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SESSION 8 Land and Soils

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Land degradation and poverty

- Global assessments of land degradation indicate that that it is worsening in some regions and increasingly linked to food insecurity, vulnerability to climate change, and poverty.
- This raises concerns over attaining the SDG for global poverty reduction.
 - Any impacts of land degradation on food security will affect mainly the poor, as well as leave them more vulnerable to climate change.
 - As the world's poor are increasingly rural and young, the impacts are likely to persist over several generations.
- *Current gap*: Lack of global and regional assessments of the extent and incidence of poverty among affected rural populations, especially on degrading agricultural land.

Increasing scale of the problem

- In 2010, there were 1.3 billion people worldwide located on degrading agricultural land (DAL).
- Over 1.2 billion were found in developing countries, around 32% of the rural population.
 - This share ranged from 13% in Latin America & the Caribbean to 49% in East Asia & Pacific.
- Over 2000-2010, the population on DAL increased by 11% worldwide, and nearly 12% in developing countries.
- *Key question*: Is a higher share of rural population on DAL associated with more widespread poverty?

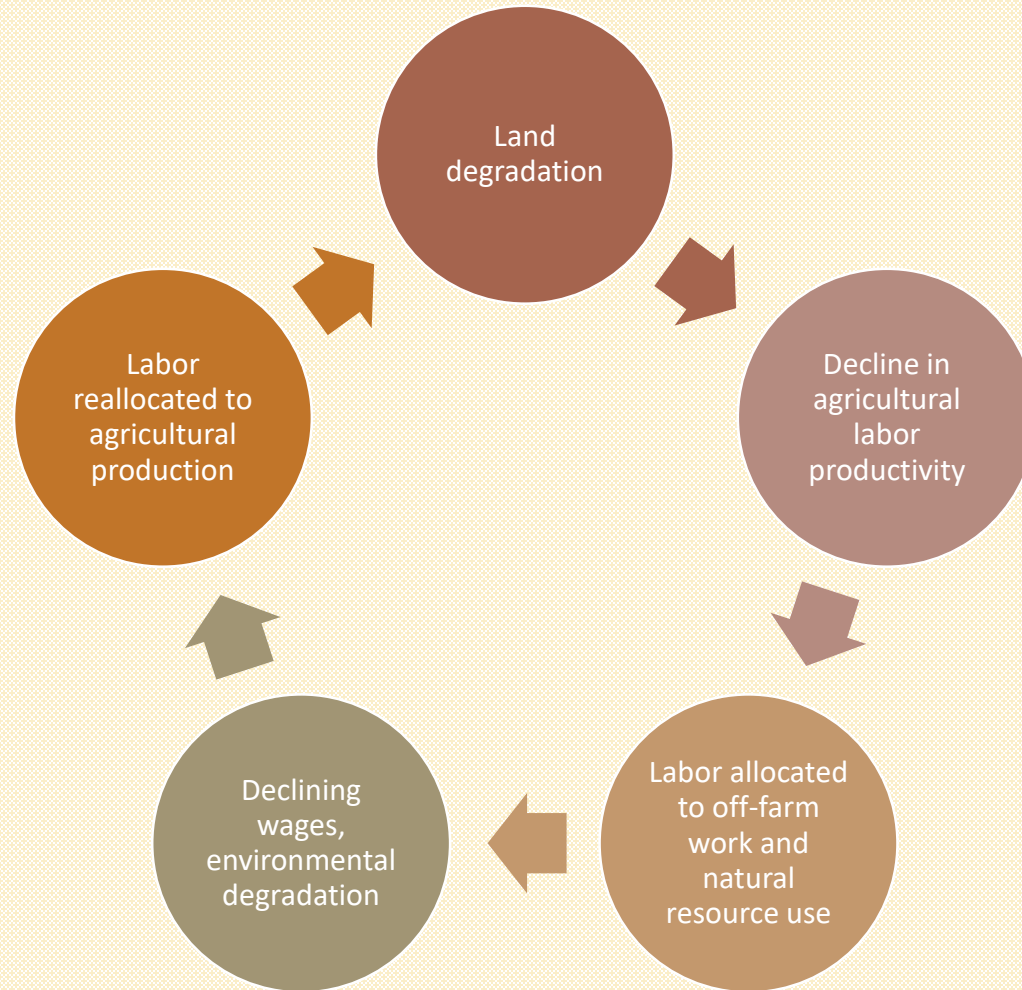
Source: Barbier, E.B. & Hochard, J.P. Does land degradation increase poverty in developing countries? PLoS ONE 11, e0152973. doi:10.1371/journal.pone.0152973 (2016)

Direct vs indirect impacts on poverty

- We analyze:
 - Whether the share of rural population on DAL in 2000 affects changes in the rate of poverty from 2000 to 2012 in 83 developing countries.
 - Whether this influence on poverty is direct, or whether it occurs through altering the poverty-reducing impact of economic growth.
- No evidence that more people on DAL leads to increased poverty, but there is a statistically significant indirect link.
 - A growing share of rural populations on DAL appears to diminish the poverty-reducing effects of economic growth in developing countries.
- *Explanation:* The income-generating benefits of growth may bypass poor households coping with land degradation, especially in remote locations with limited market access.

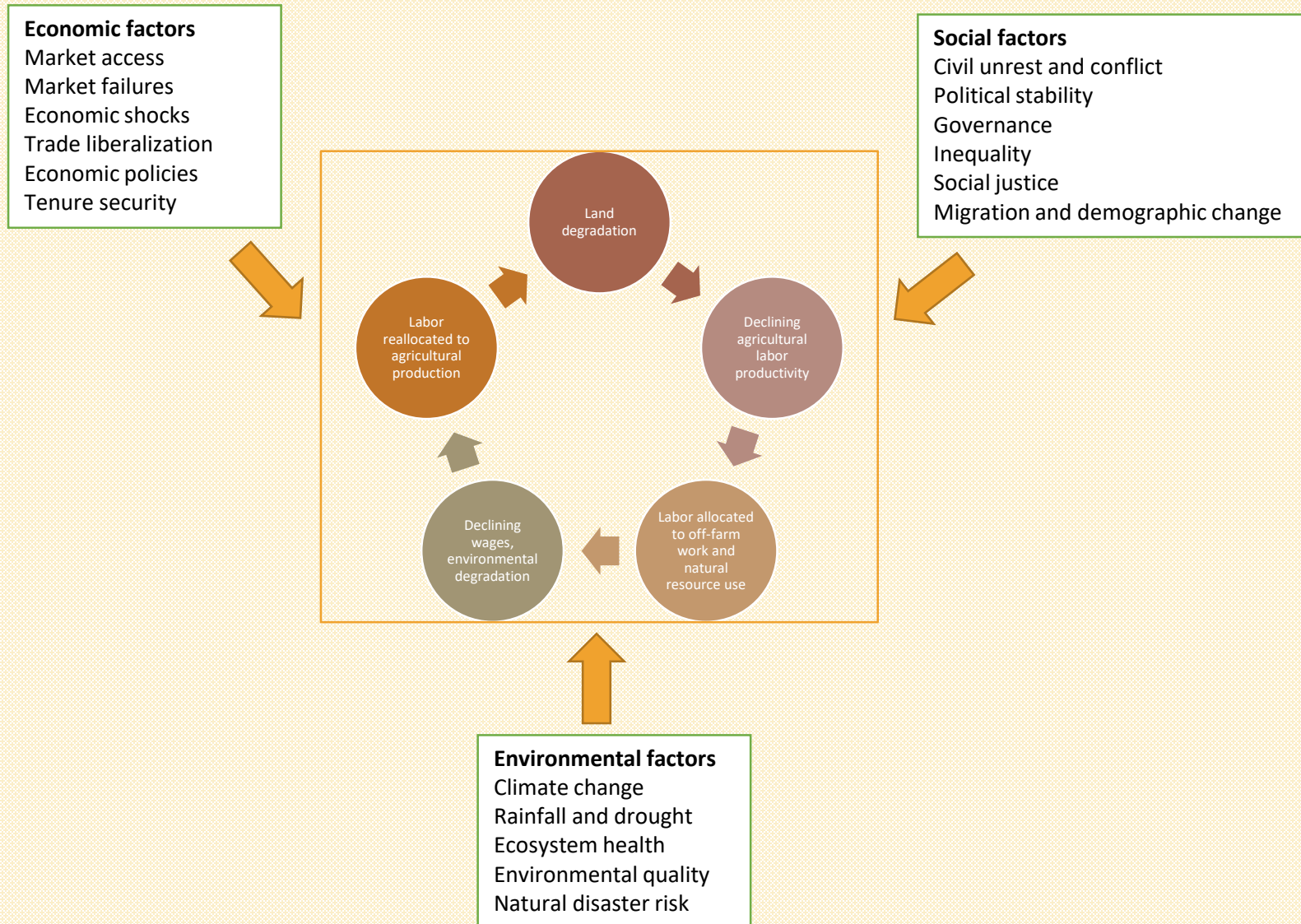
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The Potential Downward Spiral of Land Degradation and Poverty



A potential downward spiral in land degradation and poverty may occur for some rural households. Although initially a household experiencing land degradation may allocate more labor to outside employment and natural resource use, declining wages and environmental degradation may force the household to absorb the labor back into agriculture, worsening land degradation. Source: Barbier, E.B. and J.P. Hochard. The impacts of climate change on the poor in disadvantaged regions *Review of Environmental Economics and Policy* 12, 26-47 (2018).

Conditioning Factors and the Land Degradation-Poverty Nexus



A number of economics, social and environmental factors are key conditions in influencing whether or not rural households descend into a potential downward spiral of land degradation and poverty. Multiple factors often interact to influence this process.

Final remarks

- More studies are needed of the complex relationship between land degradation and poverty, at all scales.
- May be conditioned by a number of economic, environmental and social factors that influence how much economy-wide growth improves the livelihoods of the rural poor or helps them overcome the consequences of persistent land degradation.
- Land degradation should be given a global priority that requires policy solutions tailored to the specific needs and affected regions of developing countries, and be viewed just as fundamental to alleviating poverty as to the goal of attaining zero net degraded land.