

## **SUMMARY**

28/03/2024 - Government fertilizer subsidies, input use, and income: The case of farm households in Senegal.

## A. Ricome

## **Summary:**

Most Sub-Saharan countries implement input subsidy programs (ISPs) in an attempt to increase fertilizer use, crop yields and farmers' income and to improve household food security. Senegal is no exception and has had an ISP in place for the last 15 years.

This article assesses how access to subsidized fertilizer under the ISP is associated with changes in fertilizer and manure use and gross margin. Using household-level data from two agroecological zones, we employ an endogenous switching regression framework to control for the potential endogeneity of access to subsidized fertilizer. We find that access to subsidized fertilizer is associated with an increase in the total use of fertilizer of +39% but also with a reduction in the use of commercial fertilizer of 18%.

Access to subsidized fertilizer is also associated with a reduction in the likelihood of using manure of 5% and an increase in farmers' total gross margin of 11%. Results are heterogeneous across agroecological zones, with a strong crowding-out of commercial fertilizer where widely available to farmers. In this case, revising the design of the ISP could lead to improved efficiency.