## VIEWPOINT



## **Subsidizing extinction?**

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## Abstract

In 2010 world governments agreed to eliminate, phase out or reform incentives that harm biodiversity by 2020. Yet few governments have even identified such incentives, never mind taking action on them. While some subsidies are well studied, such as in fisheries and fossil fuel production, there is an urgent need for the conservation community to study the potential effects a broader array of subsidies have on biodiversity. In addition, we need a better understanding of who benefits from these subsidies. We term this pursuit 'subsidy accountability', which is crucial but challenging work crossing disciplines and government ministries. It requires ecologists, forensic accountants, and policy wonks, calculating and forecasting the positive and negative effects of subsidies and their elimination on biodiversity and vulnerable human populations. The Intergovernmental Panel for Biodiversity and Ecosystem Services recently concluded that action on biodiversity loss requires transformative economic change; true action on subsidies is one step towards such change.

### KEYWORDS

biodiversity loss, conservation finance, conservation policy, harmful economic incentives, indirect drivers, subsidies

In a time of empty pockets for nature, or what we might call biodiversity conservation's perennial austerity problem, it is hard to stomach the annual numbers: \$4.7 trillion globally for fossil fuel subsidies, or 6.3 percent of global GDP, in 2015 (Coady, Parry, Le, & Shang, 2019).

The Canadian government is ponying up at least \$3.4 billion dollars to subsidize an uneconomic pipeline expansion that steamrolls through Indigenous opposition and increases risks to endangered killer whales. Add to this Australia's estimated 3 billion in mining subsidies, China's \$18 billion nitrogen fertilizer subsidy, and Japan's \$2.2 billion contribution to overfishing (Grudnoff, 2013; Li et al., 2013; Sumaila et al., 2019).

These are just a few of the incentives governments have created in pursuit of economic development and expanded employment opportunities, incentives that may negatively impact biodiversity. We say "may" because the effect of these incentives on biodiversity is not straightforward: more research is necessary. As governments negotiate a new strategic plan for the Convention on Biological Diversity (CBD), there is an urgent need to study the effects such subsidies have on biodiversity. We call for "subsidy accountability" as a necessary foundation to advance transformative economic change as called for by Intergovernmental Panel on Biodiversity and Ecosystem Services (2019).

## 1 | DEFINITIONS AND INTERNATIONAL AGENDAS FOR **ACTION**

What is a harmful subsidy? Drawing from the OECD, the CBD defines them as "government action that confers an advantage to consumers or producers ... but in doing so,

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discriminates against sound environmental practices" (CBD, 2018, p. 5). But they include broader, less obviously economic laws and policies around resource use, say requirements to "use it or lose it" when it comes to forestry licenses or ineffective policies that tacitly allow overfishing and illegal fishing.

While action and inaction on fossil fuel subsidies are well known, few are aware that in 2010, 193 governments agreed to identify, eliminate, and reform subsidies leading to biodiversity loss (Aichi Target 3). Yet, a 2018 assessment of the Aichi targets found only 19 countries making progress. Success stories include the reduction of subsidies for chemical fertilizers in Bangladesh and France and elimination of subsidies for wetland draining in Denmark. Few countries are identifying negative incentives systematically: only seven countries report undertaking studies to identify them (CBD, 2018).

Aichi target 3 also calls for the creation of positive incentive measures; in the same assessment, half of reporting countries claimed to be using mechanisms such as green taxes, payments for ecosystem services, and conservation banking. There are success stories along these lines, including programs that link U.S. farmer subsidies to soil and wetland conservation practices (Claassen et al., 2017).

But what is the relative scale of positive versus harmful subsidies? Again, more research is needed. McFarland, Whitley, and Kissinger (2015) calculated that Brazil spent \$158 million trying to stop deforestation while spending \$14 billion subsidizing activities linked to deforestation; Indonesia spent \$165 million versus \$27 billion. Likewise in fisheries, subsidies promoting sustainable fisheries amount to approximately \$10 billion whereas harmful subsidies linked to overfishing were \$22 billion in 2018 (Sumaila et al., 2019). These positive subsidies are teeny tiny minnows swimming up Victoria Falls, dwarfed by subsidies driving land use change and biodiversity loss.

## 2 | WHY THE SLOW ACTION ON SUBSIDIES?

Part of the issue is that such subsidies are difficult to identify and hard to track, even for governments who create them. Many government departments operate in silos without awareness of harmful subsidies on offer by other ministries, or vice versa.

But all is not ignorance or the complexity of institutions; another major barrier is that subsidies that support oil and gas, mining, fishing, forestry, and agricultural expansion are deeply political, linked to short-term employment and reelection hopes. There are active and powerful lobbies at work. Indonesia has an array of domestic subsidies for palm oil, and powerful interest groups defend them (Maxton-Lee, 2018). Petroleum lobby groups met with the Canadian federal government 536 times over a 5-year period, as opposed to six

meetings with the national climate coalition, influencing not only energy but climate policy (Yunker & Daub, 2017). Since the Paris Agreement, the top five fossil fuel companies spent \$200 million per year lobbying aimed at watering down climate-motivated policy (Influence Map, 2019); the fossil fuel sector profited \$500 billion dollars in the same year they received \$700 billion in direct subsidies (van Lierop, 2019).

# 3 | TOWARDS SUBSIDY ACCOUNTABILITY

To address these barriers, we need research that identifies harmful subsidies to biodiversity and the long-term costs they have on the environment and people. But just knowing these subsidies exist and their impacts only goes so far. Subsidy accountability also needs to identify, and where possible, quantify who benefits from these subsidies. Do harmful subsidies flow to corporate actors and elites? And, on the flip side, are some harmful subsidies important for vulnerable communities and people? Or does a single subsidy disproportionally benefit the rich, but with important, even if much smaller benefits for marginalized communities?

Answers to these questions matter. All attempts to change harmful subsidies must be joined with policies that address negative impacts of such reform for working or marginalized people, avoiding backlash that has plagued efforts for subsidy reform. One can imagine a great redirection of funds away from say, overfishing, and into restoration and protection, supporting people and families through changes. Likewise, evidence of corporate or elite capture from harmful subsidies may help build political support for reform.

As a conservation community, we excel at documenting biodiversity loss. Now we need to focus on identifying underlying drivers. One concrete step is investment in subsidy accountability, a research trajectory that is vastly interdisciplinary. We imagine teams of ecologists, independent advocates, policy wonks, economists, and, importantly, forensic accountants—all tracking subsidies, forecasting the positive or negative environmental and social effects of their redirection or elimination (e.g., Jewell et al., 2018) and holding governments to account.

To advance transformative economic change, we need to build country-specific lists of policies in need of reform and, crucially, to amass the political power necessary to persuade governments of all stripes to implement such changes.

Big, *public* money is out there. We need to redirect these funds towards efforts that support ecologically sustainable economies and full pockets for nature.

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