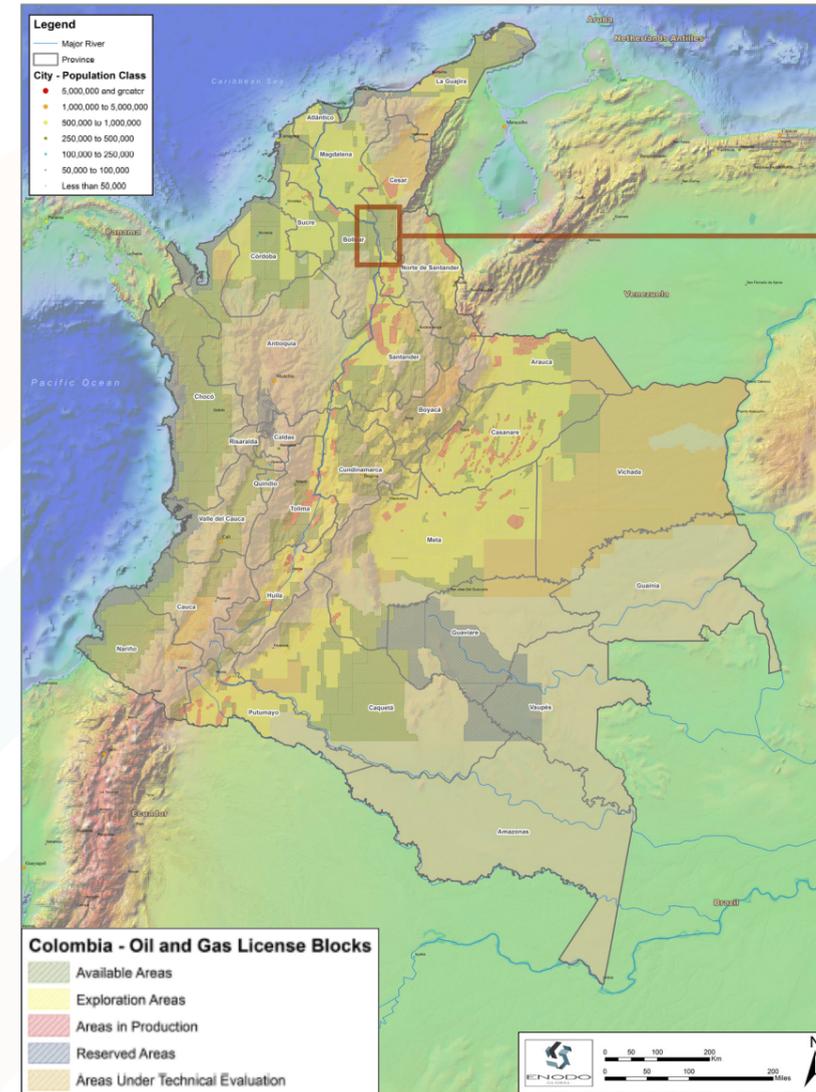
Rio Magdalena Middle Valley
Colombia



SITUATION

The June 2013 U.S. Energy Information Administration Report identified 6.8 billion barrels of total unproved shale oil technically recoverable in Colombia, including approximately 4.8 billion barrels in the Middle Magdalena Basin. Multi-national oil companies invested \$13.5 million to carry the cost of the drilling, completing and testing of 13 wells in the Santa Isabel block. The investment in Colombian shale reflects a decision by some oil companies to maximize value during the downturn by focusing on exploration and production (E&P).

Companies operating in the Santa Isabel block are in close proximity to communities in the Middle Magdalena Basin. The basin's communities are comprised primarily of subsistence-level farms with high poverty levels and a history of violence. The per capita murder rates in the region are well above the Colombian national average. The area's communities are ethnically diverse and include a significant number of internally displaced persons from years of civil unrest. These communities are also isolated socially, economically and geographically from national government authorities and operate semi-autonomously.



Santa Isabel block



APPROACH

ENODO Global's analysis focuses on the indigenous population's ability to disrupt oil companies' exploration, production and distribution activities at the local, regional and national levels. By identifying the population's dominant identity and core grievances, ENODO can pinpoint the underlying factors for future disruptions and stoppages caused by protest, strikes and violence, which manifest from deeply held cultural beliefs, land rights issues and the historical precedent of the government's inability to protect and provide basic services for its citizens. Additionally, ENODO examines the latest indications of social tensions in the Middle Magdalena Basin fueled by growing public discontent over perceived exploitation by mineral and oil extraction companies, as well as by political activists, narco-traffickers, militants and competing ethnic groups attempting to gain or maintain influence.

FINDINGS

In neighboring Barrancabermeja, recent efforts to explore for shale oil deposits have magnified social tensions, which have adversely affected

E&P operations. ENODO's initial investigation of the operating environment uncovered historic and contemporary social tensions that underpin challenges that multi-nationals will face within the local Middle Magdalena Basin and the larger region in general.

Land Rights

Land issues present the greatest threat to multi-national's operations and drive the majority of social unrest throughout Colombia. The Victims and Land Restitution Law, enacted in 2011, empowers over four million victims who had land seized by militants to claim their ancestral lands or new territories. Under Colombian law, extraction companies are not required to, and often do not, own the land upon which they operate. Even if a company is operating on land granted by the government, a community can claim that land under the 2011 law. Conflicting land rights result in conflict that goes unresolved by the Colombian government, which seldom operates below the national level and outside the capitol. In most instances, companies are forced to negotiate settlements with communities directly.

Culture

Land is the lifeblood of Colombian existence, intertwined with culture, sovereignty, ancestral ties, language and spirituality. Water is a key element in Colombian society as it is believed to be home for both positive and negative spirits that help bring balance to the world. Accordingly, extractive activities are viewed as a direct threat to the population's existence and raping the earth. Additionally, the effects of the extraction industry are viewed as morally corrupt, bringing prostitution, drugs and other social problems. Individuals living in remote hamlets would rather live a traditional lifestyle than try to reap the potential benefits from extraction operations. Rosa, a shopkeeper in the basin stated, "This is not a jungle, but an Indigenous Reservation. We must fight for our territory or else our children will be left without land. The foreigner who comes will find trouble."



Social Movements



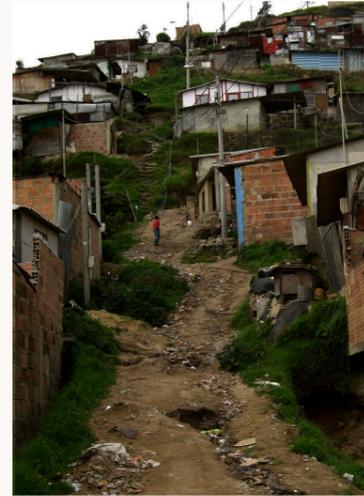
Afro-Colombian Population Concentration

Social movements, dormant for decades, have spawned large social protests across Colombia that disrupt operations and undermine investor confidence. The preponderance of social movements are based on ethnicity, demonstrated by over 160 Afro-Colombian groups represented within the Process of Black Communities, a network of black communities in Colombia. In recent months, continued protests from unions and social groups across the country have caused significant disruptions for multinational

corporations operating throughout the country. The groups associated with these social movements are growing in size and influence and their impact upon multiple sectors of Colombian society and the economy will not abate in the near future.

"The foreigner who comes will find trouble."

Government Ineffectiveness

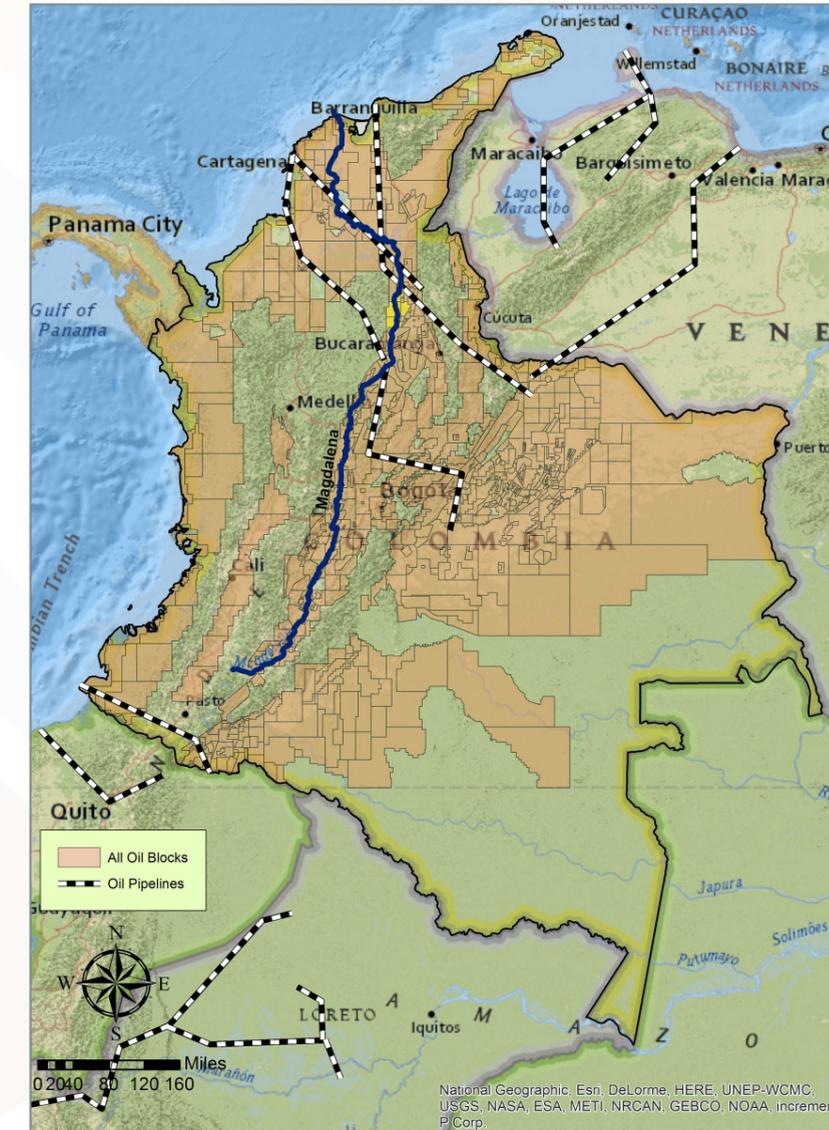


The failure of the Colombian national government to provide basic services and a lack of local and regional development programs have significantly contributed to social tensions within rural communities. The government's ineffectiveness forces local populations to view companies as caretakers or stewards for these communities. This climate of discontent has helped swell the ranks of the Revolutionary Armed Forces of Colombia (FARC) and has cast guerrilla organizations as defenders of peasant farmers. These groups use kidnapping, illegal mining, extortion, drug trafficking and violence as their primary tools to increase their influence over the population. According to Defense Ministry data, there were 33 pipeline attacks in the first three months of this year, and a total of 259 in 2013 resulting in approximately 35,000

barrels per day of unplanned production disruption. Extremists exploit existing social tensions within the population, often times fomenting unrest, to support their agenda. Multi-national corporations are forced to use private security companies since the national military and local police forces are ineffective. This only increases the cycle of insecurity, alienating companies from the communities in which they operate, which leads to further agitation and discord.



“The government ineffectiveness forces local populations to view companies as caretakers or stewards to the communities.”



Oil blocks and main pipeline network relative to Magdalena River

Transportation Corridor

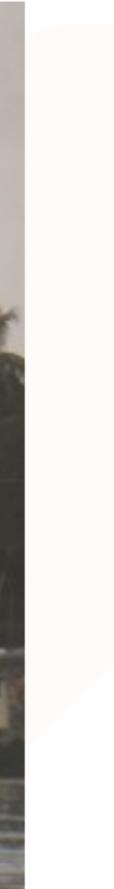
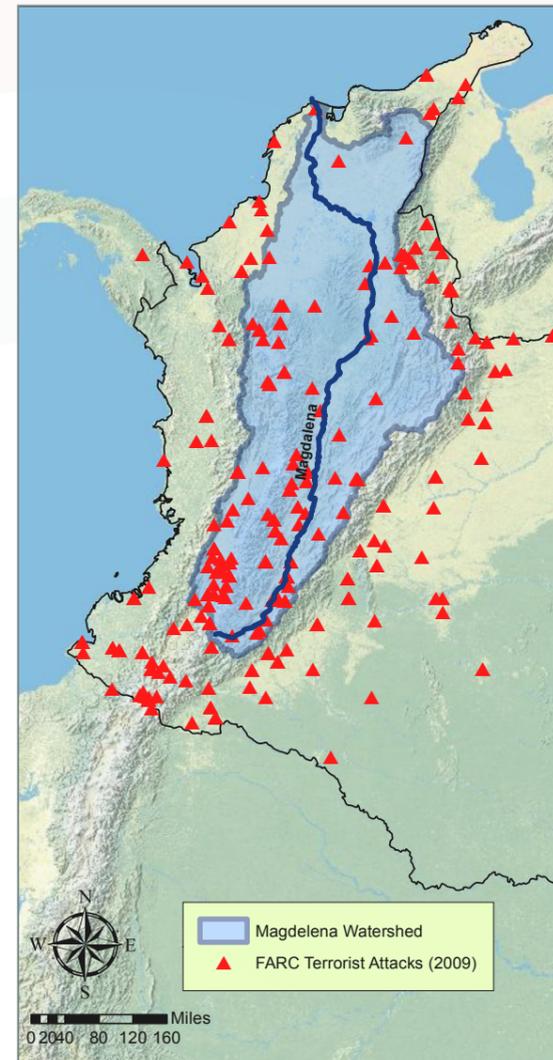
The Middle Magdalena Basin serves as one of the main transportation corridors between Colombia's highland and its coast. The physical geography consisting of high peaks and dense jungle, inadequate road and rail networks, and low capacity pipeline infrastructure create significant transportation challenges for multi-nationals. There is only one major north-south road, Highway 45, which is a natural chokepoint for transporting people and products, including oil and gas. Additionally, the basin's topography creates a floodplain that must rely upon maritime traffic due to the absence of bridges or a robust road and rail network. The basin is susceptible to floods during the rainy season, which impacts the least-prosperous communities, preventing the agriculture dependent population from access to food and drinking water. During such times of crisis, government ineffectiveness forces communities to turn to companies for essential services. If expectations are not met, it is seen as a violation of the stewardship ethic, which increases existing tensions. This can provoke community protests that disrupt operations, including delivery interruptions from attacks on pipelines.



OUTLIERS

The inability of the Colombian government and extractive companies to address local community grievances between intrinsic world views versus extraction company practices has already sparked protests and violence. These grievances are amplified by regional and national level stressors that include:

- Perceived or actual ecological damage from extractive company operations
- The Santos government's victory in the presidential election, which creates a mandate to negotiate peace with FARC
- An empowered FARC and the National Liberation Army may affect oil production and delivery
- Rapid demobilization of FARC and United Self Defense Forces of Colombia (AUC) compounds current demobilization efforts
- Potential regulatory restrictions on extractive industry create business and investor uncertainty
- Volatility of the Colombian Peso and lowered trade barriers to international goods exacerbate economic insecurity



CONCLUSION

ENODO Global's preliminary analysis indicates that operational disruptions due to protests are hurting both profit margins and productivity in Colombian energy sectors. A protest by U'wa Indians has shut down Colombia's second-longest oil pipeline costing the government more than \$156 million. In another example, FARC's attack on an oil pipeline in Catatumbo left 16,000 people without water. Multi-national should expect their activities in Santa Isabel to be impacted by individuals and groups from the Middle Magdalena Basin. Moreover, oil companies will face regional challenges to its product distribution network through choke points in existing transportation corridors. By proactively engaging communities in the Magdalena Middle Basin, oil companies can anticipate and mitigate the social stresses that will negatively impact its production and profits.



This electronic representation of ENODO intellectual property is provided for noncommercial use only. Unauthorized posting of ENODO electronic documents to a non-ENODO website is prohibited and are protected under copyright law. Permission is required from ENODO to reproduce, or reuse in another form, any of our research documents for commercial use. ENODO Global, Inc. retains all rights to the information contained in this document and assumes no liability or fault for any material contained in this document, or derived from its subsequent use, whether directly attributed, implied, or inferred by any users of this submission.

As of June 2015

620 N Patrick Street, Alexandria, Virginia 22314

(571) 403-9636

www.enodoglobal.com