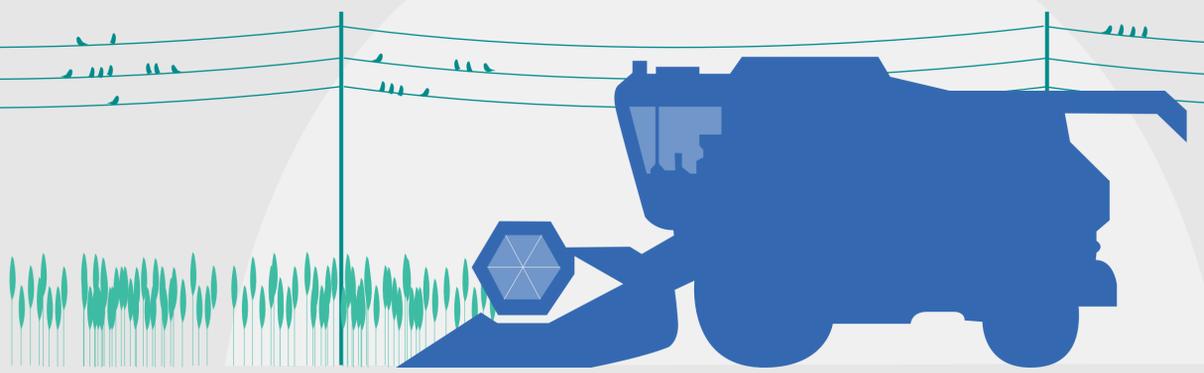


# What are Agricultural Subsidies?

Agricultural Subsidies are a proxy measure to assess the environmental impacts of policies that tend to encourage the inefficient use of resources that can lead to pollution.



## How do we know?

### Nominal Rate of Assistance

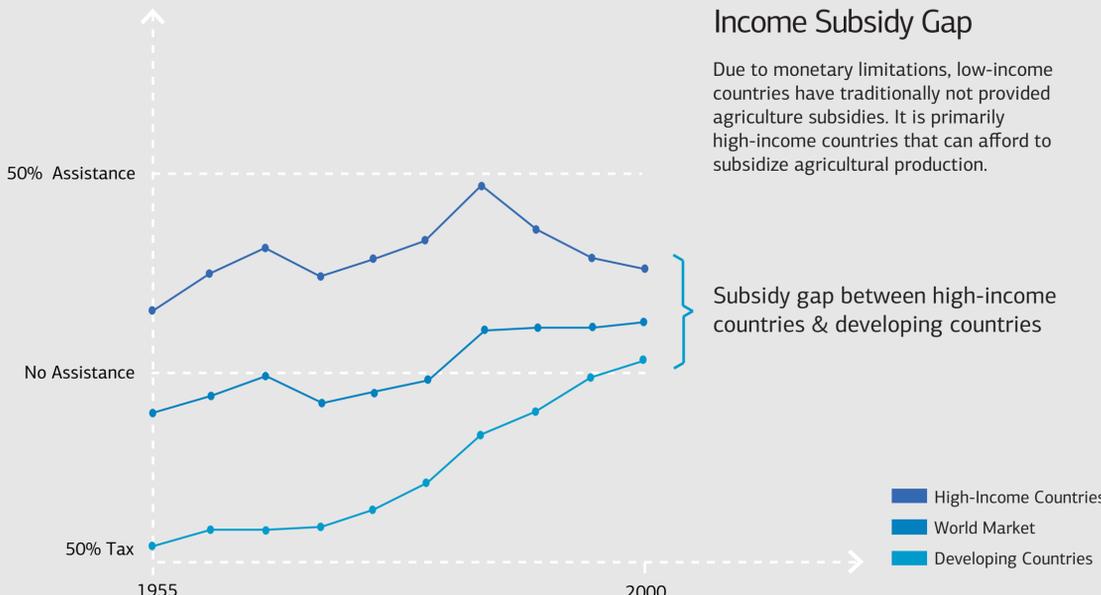
The Nominal Rate of Assistance, or NRA, is defined as the price of an agricultural product in the domestic market (plus any direct output subsidy) less its global price expressed as a percentage of the global price (adjusting for transport costs and quality differences).

Global Price (price at border)  
Domestic Price (price with assistance)



### HOW TO SCORE WHEN DATA ARE MISSING?

The World Bank only provides NRA data for around 82 countries. For all others, we use a set of rules to determine how to estimate a score for countries. Countries that have a negative NRA (i.e., taxation) receive the top score of 100. Countries with low to middle income (GNI per capita < \$4,085), also receive a score of 100, as poor countries are less likely to subsidize their agriculture sectors (see figure below). For high income countries (GNI per capita > \$12,616) with agriculture GDP > 5% of the total GDP, a point value is based on a regional GDP model. Countries that have negligible agriculture sectors (agriculture GDP < 5%) do not receive a score at all.

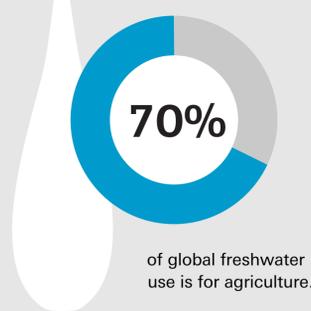
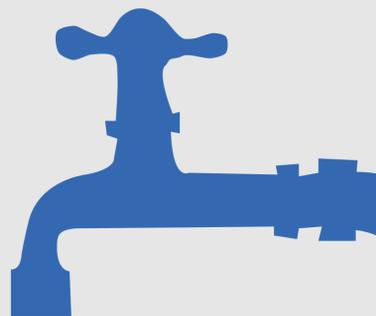
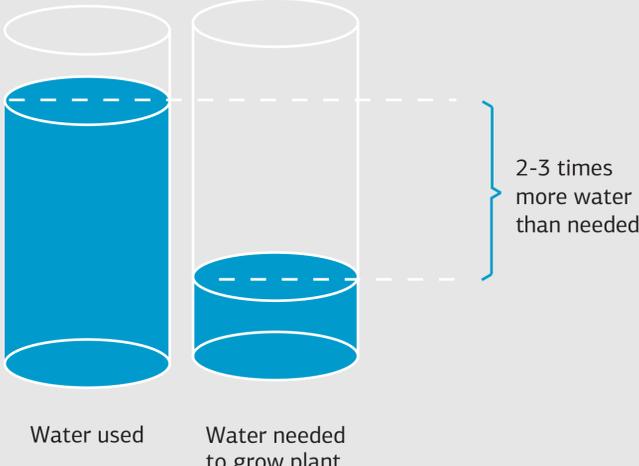


## Why does it matter?

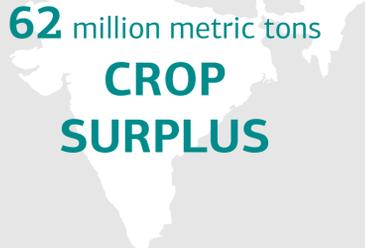
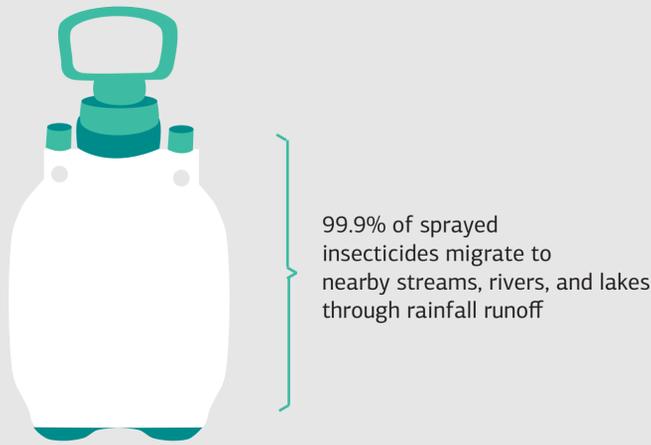
### Increased Environmental Pollution

Agricultural subsidies have been found to lead to more intensive agriculture, inefficient use of resources such as water and agricultural inputs, and can lead to increased environmental pollution through the greater use of pesticides, insecticides, and fertilizers.

### Increased Use of Water



### Increased Use of Pesticides



Free water and electricity in India led to massive surplus of the nation's harvest in 2012 and the third largest grain harvest in the world.

### Over-Production

The over-production of government-favored crops distorts global commodity markets. Not only does this affect the global economy, but also food security and poverty.



The United States uses 1.2 billion pounds of pesticides a year, of which only 0.01% reaches the intended target. The other 99.99% of pesticides sprayed contaminates the food, air, and water.



### References

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