

Climate Change and Migration

COURSE DESCRIPTION

1. Introduction (16.9.2025)

programme, data sources, readings, internet journal databases. Topics of student presentations, conditions for successful completion of the course.

2. Environment, Climate and Migration - conceptual introduction (23.9.2025)

Theoretical concepts, typology of environmental migrants, definitions. Environmental refugees or migrants? Impacts of environmental change, natural disasters and climate extremes on population on regional and global level. Environmental security, natural sources and impacts on population dynamics.

Homework 1: Why people move? (presentation 23.9.)

3. Recent Immigration flows to Europe (30.9.2025)

Migration history and Europe in modern times. Causes of recent immigration to Europe from the Middle East and Africa. Trend statistics and dynamics. Impact of migration on EU countries. Role of Italy in the processes.

Readings 1: (deadline 26.9. at 13:00)

Kelley, C.P. et al. (2013): Climate change in the Fertile Crescent and implications of the recent Syrian drought. *PNAS*, 112 (11): 3241–3246. <https://doi.org/10.1073/pnas.1421533112>

Answer the following questions:

1. What are the main impacts of drought on the local population?
2. What are the trends and frequencies of climate variability?
3. What is your opinion on this text?

4+5. Migration and climate change in Bangladesh (14+21.10.2025)

Climate change impacts on South Asian population, sea level rise, salinisation, heat waves, hurricanes, floods, etc. Resilience of local residents, migration strategy as adaptation?

Seminar: Control Day 1 (14.10.2025)

Readings 2: (deadline 17.10. at 13:00)

Best, K., Gilligan, J. & Mallick, B. (2025). Economic inequality is a crucial determinant of observed patterns of environmental migration. *Commun Earth Environ.* 6, 196. <https://doi.org/10.1038/s43247-025-02177-5>

Answer the following questions:

1. Are Bangladeshi population migrating due to environmental changes?
2. What other factors play a role in migration decisions?
3. What is your opinion on the paper?

6. Climate Migration or Adaptation? The dilemma of low-lying island residents (Maldives) (4.11.2025)

The literature and agency reports often identify low-lying islands as the regions most affected by the impacts of climate change, with their inhabitants as climate migrants (refugees) who will inevitably have to move from their homes.

Readings 3: (deadline 31.10. at 13:00)

Stojanov, R.; et al. (2017): Local perceptions of climate change impacts and migration patterns in Malé, Maldives. *The Geographical Journal*, 183(4): 370–385. <https://doi.org/10.1111/geoj.12177>

Answer the following questions:

1. What are the advantages and disadvantages of questionnaires methods with locals?
2. What are the main climate change impacts and consequences for Maldives population?
3. Do people want to migrate because of sea level rise? And why?
4. What is your opinion on the paper?

7. Environmental change, cultural context and population in sub-Saharan Africa (11.11.2025)

Impacts of climate change on sub-Saharan Africa. Local resilience. The adaptation measures and the influence of cultural factors. Case study North-East Kenya.

Readings 4: (deadline 7.11 at 13:00)

Silvestri, S., et al. (2012). Climate change perception and adaptation of agro-pastoral communities in Kenya. *Reg Environ Change*, 12, 791–802. <https://doi.org/10.1007/s10113-012-0293-6>

Answer the following questions:

1. What are the impacts of climate change in the region under study?
2. What are the possible adaptation measures and what are their main advantages and disadvantages?
3. What is your opinion on the paper?

8. Climate-related extremes, local resilience and population adaptation strategies (18.11.2025)

Different approaches and trends in adaptation strategies. Resilience of local residents and their perception of environmental risks and hazards. Migration as adaptation livelihood strategy. Low-lying islands.

Homework 2: Why do some people leave climate change affected areas while others stay? (presentation 18.11.)

9. Climate migration prediction (25.11.2025)

Climate change will gradually influence the economic, social, and political realities of a place, which will in turn influence how and where people migrate. Planning for the wide spectrum of future climate-related mobility is a key challenge facing development planners and policy makers. What are the current and future possibilities for predicting climate migration?

Readings 5: (deadline 21.11. at 13:00)

Schewel, K., Dickerson, S., Madson, B., & Nagle Alverio, G. (2024). How well can we predict climate migration? A review of forecasting models. *Frontiers in Climate*, 5, 1189125. <https://doi.org/10.3389/fclim.2023.1189125>

Answer the following questions:

1. What are the key characteristics, strengths, and weaknesses of current modeling approaches?
2. What are the future possibilities for predicting?
3. What is your opinion on the paper?

Seminar: Control Day 2 (25.11.2025)

10. Regional and Household Adaptation Strategies to Climate Extremes in Europe (2.12.2025)

Climate extremes, floods and droughts in Europe and their trends. Adaptation strategies of households. Case study of small municipalities.

Readings 6: (deadline 28.11. at 13:00)

Stojanov, R. et al. (2016): Household Adaptation Strategies to Climate Extremes Impacts and Population Dynamics: Case Study from the Czech Republic. In: Milan, A. et al. (eds.): *Migration, Risk Management and Climate Change: Evidence and Policy Responses*. Springer, pp. 87-103. DOI 10.1007/978-3-319-42922-9_5 ISBN 978-3-319-42920-5

Answer the following questions:

1. How authors demonstrate increasing intensity and frequency of climate extreme impacts?
2. How people adapt on floods in the affected area?
3. Why migration is not appropriate adaptation strategy for locals?
4. What is your opinion on the paper?

11. Students presentations (9.12.2025)

12. Evaluation of the course (16.12.2025)