FutureArcticLives - WP1

Seminar series –

Preliminary results

Martin Reinhardt Nielsen
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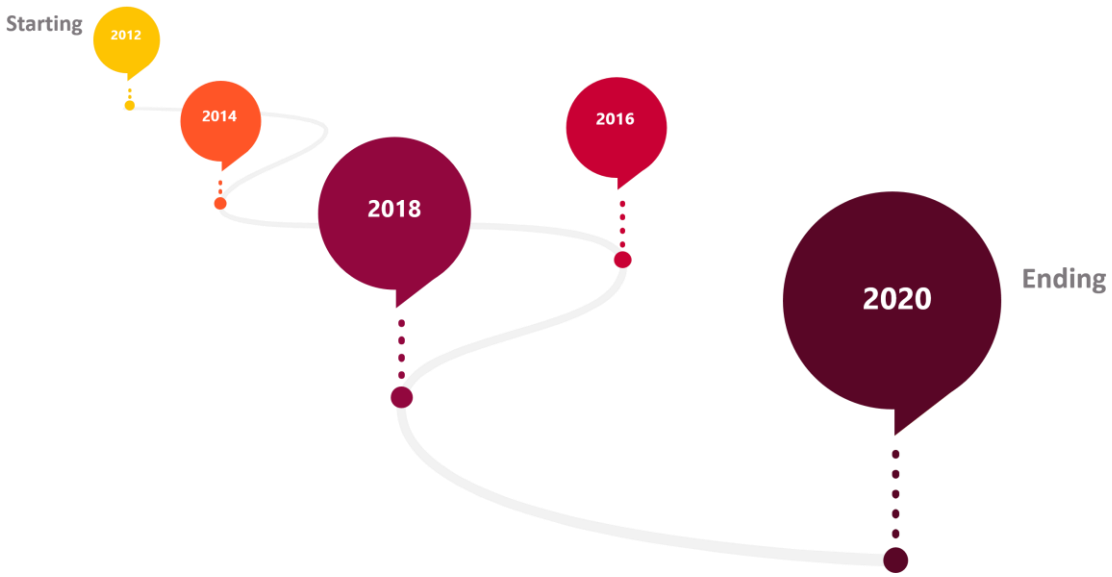
KØBENHAVNS UNIVERSITET

FutureArcticLives

The data



Family

All families with a member with a registered license as occupational or recreational hunter or trading. Includes location and a limited set of sociodemographic variables

Income

Income in five categories on an annual basis for each individual

Trade

Transactions in game and fish on a monthly basis recorded in kg or numbers depending on species for each individual

Catch

Catch of mammals and birds on a monthly basis recorded as numbers caught by each individual

The process

The sample
8.000 - 12.000 individuals

The core sample identified based on having a hunters license or trading fish or game excluding offshore large scale trawler operators

Families defined as people living together. Includes variables on age, gender, education and location

Add the family members
20.000 – 25.000 individuals

Include family member income
Four categories

Income is obtained from the tax authorities and includes salary, property, social transfers and pensions

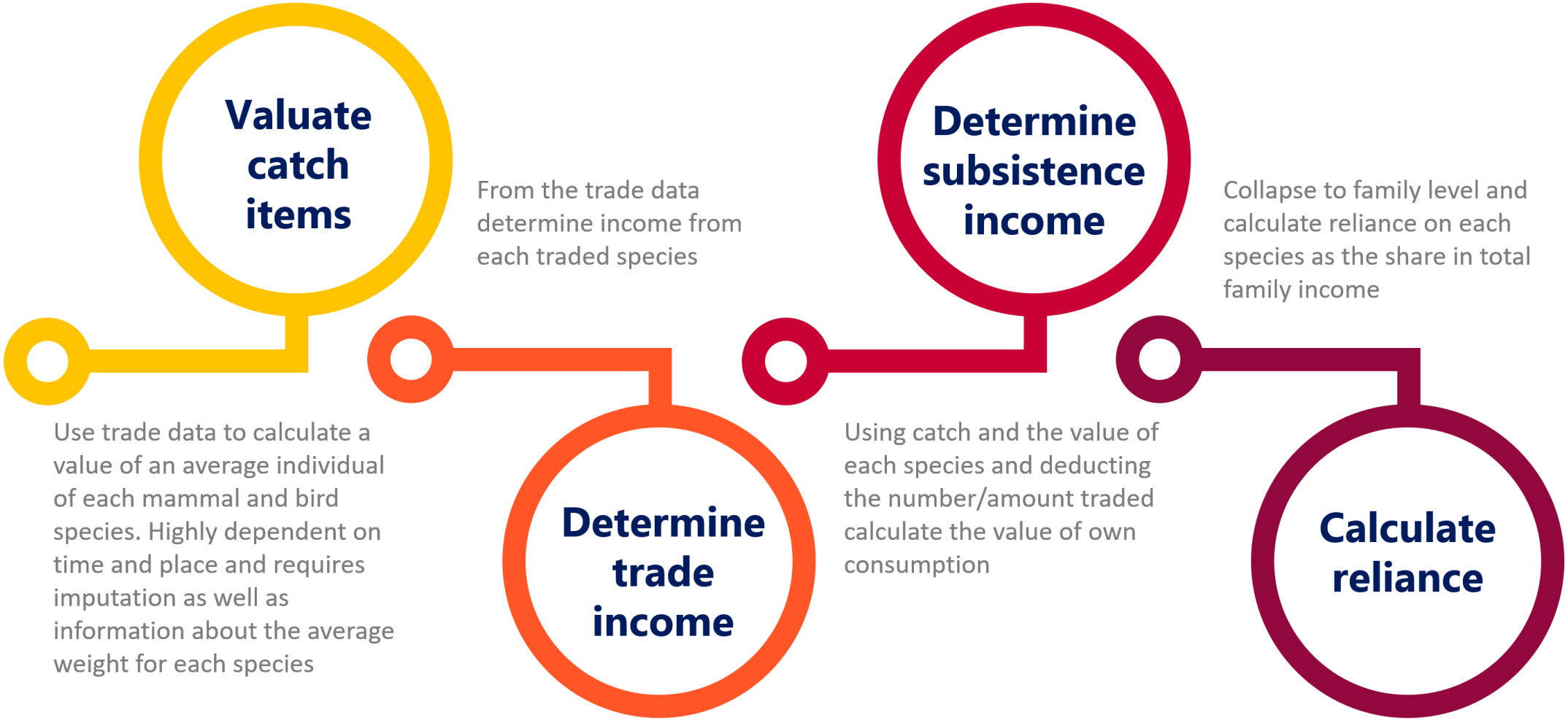
All hunters reports their catch of mammals and birds through Piniarneq on a monthly basis as a number caught

Add catch
49 species
~100.000 observations

Include trade
21 species of fish and 49 species of mammals and birds

Trade recorded at trade locations in terms of amounts/numbers and price

The calculations



Challenges

Underreporting

Extent of underreporting is unclear

Greenland Statistics

Major delays in delivering data and delivering flawed data

Catch sharing

Larger species are recorded caught by one individuals but are shared between several hunters – in addition to traditional sharing practices

Missing prices

Imputation required

Subsistence use

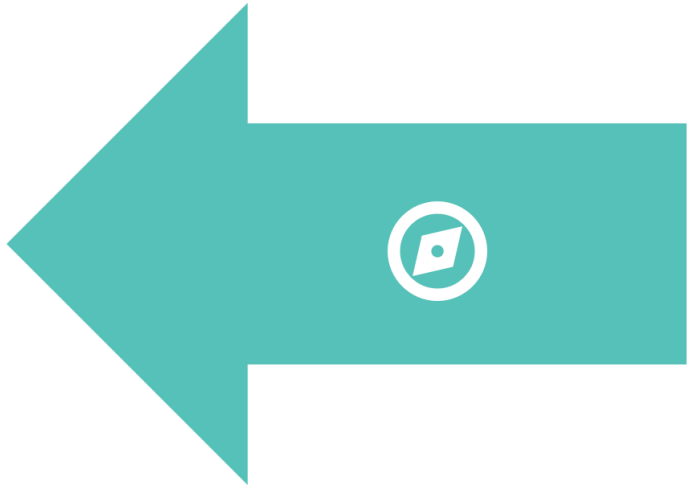
Fish catch is not recorded in Piniarneq or elsewhere unless sold at trade locations

Preliminary results

Missing

Trade data and hence prices on mammals and birds

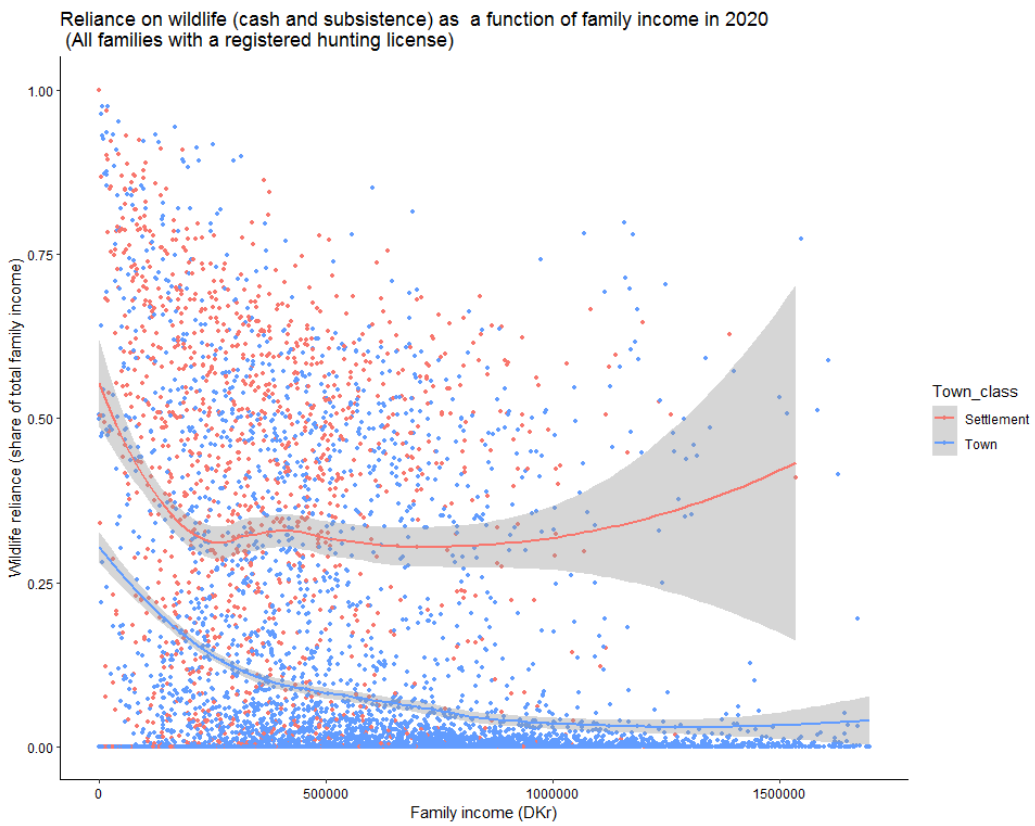
Used available prices from a significant trade evaluation report from 2007 – inflation corrected



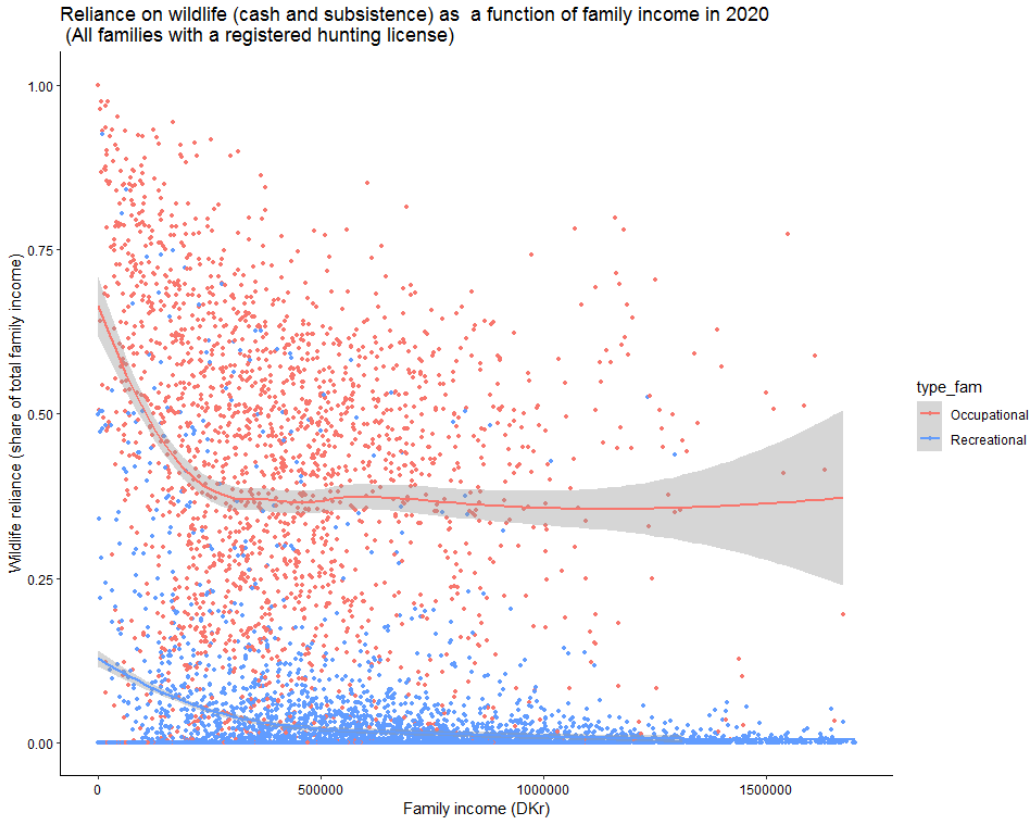
Adaptations

Reliance as a function of other income

By settlement type

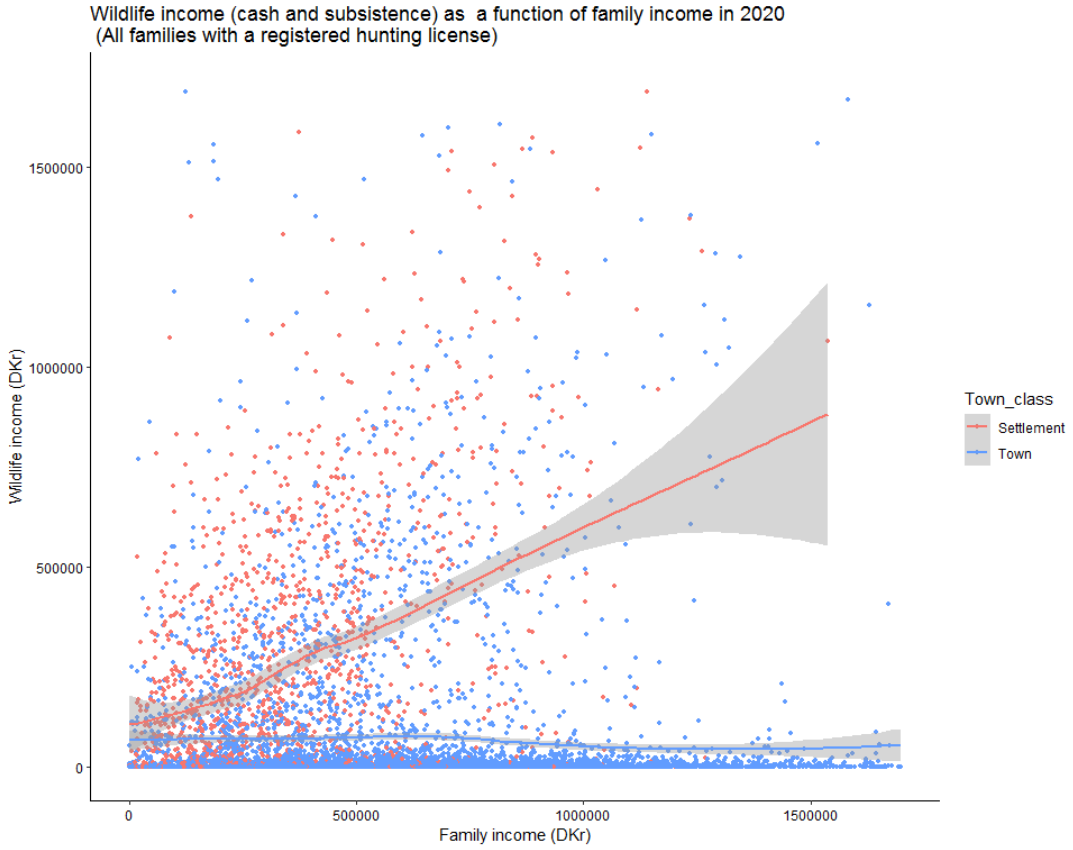


By hunter type

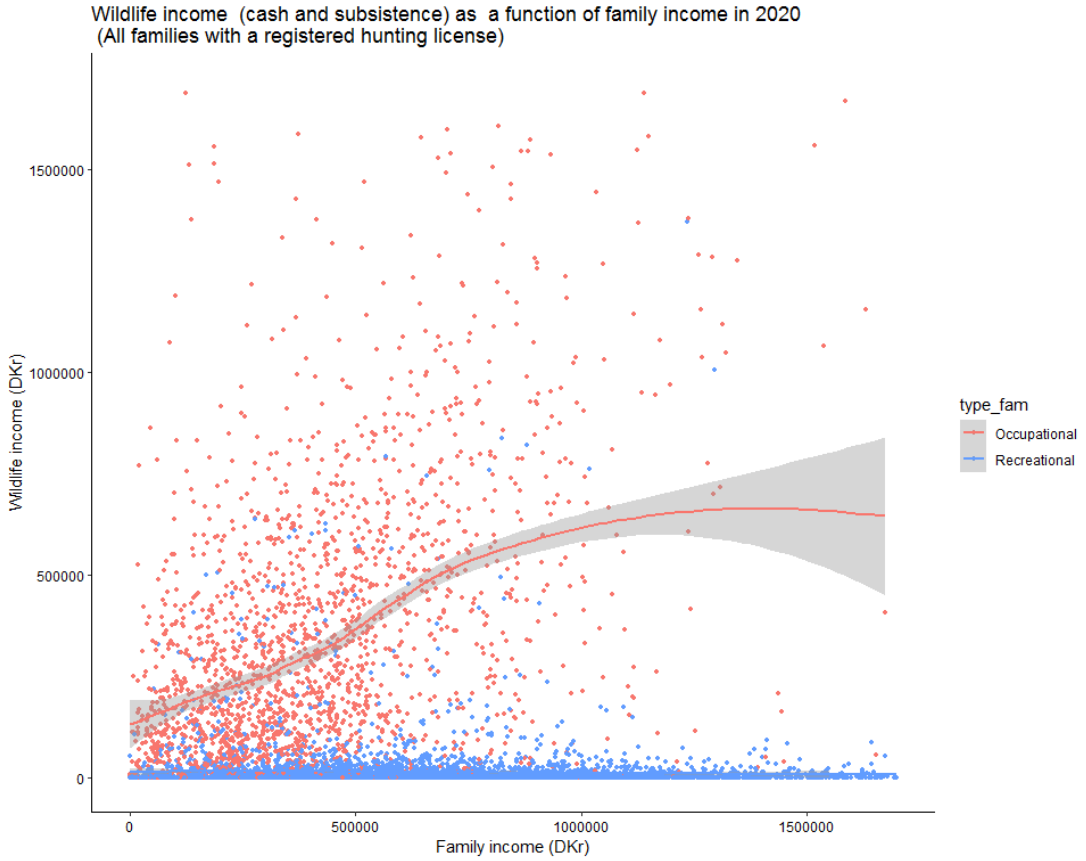


Absolute wildlife income as a function of other income

By settlement type

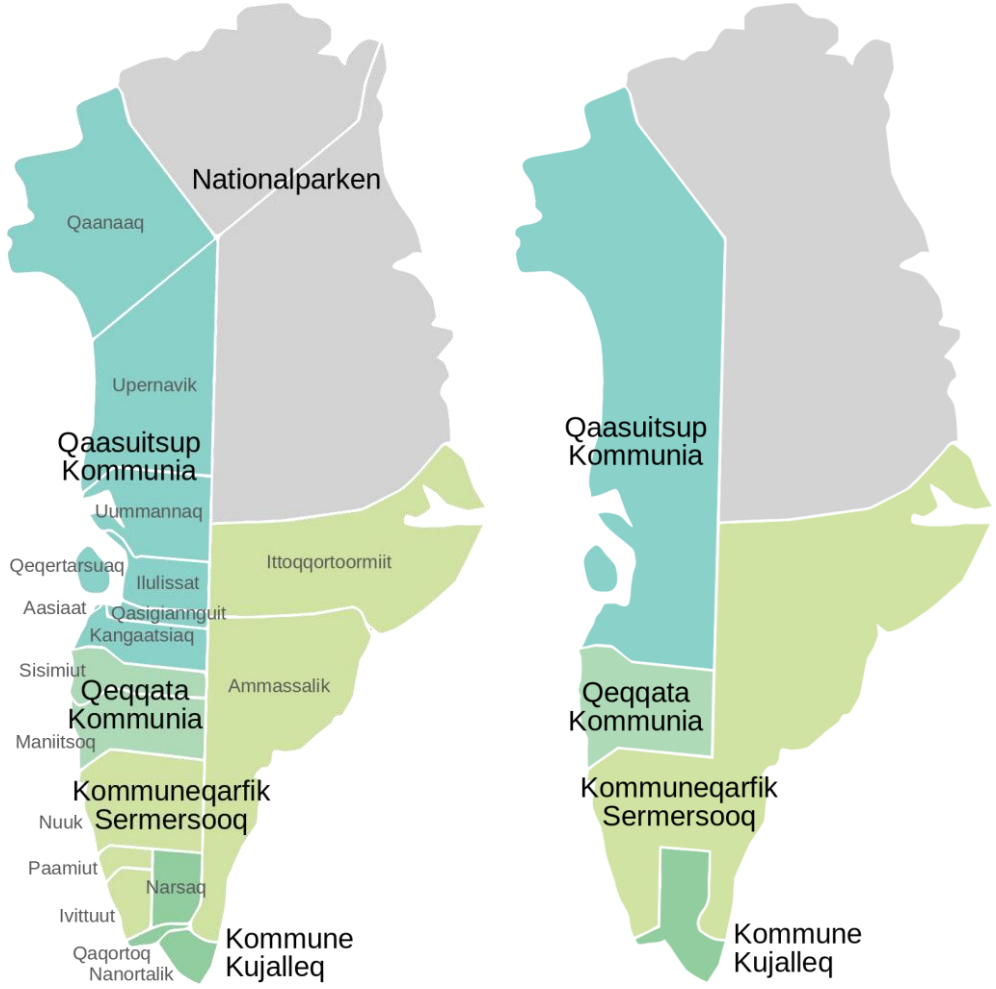


By hunter type

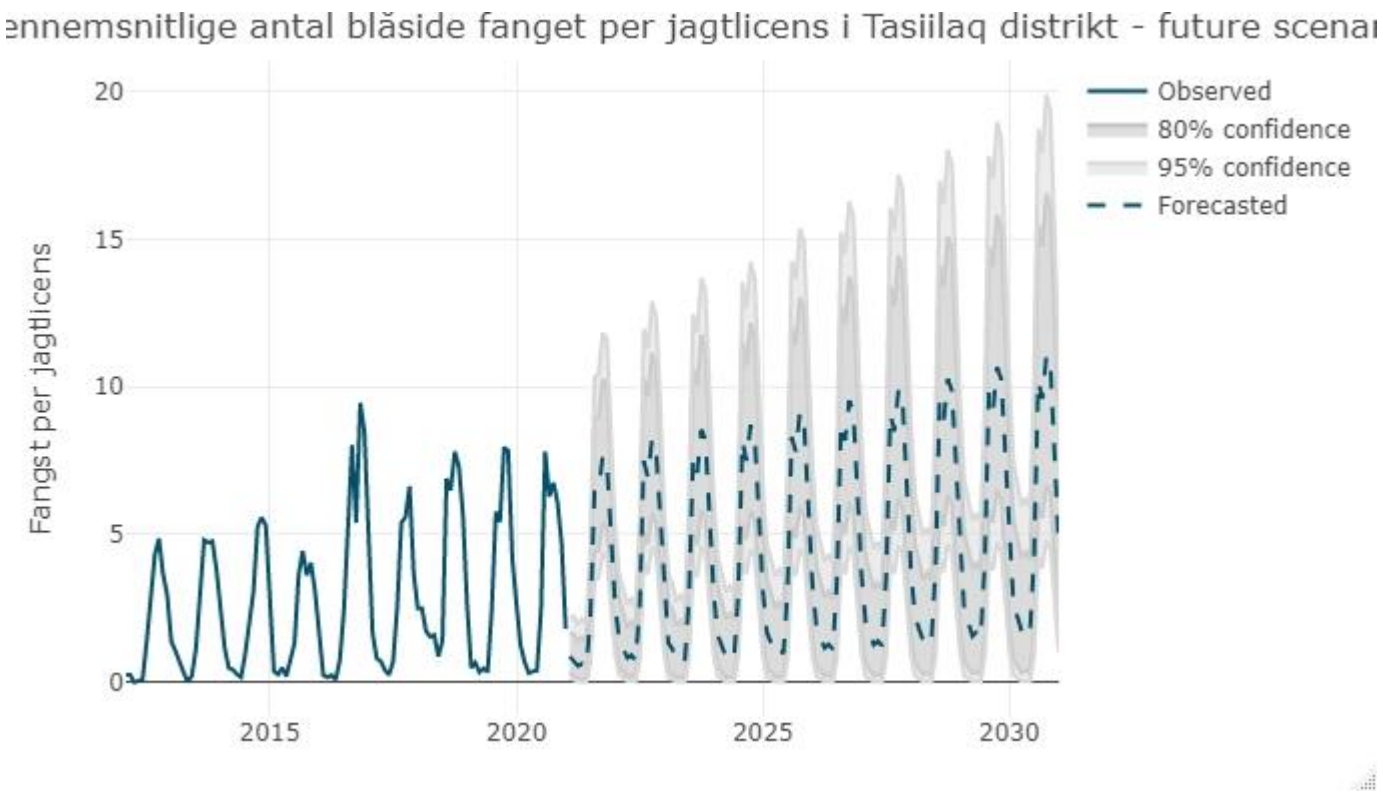


Next – after receiving the correct data from GS

- Explore geographical patterns –
  - Dynamic choropleth
  - Reliance in a global context
    - Importance of wild meat in the global south
    - Adding non hunter households
- Evaluate latent hunter types
- Model relationship with climate parameters and between species
- Model relationship with age and education
  - The life history of human foraging: Cross cultural and individual variation



Blåside - Harp seals (*Pagophilus groenlandicus*)



Gennemsnitlige fangst per fanger				
Årlige gennemsnit 2012-2020	Total 2020	Scenario 2030	Ændring i forhold til 2012-2020	Ændring i forhold til 2020
33,428	38,914	68,309	104%	76%

Workshops in East Greenland April 19-28th

- Obtain input to design plausible and relevant scenarios for the development of the sector
  - Including possible interactions between species
- Obtain missing prices for individual species
- Estimate (roughly) own consumption of fish
- Evaluate extent of sharing and the distribution of catch between multiple participating hunters
- Enquire about underreporting and estimate extent (as far as possible)

Questions and suggestions?