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Repurposing Subsidies to support Regenerative Agriculture: a Global South perspective

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GLOBE EU Conference on Regenerative Agriculture, Nov 16

MODERN AGRICULTURE IS CONTRIBUTING TO NATURE DECLINE

US\$708 billion goes to agriculture subsidies every year

- **24 billion metric tons** of fertile soil is lost per year
- **23 %** of the global land surface is suffering from reduced productivity
- **10 %** of crop yield reduction
- **18.5%** of global greenhouse gas emissions
- **US\$6.3 trillion** lost to deforestation and land degradation
- **3.2 billion people** threatened by food insecurity

AGRICULTURE SUBSIDIES ARE PROVIDED TO MEET IMPORTANT POLICY GOALS

Agricultural policy goals	Different forms of policy support
<ul style="list-style-type: none">○ Achieving high levels of self-sufficiency in production○ Ensuring domestic food security and livelihoods○ Improving income from agriculture with more equitable distribution among farmers○ Reducing income equality between rural and urban areas○ Increasing agricultural productivity○ Improving efficiency in the processing and marketing chain○ Ensuring supply and price stability○ Improving rural development○ Improving environmental performance○ Increasing export and employment, reducing costs, and adding value to raw crops○ Poverty alleviation and sustainable development	<ul style="list-style-type: none">✓ Concessional loans and rural credit lines✓ Market price support✓ Import and export tariffs✓ Interest-rate subsidies✓ Production input subsidies✓ Tax rebates (or exemptions)✓ Performance-based payments✓ Production output subsidies✓ Insurance against lost income for producers or processors✓ Public investments in supply chain infrastructure or equipment

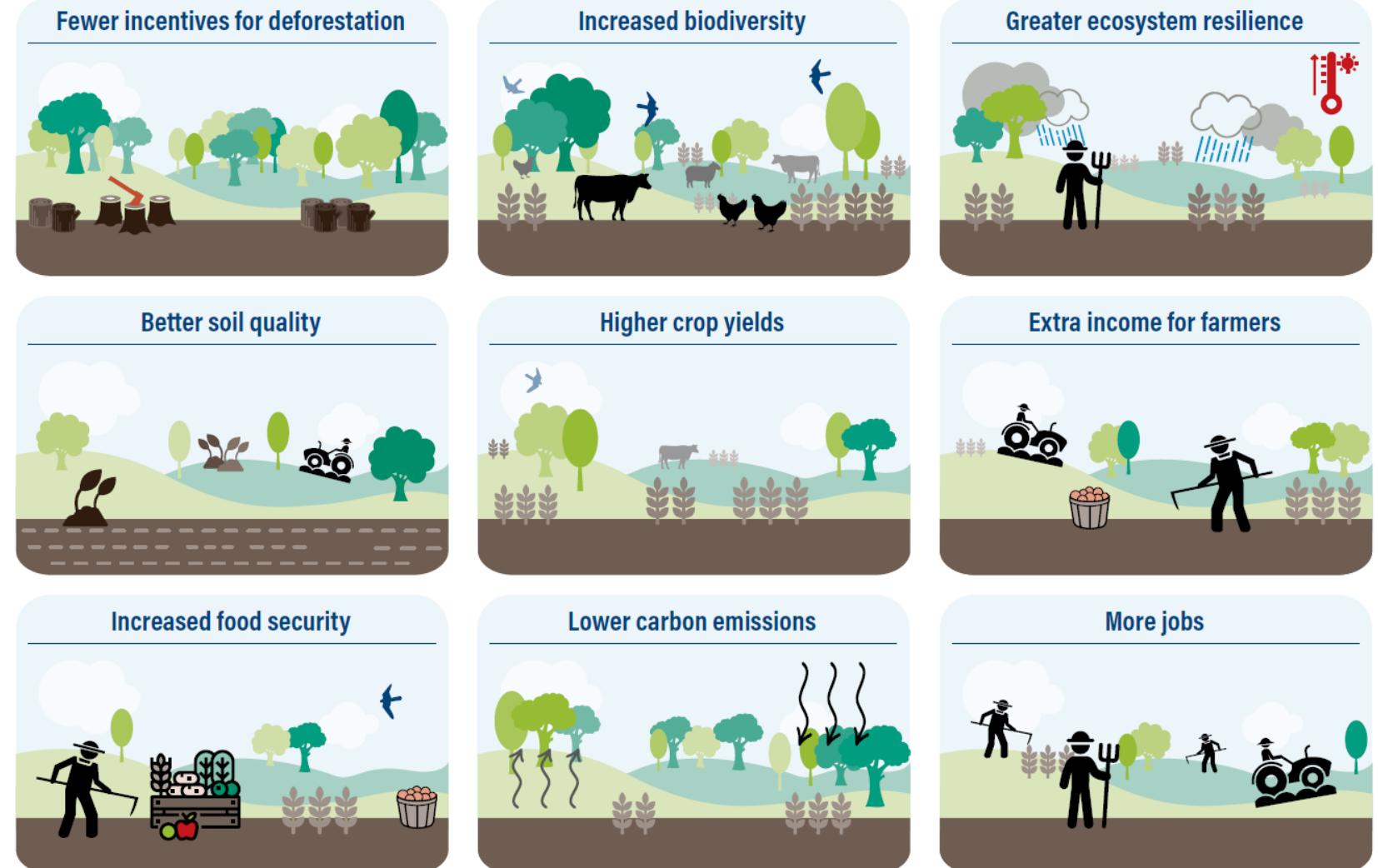


AGRICULTURAL INCENTIVE PROGRAMS IN MANY COUNTRIES FAILED TO ACHIEVE THE INTENDED POLICY GOALS

- Failed to boost farmer incomes
 - Indian: \$15 billion USD per year on fertilizer subsidies, which disproportionately subsidized nitrogen, polluting the water for irrigation and lowering crop yields
- Failed to increase the land productivity as expected
 - Malawi: the input subsidy program (since 2005) accounts for 60% of its agricultural budget, which increased maize yields at first, but its impact (and crop biodiversity) declined over time
- Incentivized deforestation
 - Indonesia: 9.75 million hectares of primary intact forests was lost to subsidized oil palm expansion between 2000-2019. About 71% of government support went to biodiesel producers, and < 5% to small farmers

REDIRECTING AGRICULTURE SUBSIDIES CAN GENERATE SIGNIFICANT BENEFITS

\$400 billion/year that are earmarked for support programs could be potentially repurposed to support regenerative agricultural practices such as agroforestry, climate smart agriculture, agroecology, etc. that could better serve farmers and the planet.



4 WAYS TO REDIRECT AGRICULTURE SUBSIDIES

1.
**REPURPOSE
EXISTING
SUBSIDIES**



2.
**CREATE
NEW
INCENTIVES**



3.
**PUT
SMALLHOLDER
FARMERS FIRST**



4.
**ENCOURAGE
PEER-
LEARNING**



REMOVE HARMFUL SUBSIDIES AND CREATE NEW INCENTIVES

- Remove harmful subsidies (that encourage the overuse of artificial fertilizers, chemical pesticides and ground water) in areas where yield increases can't be sustained, and soil degradation is high.
- Repurpose subsidies to finance agricultural R&D focused on productivity-enhancing, soil health-improving and emissions-reducing technologies, like agroforestry and low-carbon agriculture, that can boost climate resilience and guarantee long-term yields and incomes.

Example: After two decades of Costa Rica's Payments for Environmental Service (PES) program, a total of \$500 million USD of taxes on gasoline had been transferred to protect and restore 1.25 million hectares of forest, nearly one fourth of the country's territory. Today, ecotourism employs thousands of people, all thanks to the beauty of the country's restored forests.



ENABLE MARKETS FOR ECOSYSTEM SERVICES

- **Develop payment for the ecosystem services (PES) schemes**, like clean water and carbon storage, that come with regenerated farmland...
- **Develop surrogate markets** for ecosystem services to be traded.

Example: In Ghana, environmental degradation caused by wildfires has threatened local livelihoods. To reduce further damage from forest fires, farms are adopting more sustainable land management practices. A PES scheme in 2015 helped farmers grow trees to reduce soil erosion and improve soil quality. When farmers received the payments, the participation rate tripled.



DESIGN INCENTIVE PROGRAMS THAT TARGET SMALLHOLDER FARMERS

- Large landowners and corporations often benefit disproportionately from existing subsidies.
- Small farmers need more clearly defined land rights.
- Payment for ecosystem services (PES) programs need to put smallholder farmers at an advantage.

Example: In the Brazilian Amazon, some small rural communities burn down forests to grow cassava/manioc, their staple crop. Two programs, Bolsa Floresta and Bolsa Verde, pay smallholders if they agree not to clear primary forests. Under these programs, cassava yields increased by 22.83 kg per household per year while protecting the forest.



CONCLUSIONS

- The right agricultural policy incentives can help *restore* degraded soils and improve farm income, while *disincentivizing deforestation* at the same time.
- People can restore farmland through a variety of generative agricultural practices approaches like **agroforestry** (trees on farms), **silvopasture** (trees on grazing land), and **low-carbon agriculture** (no-till farming and cover crops, for example).
- Restoring degraded farmland increases the **per-hectare yield gains on existing agricultural lands**, reducing pressure on existing forests.
- Reallocation of agricultural support to R&D focused on productivity-enhancing, soil health- improving and emissions-reducing technologies thus would produce better outcomes for food security and nutrition and for the natural environment.
- Restoring farmland can help lead a **just transition to sustainable rural economies after the COVID-19 pandemic**.

