



**THE-GLOW**

Transdisciplinary Higher Education  
for Global Wellbeing

# Gender and Climate Change Intersections: A Transdisciplinary Approach

June 2024



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## Course description

In an era defined by unprecedented environmental challenges and societal complexities, it has become increasingly evident that conventional, siloed approaches are inadequate for grappling with the multifaceted nature of climate change and its profound impacts on human societies. Not only do gender inequalities contribute to climate change, its impacts also affect gender and health in intricate ways. Women often bear the brunt of climate-induced hardships, yet at the same time are frequently excluded from decision-making processes and resource allocation. However, gender and climate change are interrelated in varying ways, also affecting men and individuals with different sexual orientations and gender identity expressions (SOGIE). The intricate web of interactions between climate change, gender dynamics, health outcomes, and environmental integrity demands a multifaceted approach that integrates insights from diverse disciplines such as environmental science, public health, sociology, economics, and gender studies. By breaking down disciplinary barriers, we can uncover synergies, identify blind spots, and develop innovative solutions that address the root causes of climate change while promoting social justice and human well-being.

## Course objective

Throughout this course, we will focus on analyzing the interactions between climate change, gender/agriculture, environment, and health. The analysis will be based on analytical frameworks, case studies, observations and interviews that deepen understanding of these complex relationships, at the same time providing input for potential transdisciplinary interventions. In this course, conventional monodisciplinary approaches will be challenged, stimulating and cultivating critical and innovative thinking skills in order to confront the serious problem of climate change in all its dimensions.

## Learning Outcomes

Students on completion of the course would be able to

1. Understand the interplay between climate change, gender, environment, agriculture, and health
2. Apply transdisciplinary gender analysis approaches (concepts, frameworks) to climate change at the intersection of environment, agriculture and health using real world case studies
3. Critically assess & rethink current disciplinary paradigms concerning gender and climate change, and be an effective agent of (transformative) change
4. Develop and communicate recommendations for transdisciplinary interventions/strategies based on the outcomes of the analysis

## Examination and credits

Successful completion of this course yields 2 erts. Examination components are:

- Mandatory attendance for all course components, compensatory assignment in case of missed attendance (Pass/Fail)
- Case presentations week 1, summative group assessment, 20% of the final grade (see Appendix A)
- Field visit presentations, summative group assessment, 50% of final grade (see Appendix B)
- Individual reflection report, summative individual assessment, 30% of final grade (see Appendix C)

## Course instructors:

Dr. Philippe Doneys (AIT), Dr. Luca Falqui (Thammasat), Dr. Anchana Thancharoen (Kasetsart), Dr. Daeyun Kim (Kasetsart)

Support with course development and logistics: Dr. Gonnie Klabbers (Maastricht), Dr. Li Liang (Thammasat), Dr. Maureen Dar lang (evaluation)(Heidelberg), Mr. Saitawut Yutthaworakool (AIT).

## Course Moodle page

<https://moodle.ait.asia/course/view.php?id=907>

## Class schedule

All classes are held at room E206, SERD building, AIT. You can download the AIT map here: [https://ait.ac.th/wp-content/uploads/2023/10/aitmap\\_campus2023.pdf](https://ait.ac.th/wp-content/uploads/2023/10/aitmap_campus2023.pdf) (building 26).

The class schedule will be as follows:

- June 4, 13:00-16:00
- June 5, 13:00-15:00 (plus 1.5 hour of pre-recorded lecture)
- June 6, 10:00-12:00, 13:00-15:00
- June 7, 10:00-12:00, 13:00-16:30
- June 8, Field Trip, 08:00-20:00
- June 10, 13:00-15:00 (group work with faculty present)
- June 11, 13:00-15:00 (group work with faculty present)
- June 12, 13:00-17:30
- June 13, 13:00-14:30
- June 14, no class, individual reflection report

## Course program

- **4 June - Course Introduction**

### ***Introduction to the course***

1hr, Dr. Philippe Doney

In the in-class introduction, the topic will be briefly introduced, an overview will be given over the course, including the field visits, assignments, course completion requirements, and study load

### ***Lecture 1***

2 hrs, Dr. Philippe Doney

The first (in-class) lecture will be a general lecture on gender and climate change, including a basic introduction of the meaning and use of gender in social sciences, and how gender matters in climate change.

### ***Self study***

3 hrs

Students will watch pre-recorded lecture 2, by Dr. Luca Falqui (for lecture 3, on the next day). This lecture covers gender and climate change intersections, building on lecture 1, by focusing on the gender-mediated impacts of, and response to, climate change in three areas: agriculture, environment and health, highlighting specific sectoral impacts and responses, while underlining how these impacts/responses are interconnected and intersecting. A flipped classroom approach was set up to have the students familiarize themselves with a more in depth understanding of gender and climate change intersections.

Required readings (all required readings should be read before the class):

- UNDP (2016), *Overview of linkages between gender and climate change*, UNDP.
- Irene Monroe, *Hurricane Katrina's Struggling Black Gay Community*, Huffington Post, Sep 2, 2015.
- CNN, *How the climate crisis fuels gender inequality*, November 30, 2023.

Optional readings:

- Pham, P., Doney, P. And Doane, D. (2016). Changing Livelihoods, Gender Roles and Gender Hierarchies: the Impact of Climate, Regulatory and Social Changes on Women and Men in a Co Tu Community in Vietnam, *Women Studies International Forum*, Volume 54, 48–56.
- Gaard, G. (2015). Ecofeminism and climate change. *Women's Studies International Forum* 49, 20–33.
- Bush, S., & Clayton, A. (2023). Facing Change: Gender and Climate Change Attitudes Worldwide. *American Political Science Review*, 117(2), 591-608.  
doi:10.1017/S0003055422000752
- Laungaramsri, P. (2017). Whither gender in the environmental movement? In P. Hirsch (Ed.), *Routledge Handbook of the Environment in Southeast Asia* (pp. 470–482). Routledge.
- UNDP (2010) Gender, climate change and community-based adaptation, UNDP.

- **5 June - Gender and CC intersections**

**Pre-recorded lecture**

1.5 hr, Dr. Luca Falqui

<https://drive.google.com/drive/u/1/folders/1fi5Nwn1XfCS8dKvazijvD6PPsiUfcPe>

**Group discussion**

2 hrs, Facilitated by Dr Philippe Doneys and Dr. Luca Falqui

In groups of max 6 students, discussion will take place based on the readings and pre-recorded lecture. The guiding questions for the students, as well as the discussion points students came up with themselves will serve as input for the discussion. This session will be moderated by faculty, and will last up to 2 hrs.

**Self-study**

3 hrs

Students prepare for day 3 by reading the materials listed on Day 3.

Guiding questions that help students understand the different frameworks used for gender analysis presented in the readings, in preparation of the group discussion on day 3 are:

- What frameworks have been described in the literature?
- What are similarities or differences between the frameworks?

Required readings:

- Doneys, P. and Resurreccion, B. P. (2022), Gendered Pathways of Democracy to Sustainability, in Bornemann, Basil, Knappe, Henrike and Nanz, Patrizia (eds) *Routledge Handbook of Democracy and Sustainability*, Abingdon: Routledge.
- Sophia Huyer, Ana Maria Loboguerrero, Nitya Chanana, Olga Spellman (2024), From gender gaps to gender-transformative climate-smart agriculture, *Current Opinion in Environmental Sustainability*, 67:101415.
- Katri Kivioja, Montira Pongsiri and Alyson Brody - UNDP (2023) *Synergies in jointly addressing climate change, health equity and gender equality*, UNDP.

Reading-based group discussion questions:

- How is women's level of power and decision-making regarding the environment an issue for climate change mitigation and adaptation?
- How can climate change impact gender equality through direct and indirect health effects?
- How is Climate Smart Agriculture gender blind?
- How does climate change affect women's role and participation in agriculture?
- What are the co-benefits that gender-responsive policies could bring to health equality and climate action?
- How are governance systems creating disadvantages for women and SOGIE groups with respect to climate change?

Optional readings:

- Desai, Z., & Zhang, Y. (2021). Climate change and women's health: A scoping review. *GeoHealth*, 5.

- Kim van Daalen, Laura Jung, Roopa Dhatt, Alexandra L Phelan (2020). Climate change and gender-based health disparities, *www.thelancet.com/planetary-health*, Vol 4 February.
- Edwige Marty, Alcade C. Segnon, Sabine Homann-Kee Tui, Sabrina Trautman, Sophia Huyer, Laura Cramer & Everisto Mapedza (2023) Enabling gender and social inclusion in climate and agriculture policy and planning through foresight processes: assessing challenges and leverage points, *Climate Policy*, DOI: 10.1080/14693062.2023.2268042

## • 6 June - Gender and CC analytical frameworks

### **Group discussion**

2 hrs,

facilitated by Dr. Philippe Doneys and Dr. Luca Falqui

In a plenary 2-hour group discussion facilitated by faculty, students discuss the different frameworks according to the guiding questions mentioned above.

### **Recap in-class lecture about analytical frameworks**

1.5 hrs, by Dr. Philippe Doneys and Dr. Luca Falqui

In this lecture, an overview will be provided of different analytical frameworks to be used on gender and CC, their focus and how they are used.

### **Case study presentation instructions (for June 7)**

Instructions: 30 min

Student preparation (self-study): 2-3 hours

See further instructions in Appendix A.

### Required readings:

- Han, J. Y.-C., Pross, C., Agarwal, R., & Torre, A. R. (2022). *State of Gender Equality and Climate Change in ASEAN*. ASEAN, UN Women. (chapter 1)
- Minh Hai, V. and Smyth. I. (2012), *The Disaster Crunch Model: Guidelines for a Gendered Approach*, OXFAM GB
- Zeenah Haddad and Elena Villalobos Prats - WHO (2012) *Mainstreaming gender in health adaptation to climate change programmes*, WHO.
- Elmhirst, R. (2015). Feminist political ecology. In T. Perrault, G. Bridge, & J. McCarthy (Eds.), *The Routledge Handbook of Political Ecology* (pp. 519-530). Routledge.

### Optional readings:

- Dania, M. and Inpin, W. (2021), Gender Vulnerability and PAR Model Assessment in the Post-Disaster Period: A Case Study from the 2014 Chiang Rai Earthquake, Thailand, *Journal of Mekong Societies*, Vol.17 No.1 January–April. pp. 68-88
- Gupta, J., Scholtens, J., Perch, L. et al. Re-imagining the driver–pressure–state–impact–response framework from an equity and inclusive development perspective. *Sustain Sci* 15, 503–520 (2020). <https://doi.org/10.1007/s11625-019-00708-6>,
- Parikh, J (2007), *Gender and Climate Change Framework for Analysis, Policy & Action*, UNDP India and IRADe.

- **7 June - Analytical framework-based case study presentations and field trip instructions**

***Case study presentations***

2 hrs

Students present their case-based analyses in groups of 5-6 students, in a plenary presentation session. Maximum duration of the presentations is 10 minutes per group, followed by 5 mins of Q&A. After all groups have presented, a plenary discussion will follow on the take-aways of the presentations. The session will be moderated by faculty.

***Field trip assignment***

30 min

In this plenary session, the group assignment associated with the field visit will be explained to the students. The detailed instructions can be found in Appendix A.

***Instructions for field visit***

1 hr by Dr. Anchana, pre-recorded.

Given the afternoon activities, students can watch the video and read the documents below before coming to class that day. Students will be provided with instructions regarding the upcoming field visit on Saturday.

Background information on Bang Kachao will be provided.

***Developing observation and interview guide***

1 hr

Students, in the groups they are assigned to, based on intersectional themes discussed so far,, develop an observation guide for observing gender, CC, health, farming and environment connections in the site activities, as well as an interview guide (consisting of max 5 questions) for interviewing the community members about the interplay between gender, climate, environment, agriculture and health.

***Self-study***

2 hrs

Students can look up specifics of the site visits using the following materials.

***Brief introduction about Bang Kachao community:***

- Responsible Tourism at Bank Kachao, <https://www.youtube.com/watch?v=b5kAsn3LeTY>
- Sauwalak Kittiprapas, Apichai Sunchindah & Ridhi Saluja, 'Green lung' of Bang Kachao holds much promise, BangkokPost.
- Wengki Ariando, Kristijan Ljubas, Michael Muturi, Siri Luther, Bang Kachao Urban Forest, Chulalongkorn University, November 2017.
- O'Kane, D. (2022). The Ecological and Social Effects of Gentrification and Urbanisation in Thailand's Lower Chao Phraya Delta (Dissertation), Malmö University.

#### **Stingless bee farming**

- Sutudto, P., Vijitsrikamol, K., & Duangmal, K. (2020). Impacts of Corporate Social Responsibility Activities on Kung Bang Kachao Communities, Samut Prakan Province. NPRU (in Thai).

#### **Fireflies**

- Nym Korakot Punlopruksa, On a lightbug safari with the man trying to save them, Coconuts Bangkok, Mar 23, 2021.
- Silen Sparks, Firefly Magic in SE Asia, 2019.
- Sartsanga, C., Swatdipong, A., & Sriboonlert, A. (2018). Distribution of the firefly genus Pteroptyx Olivier and a new record of Pteroptyx asymmetria Ballantyne (Coleoptera: Lampyridae: Luciolinae) in Thailand. The Coleopterists Bulletin, 72(1), 171-183.

- **8 June - Field trip, Bang Kachao**

#### ***Field trip schedule (see Appendix D)***

- **10 June - Field trip assignment analysis**

#### ***Data analysis and presentation preparation***

Students, in their respective groups, use their observations and interviews, to analyze the transdisciplinary intersections between health, farming and the environment and how those are influenced by gender and climate change, using analytical frameworks covered in week 1. Each group formulates 2 discussion points and uses collected evidence to build their analysis. Based on their findings, the groups should propose recommendations for both science and practice. Faculty who will be present for consultation: Dr. Philippe Doneys, Dr. Luca Falqui, Dr. Daeyun Kim). 1pm-3pm.

- **11 June - Field trip presentation preparation**

#### ***Presentation preparation***

Students finalize their work on their analysis and then focus on developing their presentation, including the format to be used. Faculty who will be present for consultation: Dr. Philippe Doneys and Dr. Luca Falqui, Dr. Anchana Thancharoen and Dr. Daeyun Kim. 1-3 pm .

- **12 June - Field trip presentations and feedback**

#### ***Field visit presentations***

2 hrs

This session will be moderated by faculty of all three universities (Dr. Philippe, Dr. Luca, Dr. Anchana, Dr. Chris).



The student groups will present their findings, their discussion points and recommendations in a presentation of max 20 mins per group (15 mins presentation, 5 mins for Q&A). Presentation mode may vary by choice of the students. Originality in presentation will yield bonus points in the assessment. The presentations, including how questions are addressed, will be assessed summatively by the faculty. The final grade will make up 50% of the final course grade.

- **13 June - Course evaluation**

***Course evaluation***

1.5 hrs, (facilitated by Dr. Philippe Doney, Dr. Luca Falqui, Dr. Daeyun Kim)

This in-class session will be dedicated to evaluating the course. First, students are asked to complete an evaluation questionnaire. After this, a qualitative evaluation with the students will follow. This session will be moderated by faculty.

- **14 June - Individual reflection report (No Class)**

***Guidelines for the individual reflection report (see Appendix B)***



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## **Appendix A**

### ***Case study presentation instructions (June 7)***

Student preparation (self-study): 2-3 hours

You have learned about the different frameworks that can be used for gender analysis of climate change, including impacts on the environment, agriculture and health. For the group presentation you work in groups of 5-6 students (groups will be formed by the instructors). You prepare a 10-minute presentation of a case based on a choice of analytical frameworks (one of a combination of) already discussed. Cases will be chosen by the groups (can be a short or longer term event, change or crisis, i.e. disasters, protracted crises). Your presentation can be supported by any type of media you prefer, as long as they support the content delivery.

The group presentations, including how the analysis is done and presented, will be assessed summatively by the faculty members. The final grade will make up 20% of the final course grade. Faculty will also provide you with feedback.

## Appendix B

### Assignment group presentations based on fieldtrip (June 12)

Group work is done in groups of 5-6 students. Groups are created by faculty. Your observation and interview guide serve as input for data collection. During the field visit you can take notes of what you see and hear for the purpose of analysis. You may be allowed to audio or video record certain activities or interviews, but before doing so, please always check on beforehand with the faculty present. You can choose one of the analytical frameworks discussed in week 1 to loosely guide your analysis, but next to gender roles and possible gender differentials in the community market, stingless bee farming and firefly eco-tourism, you also need to analyse intersections between agriculture, environment, health and gender. Guiding questions for the analysis may be:

- Which stakeholders are involved in the activities you have observed? Tip: do not focus only on the stakeholders you have seen yourself, ask for or think about stakeholders involved behind the scenes, who benefits, who enables, but also who may be disadvantaged, who makes the decisions?
- What gender roles/differences have you observed or heard mention?
- What needs do all activities you have observed address?
- How are those needs related to farming, environment and health? Are they beneficial or not? For all stakeholders involved?
- To what extent are the activities sustainable, in terms of climate change?
- What intersections between health, environment, agriculture, climate change and gender did you observe?
- Do you have recommendations for optimising gender equality related to farming, environment and health?

As in the group presentations in week 1, your presentation can be supported by any type of media you prefer, as long as they support the content delivery. Originality will be rewarded with bonus points. You may think about a video, a podcast, a news item, it may be interactive, etc, as long as you present the findings of your analysis to the audience.

The group presentations, including how questions are addressed, will be assessed summatively by the faculty. The final grade will make up 50% of the final course grade.

Peer feedback is part of this session. Each group will be paired with one of the other groups. Faculty will make the pairs. The paired group members will be asked to individually write their feedback on a feedback form. After the plenary session with all presentations, they have 10 mins to discuss the main feedback points, before one of the students from each group will be appointed to share the feedback to the group that presented. The receiving group can use the feedback in their individual reflection reports. The peer feedback form can be found below.



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### Peer feedback form

Group no:

Names group members:

Providing feedback for group no:

Names group members:

In answering the questions below, be as specific as possible. If for instance you feel that one of the strengths was that the analysis was thorough, you also need to specify what was illustrative of that thoroughness.

*In what way was this group's presentation similar to your group's presentation (on content, not mode of delivery)?*

*In what way was this group's presentation different from your group's presentation (on content, not mode of delivery)?*

*What were particular strengths of this group's presentation?*

*What do you think could have been improved in this group's presentation?*

*What have you learned about transdisciplinarity that you did not know or realise before, after this group's presentation?*

*In light of this presentation, is there anything you would have done different in your analysis and why?*



## Appendix C

### Guidelines individual reflection report

At the end of the course, you are asked to write an individual reflection report on your learning process to become a transdisciplinary professional. This report should discuss your own critical reflection upon your learning process towards becoming a transdisciplinary professional, and your contribution to all the learning activities and assignments.

You may use the questions below as starting points for your reflection:

- What have you learned about transdisciplinarity?
- In what way did the learning activities in this course contribute to your learning process?
- How have you contributed to the duo and group work? How did that help in progressing through these assignments? Looking back, how could you have done better?
- What, in terms of transdisciplinarity, do you want to learn in the future course(s)?
- The report should be 2 pages in length. The report makes up 30% of the final course grade. Deadline for handing in the report is the last day of the course, Friday June 14, at 5 pm.

### Appendix D (Field Trip Schedule)

Time	Activities
8:00	Depart from AIT (16 students + 2 teachers = 18), TU (12+3 = 15) (students and teachers), KU (1+2 = 3) (total 36)
8:30	Pick-up students and teachers from KU (6)
9:30	Arrive at floating market (Bang Kachao)
10:00	Orientation at floating market
11:00	Student activities (observe local market sellers and customers)
12:00	Student activities (interview local market sellers and customers)
12:30	Group photo and move to stingless bee farm
13:00	Lunch
13:30	Orientation at stingless bee farm (introductory presentation by community enterprise)
14:00	Observe stingless bee hive, and tasting honey product
15:00	Student activities (interview local farmers - stingless bee farm, and Q&A)
16:00	Group discussion (remark local community observations at floating market and stingless bee farm)
17:00	Group photo and rest
17:30	Dinner
18:00	Move to boat dock
18:30	Depart to Aj. Prayad's house (local community)
19:00	Orientation at Aj. Prayad's house (local community) (introductory presentation by Aj. Anchana and Aj. Prayad)
19:30	Student activities (observe fireflies habitats, and ecosystems, and Q&A)
20:00	Group photo, return back to the boat dock (firefly watch)
20:30	Final group photo and move to KU
21:00	Arrive at KU and move to TU, AIT
22:00	Arrive at TU