Data User Workshop – Natural Resource Extraction & Poverty

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Natural resource extraction

- Households use common properties such as forests, grasslands, and lakes to collect, hunt and log fruits, herbs, vegetables, animals, fish, and wood

Why?

a) To save money on products which they otherwise would have to buy on the market
b) To cope with shocks (e.g. if a flood washes away part of your harvest)
c) To increase income by selling these products on the market

- According to Angelsen et al. (2014) these products contribute ca. 20% to total household income

Natural resource extraction – why problematic?

1. Climate change, biodiversity loss and degradation

   If extraction is not done sustainably this increases negative impacts of climate change and degradation

2. Extraction is labour intensive while income gains are low

   Other income-generating activities gain higher incomes. If households use labour to extract these are not able to get a higher income via other activities.

→ Extraction is considered as backward and inferior activitiy

Natural resource extraction and poverty

So, why keep people extracting natural resources?

- Not educated enough to pursue other income-generating activities
- Not enough assets to pursue other income-generating activities
- Structurally disadvantaged (ethnic minority, female, old)
- There is no or not enough demand for labour in other areas

→ Poor people extract because they have no alternative

(Or do they have no alternative because they are poor?)

What about the rich people?

- Rich people extract natural resources to sell these products on the market
- Poor people extract to supplement food and to save money

- Rich people extract more in absolute terms

→ Poor people are more dependent on natural resources than rich(er) people

How to measure natural resource extraction?

1. Determine whether households extract natural resources
   → Binary variable 0 if they do not extract and 1 if they do

2. Determine household income from natural resource extraction

3. Determine the share of total household income coming from natural resources
   → measure of dependence on natural resources

Measuring Poverty

1. Income poverty
   (Carter and Barrett 2006)

2. Foster-Greer-Thorbecke indices
   (Foster, Greer, and Thorbecke 1984)

3. Multidimensional poverty indices (MPI)
   (Sen and Anand 1997; Alkire and Santos 2014)

Income poverty

- Determine poverty line (usually per capita and day)

- Create a binary variable indicating whether a household is poor (=1) or not (=0)
  - → household income per capita and day is below poverty line → poor
  - → household income per capita and day is above poverty line → not poor

Coding of poverty and natural resource extraction

→ Stata