

What's Trade Got to Do with It?:

Exploring the Impact of Direct Transfer Food Aid on Sub-Saharan African Agricultural Producers and Agricultural Trade.

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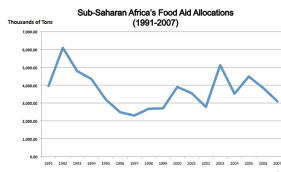


Key Terms:

- international trade
- commodities
- food aid
- agricultural policy
- economic impacts
- producer livelihoods
- development



Introduction:

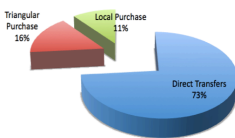


Of the Canadian allocated direct transfers worldwide, sub-Saharan Africa (SSA) received roughly 80 per cent of all direct transfers and 90 per cent of all project category direct transfer food aid. Direct transfer food aid is considered commodities produced in the donor country and provided at concessional prices to the recipient country (e.g. Canadian wheat). Canadian food aid policy has changed over the past decades with a decreasing trend in direct transfers since 1988. **According to the African Institute of Development, agriculture is vital to much of the region's livelihood. The sector employs 65 per cent of the labour force and accounts for 32 per cent of regional GDP. Although Canada's role in food aid has been minor compared to the United States, it is imperative to understand the implications of choice in foreign assistance.** Our secondary interest was to investigate the effects non-emergency food aid direct transfer has on international commodity trade in the region. A number of studies have churned up the food aid controversy in recent years.

A Brief Review of Food Aid:

Introduced after the expiration of the Marshall Plan in the United States, food aid was used as a development tool built to assist in agricultural surplus disposal and development. Non-emergency food aid is the addition of both project and program categories, also commonly referred to as development food aid. **Of the total food aid delivered to the region between 1991 – 2007, 33 per cent was for development support and of that 73 per cent was in direct transfer form.** Direct transfers can be sold close to the main trade channel or on the local market, each affecting agricultural producers differently.

Non-Emergency Food Aid Delivery Breakdown from 1991-2007



Current Literature:

Since the inception of food aid in the post WWII era, delivery methods have changed substantially moving from surplus disposal of commodities to targeted delivery. Key contributions to the existing literature have challenged the notion of disincentive effects from food aid deliveries in the post surplus disposal era:

- Abdulai et al performed a regional analysis on total food aid in SSA, finding no significant disincentive effects.
- Tadesse and Shively found a 10 per cent threshold between total agricultural production and food aid allocations, indicating the maximum food aid a country can receive and still mitigate disincentive effects.

While findings about general food aid have advanced the literature, little is known about the specific effects of non-emergency food aid (NEFA) direct transfers on domestic producers in recipient economies.

In terms of our secondary investigation of the substitution effect between direct transfer food aid and trade, **Barrett found that program food aid substitutes for trade volumes in the short run.** It is possible that long-term effects may differ.

Data and Methods:

The data set used spans from 1988 -2010 and is disaggregated to exclude all but direct transfer food aid, **this is the first regional study in SSA to provide results specific to non-emergency direct transfers.** Additionally, we focus on cereal grain deliveries as they constitute a large portion of direct transfers. The fourteen countries included in this study are: Burkina Faso, Burundi, Cameroon, Ethiopia, Gambia, Ghana, Kenya, Madagascar, Malawi, Mali, Mozambique, Rwanda, South Africa, and Togo. Using fixed effects panel regression, we estimated the following equations:

- (1) $\ln(\text{Price}_t) = B_0 + B_1 \ln(\text{NEFA}_{t-1}) + B_2 \ln(\text{Production}) + B_3 \ln(\text{Population}) + B_4 \ln(\text{Im ports}) + B_5 \ln(\text{Fertilizer}) + B_6 (\text{HIV}) + \epsilon_t$
- (2) $\ln(\text{Production}_t) = B_0 + B_1 \ln(\text{NEFA}_{t-1}) + B_2 \ln(\text{Price}) + B_3 \ln(\text{Population}) + B_4 \ln(\text{Im ports}) + B_5 \ln(\text{Fertilizer}) + B_6 (\text{HIV}) + \epsilon_t$

Results:

Our results indicate no significant disincentive effects caused from direct transfer food aid to producer prices and production quantities in the selected countries throughout SSA. Additional testing has been done with disaggregated panels for high and low level recipient countries as well as testing the lag effect of a delivery. **However, there are preliminary results to indicate that direct transfers may be crowding out cereal imports.** This could have negative effects on agricultural producers within donor countries depending on the magnitude of delivery.

Dependent: Commodity Imports	Delivery of Food Aid _(t-1)
NEFA	-0.0952**
P Value	0.035
R Squared	0.7933

Interpretation: With an additional one per cent of cereal direct transfer food aid, imports of cereals decrease by .0952 per cent.

Dependent: Producer Prices	Delivery of Food Aid
NEFA	-0.0322
P Value	0.125
R Squared	0.5749

Dependent: Production Quant.	Delivery of Food Aid
NEFA	-0.0051
P Value	0.343
R Squared	0.6278

Policy Implications:

Direct transfers are an essential part of international aid. In addition to development, direct transfers assist in famines, conflict zones, and areas of natural disaster. Our results assist donor governments in understanding the international trade-offs of utilizing such a development tool. The key policy implications of our research are:

- **The absence of significant disincentive effects on recipient economy agricultural producers indicates that domestic market distortion may be avoided through proper targeting and mitigation techniques.**
- **Alternatives such as cash transfers and local procurement should be further explored in a non-emergency context to avoid crowding out of cereal imports to recipient economies.**

For a thriving Canadian agri-food sector, we must work to create a more competitive tomorrow through effective policy today.



Questions or Concerns?
Please contact Johanna
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References (for a full list, please see the author):
1.) Abdulai, A., C. Barrett, and J. Hoddinott. (2005) Does Food Aid Really Have Disincentive Effects?: New Evidence from sub-Saharan Africa. *World Development*. 33(10):1689-1704.
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Data provided by: the World Bank, World Food Programme, and the Food and Agriculture Organization