**Impact of AID on food security-**

Food Security Measures:

* Hunger Index (the Global Hunger Index – GHI – is available for limited years, instead, can use the following 3 indicators separately, or average the 3 to obtain the hunger index: Mortality rate under-5, % of children under 5 who are underweight, Prevalence of undernourishment (% of population))
* Food Production per capita (available as crop production index)
* Poverty? (we can use Poverty gap at $1.90 a day (2011 PPP) (%) as a common indicator. Note data is not available for all years and all countries. The other common indicator of poverty is the GINI index, however the data is more sparse and GINI is a more complicated indicator to calculate)
* Other Food Index/ health index (Food production index was included in our data because it is a quite complete data set. Also included Depth of the food deficit (kilocalories per person per day) as another indicator because the data from 1992 onwards is very complete)

Aid Inflows / Sources:

* Total International AID (Included as Net Monetary Aid – as calculated by the World Bank)
* Foreign Direct Investment (Included, we use Net Foreign Direct Investment rather than inflow because developed countries are expected to have disproportionally large inflows)
* Debt forgiveness grants (current US$) (can be used to see if debt forgiveness is a more effective measure in reducing food security issues – note: need to normalize per capita)
* Net ODA received per capita (current US$) (Official Development Assistance per capita)

Other

* Population, total (required in order to normalize any aid expressed as a total per country)
* Country GDP (Included as GPD per capita)
* Rainfall (water resources indicator added: Improved water source (% of population with access) note data starts at year 1990)
* Arable Land (included as Arable land (% of land area) – careful when using this data because there is an overall trend of increasing % arable land for the world, which indicates there are some underlying causes, probably technological, that actually increase average % arable land) Also included Agricultural irrigated land (% of total agricultural land) as another indicator. Other choices were % permanent crop land and

Agricultural land (% of land area) but both these data sets have a step change in 1991 which raises concerns on how this data was obtained.

* Access to electricity (added)

Analysis:

Q1: Is AID directed at the right place?

Q2: Does awareness of issues in AID providing countries impact volume of AID and or effectiveness:

-Sweep Twitter, Fb etc for mention of food and country vs location

-Sweep News main new agencies for articles on same

-Google Keyword search vs location

Q3: What type of AID (Governmental AID, Food AID, NGO funds, Loans, External Investments) seems to have most impact?

Q4. Does local economic parameters (GDP, etc) have a larger impact than external AID?

Q5: Is it even about money? Or is it more due to other factors compare with data on arable land, water resources, etc.

Possible Data Sources:

* OECD Data
* World Bank other developmental bank data (Used World Bank as it aggregates from multiple sources i.e. WHO, OECD, Regional Banks)
* Gates Foundation other private foundation