* Other contacts
  + Jessica was responsible for a lot of the GAIN stuff and understands it well but is not involved in maintaining it, should talk to someone else about the current state of it, such as updates etc, Jessica’s knowledge ends around 2017
    - She has a person for us to reach out to, forwarding info to Leanna
  + Some students in the UK were looking specifically at Africa’s vulnerability that had a refugee component to it, should ask them their strategy etc, jessica is forwarding leanna the proj
* What lead to this ND-GAIN project, what was the motivation
  + The notion of adaptation was evolving at the time
    - For example, definition and quantification of adaptation changes in IPCC reports
  + We want to know about vulnerability of a country, composed of two things:
    - Exposure
      * Magnitude of effect of climate change
    - Sensitivity
      * Particular pathway of effect is important
    - How do we separate and quantify these notions to make a better quantification and definition of adaptability?
  + “Adaptive capacity”
    - A term historically not well articulated, how much can you adapt to climate change struggles, how ready are you to respond
  + Nd gain initially made for investors, aid agencies directing resources, companies establishing new enterprises around the world
    - For multinationals to think about relative risk of different settings
    - And for countries to be able to advocate on their behalf to attract investment
  + Unpacking notions of adaptability such as adaptive capacity or vulnerability
* What has the research been used for/by?
  + Pushed to corporate multinationals originally
    - Press releases, etc
  + The point of rankings is to track how particular countries are changing, telling the story of changes, quantifying reasons of changes in rankings
    - ND released press releases focusing on inferences from data, especially time series
  + Some student projects with motivations like ours
    - Jessica had a post doc who compared gain data to international migration flows, showed migration reduced vulnerability
      * Showed interesting trends of people moving against the grain, or in circles of similar vulnerability settings when they were trapped, etc
      * Grecequet, M., J. DeWaard, J. J. Hellmann, and G. Abel. 2017. Climate vulnerability and human migration in global perspective. Sustainability 9: 720. PDF.
      * <https://www.niussp.org/environment-and-development/migration-reduces-climate-risk-many-not-allla-migration-reduit-le-risque-climatique-mais-pas-pour-tous/>
  + Jessica’s colleague she can connect us to who compared gain to “natural capital”
    - Did some country level analysis with “ecosystem service” data
    - Comparing vulnerability to natural assets
    - Natural capital = forests, biodiversity, a property a country posses, an asset that is the natural resources
    - <http://environment.umn.edu/staff/nfamara-k-dampha/>
  + Any particular region of focus making ND GAIN?
    - There is a lot of variation in quality of data between countries
    - Only used data collated globally and gathered by reputable source
      * However, still could be unreliable
    - Never got the chance to implement a measure of data quality, too difficult
    - Frequency of reporting is another issue
      * Different countries release data at different times
    - Basically, we need to keep an eye out and look at things like this to inspect quality wherever we focus
    - No clear regions with more confidence that come to her mind
    - Data comes at country level, which can generalize a lot and lose information for larger countries
      * Felt that nd gain was more useful in smaller countries, or ones where economy/geography was more uniform
    - With natural disasters specifically, how localized are the effects? Does it extend to country level?
  + Given more time/resources, what would you do?
    - Finer resolution, data within countries
    - Data quality issue mentioned earlier
      * Even just highlighting higher/lower quality data, could result in pressure for countries to report higher quality data
    - At conferences, there are things going on gain could help with
      * Adaptation tracking – how do you track success of international aid investments
      * Loss and damage – major topic of meetings in egypt, wether climate agreement would incorporate obligation of countries that caused climate change to pay countries that suffered from it, straight up payment for damages. How do you decide eligibility, who is most harmed and responsible? Gain could help make metrics for this
      * Check out Martina paper above, important to predict climate refugees. Right now the way we handle international refugees is a disaster, not up to the task of increases due to climate change. How could we anticipate them, make helpful policy changes to help, etc
  + Mitigating risk of countries closing their borders in reaction to this project
    - Loss and damage: countries don't want to pay. Therefor, it is in their interest to increase adaptability of places that may be the source of migrants. Countries responsible for climate change will incur costs either from the refugees themselves, or by costs from loss and damages in various agreements later, so either way they have a motivation to increase readiness of less advantaged countries.
  + Technical questions
    - What are the delta csv versions?
      * Jessica doesnt know, might have to do with normalization to make things comparable, refer to technical document
    - For how missing data is handled,
      * Refer to technical document
  + Final thoughts: All models are wrong, some are useful
    - This dataset has useful information, but under a microscope there are flaws. Use a healthy degree of skepticism. Ask ourselves throughout, can we confirm and test any trends we think we see etc
    - Keep in mind problems we run into, point out in results ways data could be improved, what else would be useful, this sort of info will be useful for future work in this area or to motivate improvements in data collection