



PhD study trip Environmental Policy Group 2018

China: Beijing, Nanjing, Shanghai



May 2018

Environmental Policy Group, Wageningen UR

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Contents

Introduction	1
Background	1
Theme of the study trip: Urban Nexus in China.....	1
Objectives	3
Organization	3
Sponsors	4
Outline.....	4
Beijing.....	5
Thursday May 10: NGO Day.....	5
Friday May 11: Renmin University	9
Saturday May 12: Xinfadi Market.....	12
Monday May 14: Tsinghua University	15
Tuesday May 15: Chinese Academy of Science.....	19
Nanjing	21
Wednesday May 16: Nanjing Forest University	21
Thursday May 17: Nanjing Agricultural University.....	23
Shanghai	26
Friday May 18: China Academy of Urban Planning and Design.....	26
Monday 21: Shanghai University.....	29
Conclusion.....	32
Annex 1: Participants.....	34
Annex 2: Schedule.....	35

Introduction

BACKGROUND

PhD students from the Environmental Policy Group have previously organised study trips to Sweden and Denmark in 2012, to Belgium in 2014 and to Germany and Switzerland in 2016. We have found that this was a very valuable opportunity to share ideas on theories, methodological approaches and research experiences with peers, policy makers and researchers with similar research questions and from different backgrounds and nationalities. For the 2018 study trip, the PhD students set the ambition high by selecting China as our destination and by developing a programme under the theme of the urban nexus.

THEME OF THE STUDY TRIP: URBAN NEXUS IN CHINA

The world is on the brink of a new era of unprecedented governance challenges related to expanding urbanization, food production and energy demand. Current resource management strategies are technocratic and top-down in nature. These strategies are insufficient if sustainable production and consumption of energy, water and food is to be achieved [1]. This problem is particularly pressing in urbanizing China, where currently more than half of the population resides in urban areas [2] and domestic consumption of water and energy [3,4] is rising dramatically [5], with disastrous effects on air quality, particularly in cities [6]. The disconnect between production and consumption constitutes both a material and social challenge for sustainability.

The past five years in China has seen major institutional reforms across many domains and has now entered a New Era. China is now perhaps the world's largest laboratory of political, economic, social and legal reforms, in its attempt to combine the "invisible hand" of the market with the "visible hand" of the party-state. Ongoing reforms are trying to remove institutional barriers and move in the direction of more effective environmental governance. Not only polluting industries, but also governmental organizations, are under increasing pressure to properly enforce policy and to be accountable. An empowered civil society and judiciary would be important game changers. The recently concluded Congress further clarified consumer-inclusive pathways in the New Era, which considers an important momentum for improving environmental governability in China.

In order to address these urgent environmental problems and opportunities to work towards successful sustainable governance of cities, the theoretical concept of the 'urban nexus' is promising. Nexus-thinking emerged as a response to policy fragmentation and the lack of coordination between the management of several vital resources – energy, food and water in particular - which face increasing demand and are inextricably linked [7,8]. To illustrate this interdependence: growing populations demand more food, and the global food production and supply chain currently already accounts for 70% of all water withdrawal and 30% of energy consumption [8]. Applying the nexus approach to an urban context leads to the concept of the '*urban nexus*': integrated governance across water, food and energy sectors at the *urban* level.

The urban nexus as a concept brings together interactions between material and social elements: it concerns the *physical* resources water, food and energy, which are appropriated by *people* in and through various provision and consumption practices. This is challenging because participants need to make connections with other parts of the urban nexus beyond their own main expertise. Taking a nexus approach to effect a transition towards sustainability thus requires an interdisciplinary research program, covering both material and social flows and their interconnections. Regarding the former, research into natural resource use efficiency should be conducted. This should be complemented with research into provision and consumption practices within the sectors of water, food and energy.

Consequently, a crucial question is how to govern this urban nexus of water, energy and food in its much-needed transition towards sustainability. What institutional innovations are required, which innovative practices and which policy measures? The PhD researchers at the Environmental Policy Group (ENP) at Wageningen UR have been working intensively on governance of socio-material interactions, drawing on sociological theories like global flows and networks, as well as social practice theories. Our research concentrates on value chains and particularly on production-consumption junctions: the place where policies and practices come together. ENP's PhDs study these themes within the (nexus) fields of energy, food and water, in a number of settings including the Netherlands, China and beyond. By selecting *urban nexus* as the guiding theme of the study trip, our intention was to have a framework which both brings together the ENP PhDs who working on different topics and which a bridge with Chinese researchers and organisations who are working on urban sustainability.

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OBJECTIVES

We set the following objectives for the study visit:

- To visit Chinese institutions to learn and exchange new knowledge and experience within the theme of the urban nexus.
- To visit Chinese non-academic institutions to learn more about the science-policy interface in the Chinese context.
- To develop networks for potential future collaboration between ENP and Chinese institutions.
- To present ENP and its work to the outside world.
- To reach out to the ENP alumni network in China.
- To strengthen bonds within the ENP-PhD community.

ORGANIZATION

Our activities were mainly structured around the theme of “Urban Nexus”. Seminars, discussions and workshops have been conducted to exchange knowledge, working and research experiences around this topic. The sessions were complemented by workshops on climate change, on cities and urban governance, on sustainable consumption, and a fieldtrip visit to one of China National Parks. The urban nexus as a concept brings together interactions between material and social elements: it concerns the physical resources water, food and energy, which are appropriated by people in and through various provision and consumption practices.

To organize the events, one PhD student with experiences from past trips was taking the lead as coordinator for the entire organization process. Afterward, each participating PhD was assigned one day to create different programs jointly with selected institutions. The PhDs contacted the institutions and discusses the format of the events to ensure variety of activities that are to be conducted. The corresponding institutions are as follows:

- World Resource Institute
- World Future Council
- Renmin University
- Xinfadi Wholesale Market
- Tsinghua University
- Chinese Academy of Science
- Nanjing Forestry University
- Nanjing Agricultural University
- Chinese Academy of Urban Planning and Design
- Shanghai University

SPONSORS

We would like to express our sincere gratitude to the ENP chair group and Wageningen alumni network in China, and to the institutes and organizations who have made this trip possible by providing financial and logistic support. We would like to particularly thank LEB Foundation, Renmin University of China, Wageningen School of Social Sciences (WASS), Wageningen Institute for Environment and Climate Research (WIMEK), and the Environmental Policy Group for supporting our successful trip!

OUTLINE

The report is divided into the three cities visited, with summaries of the events held and key learning points from each day. We conclude the report with general lessons learned throughout the PhD trip.

Beijing

THURSDAY MAY 10: NGO DAY

1. General objectives of the day

The general objective of the first day in our trip was to talk with some non-profit organizations in China to take a look at how is knowledge used by practitioners to change the environmental policy. It was also an opportunity to learn how governance happens, particularly the inclusion of the civil society, in a one-party country such as China. Finally, listening from the non-profit organizations also gave us an insight on the environmental priorities in China as their work was always related to some of the most pressing environmental needs.

2. Report on contents

The day was divided in 3 professional activities, each with different non-profit members, and 1 cultural activity.

Visiting World Resource Institute (WRI) China Offices – 9.30 – 12.00

- The WRI China (<http://www.wri.org.cn/en/about>) is a think- and do-tank that does research to turn ideas into action at the nexus of environment, economic opportunity and human well-being. They work in the areas of climate, energy, water, finance and sustainable cities. The program was as follows:
- 9.30-9.35 Opening Remarks by Daizong Liu, China Director of Cities Program
- 9.35-9.55 Presentation about Wageningen University and the 2018 ENP PhD Trip by Sayel Cortes
- 9.55-10.15 Presentation by Daizong Liu (dzliu@wri.org) on Urban Development: During this presentation. Mr. Daizong Liu used a data-rich presentation to link the climate challenges of China and the world to urban development and mobility. The presentation aligns with WRI's strategy to promote sustainable mobility and Transport Oriented Development (TOD) as a way to reduce fossil fuels use (and thus emissions) in the transport sector while at the same time providing important benefits to the health, air quality, and local economy of a city.
- 10.15-10.30 Presentation by Wenyi Xi (wenyi.xi@wri.org) on the Climate Program: In her presentation, Ms Wenyi Xi presented about Climate Watch China and how they are putting information about the emissions and national determined contributions to solve climate change
- 10.30-10.45 Presentation by Jiao Wang (jwang@wri.org) on the Water Program: We learn about water availability in China, particularly about the water scarcity in the north part of China.
- 10.45-11.00 Presentation by Min Yuan (min.yuan@wri.org) on the Energy Program: We learned about the transition to renewable energy in China which includes a strong push for solar panels
- 11.00-12.00 Discussions and Q&A. Wrap-up and closing remarks



Meeting with World Future Council (WFC) – 14.30-17.00

We met with representatives of the World Future Council (WFC) at Hong Zhi Coffee for an informal discussion about the role of NGOs in shaping environmental policy in China. The WFC promotes environmental policies by researching, identifying and spreading sustainable policies to solve worldwide problems. The program went as follows

- 14.30-14.40 Introductions
- 14.40-14.45 Opening remarks by Boping Chen (boping.chen@worldfuturecouncil.org) China Director of the World Future Council: Welcoming remarks and contextualizing the work of WFC considering the increasing interest of Chinese government in environmental issues
- 14.45-15.00 Talk of WFC's Operation and Communications Coordinator, Ms Charay Zhang: Introduced WFC in China and its role as part of a global NGO
- 15.00-15.15 Sayel Cortes introduces ENP and the PhD Trip to China
- 15.15-15.30 Ms Zoe Zhou (ying.zhou@worldfuturecouncil.org), WFC's Program and Communications Manager: Introducing some programs of WFC, particularly focusing on a program of Urban Wetland Conservation that they have been implementing together with local governments and that promote ecosystem services within cities.
- 15.30-15.45 Robin Smale talked about urban renewable energy practices in the Netherlands
- 15.45-16.00 Pamela Bachmann talked about Ecosystem Services in Chile
- 16.00-16.45 Dime for discussions and Q&A
- 16.45-17.00 Introduction about the Hong Zhi Coffee by its director: Hong Zhi Coffee was originally conceived as a space to support different NGOs. It managed to make a difference in the local NGO setting for a few years, however increasing costs and lack of funding opportunities made her decide on the future closing of the cafe.



Cultural visit to the Temple of the Sun and the park around it – 17.00-18.30

Networking dinner – 19.00-21.00

At the end of the day, we had a dinner with some non-profit representatives including Nanqing Jiang from the United Nations Environment Program (UNEP) also a WUR alumni, Zoe Zhou and Charay Zhang from WFC, and Laura/Marie Schroder a WUR alumni interning at GIZ China. The dinner gave us all time to build deeper connections and talk more informally about the realities of NGOs in China. Some interesting points were related to how UNEP works with the China government at a national level to help define an environment agenda, that then works as an umbrella for other NGOs such as WRI and WFC to work with local governments on implementing projects on the ground. This was a real look at the complexities of multilevel governance in the environment sector in China.



3. Learning outcomes & conclusions

This day offered a good way to understand the current environmental challenges in Chinese cities by talking with people from three different non-profit organizations. WRI has a strong think-tank base so it emphasizes using applied research to support policies that make changes on the ground. WFC tries to find best policies globally and to support governments to implement them, while UNEP tries to promote global agendas into national policies. Although different they all complement each other working in different elements of the environmental governance in China.

4. Tips & tricks

Always leave more time than necessary when moving with a big group.

FRIDAY MAY 11: RENMIN UNIVERSITY

1. General objectives of the day

A joint Chinese-Dutch research seminar is organised to further understand, develop, theorise and conceptualise the sustainable governance of the urban nexus. The title of the day: Sino-Dutch Seminar “Governing Urban Nexus: Theories, Methodologies and Applications” (中荷“城市环境流治理：理论，方法和应用”研讨会). The main idea was, to exchange knowledge with peers in an inspiring setting with researchers who play a key role in theorising and researching urban nexus for environmental change, something which is at the core of research at Environmental Policy Group in Wageningen and the School of Environment and Natural Resources. Researchers of ENP and Renmin share a globally-oriented research objectives and will share understanding of challenges and opportunities in the science-policy interface.

2. Report on contents

Session I: Governing urban nexus in China (chair: Dr. Lei Zhang)

- 9:30-10:00: Governing water-energy-food nexus in China (Dr. Lijin Zhong, Energy Fundation Beijing).
- 10:00- 10:30: Household energy consumption (Dr. Wenling Liu, Beijing Institute of Technology)
- 10:50-11:20: Governing nexus in Eco-tourism in China (Dr. Mingming Su, School of Environment and Natural Resources, Renmin University of China)
- 11:20-11:50: Application of Social-economic-complex eco-system theory in nexus study (Dr. Lei Zhang, School of Environment and Natural Resources, Renmin University of China)
- 11:50-12:30 Introduction of the School of Environment and Natural Resources, Renmin University of China Prof. dr. Hua Wang, Dean of School of Environment and Natural Resources, Renmin University of China



Session II: Wageningen University workshop on the urban nexus (chair: dr. Bas van Vliet)

- 13:00-13:30: The water, Energy and Food Urban Nexus: a networks and flows approach (Moises Covarrubias Perez, PhD candidate Environmental Policy Group)

- 13:30-14:00: The urban nexus in retrofitting housing in China. Frank de Feijter, PhD candidate Environmental Policy Group
- 14:00-14:45: Researching urban infrastructures (dr. Bas van Vliet)
- 15:15-16:30 Collecting the lessons of the day (Prof. dr. Simon Bush)



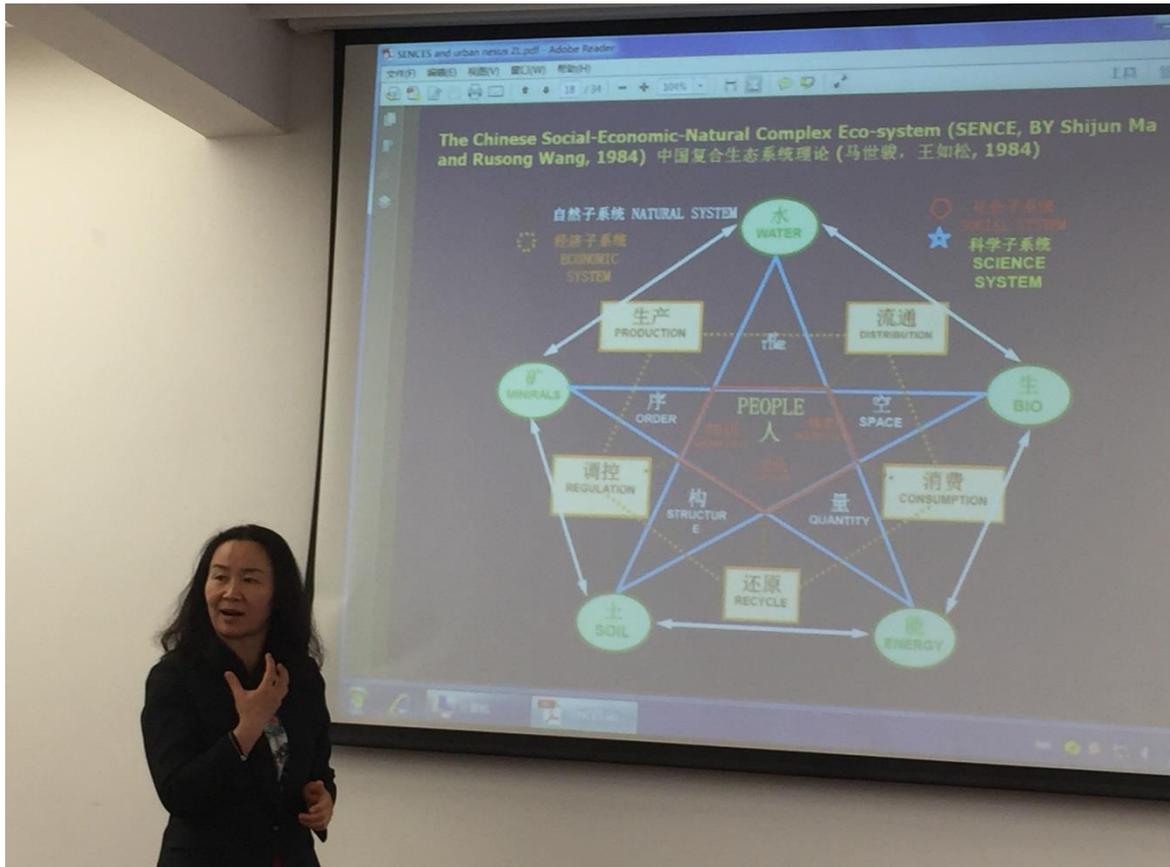
3. Learning outcomes & conclusions

The main contribution of this joint seminar lies in the knowledge exchange between Dutch and Chinese scholars on sustainably governing the urban nexus, in various disciplines ranging from environmental sciences to sociology and economics. PhD researchers and tenured staff at the Environmental Policy Group (ENP) at Wageningen UR have been working intensively on governance of socio-material interactions, drawing on sociological theories like global flows and networks, as well as social practice theories. Our research concentrates on value chains and particularly on production-consumption junctions: the place where policies and practices come together. The urban nexus approach has emerged to refer to policy and decision-making of Water, Energy and Food (WEF) in cities that aim for more sustainability. The nexus approach is a cross-sectorial and integrative perspective for the management of WEF resources with respect to their social, economic, political, material, technical, and environmental dimensions. It recognizes the intimate inter-linkages between the management of individual flows of water, energy, and food, and it looks forward to enlighten and scrutinize possible trade-offs and synergies around these resources.

We learned there is no Chinese word for 'nexus', so it is basically used as a buzzword. Also in China the contribution of the social sciences can be to make natural sciences theories more social. We became more familiar with Chinese governance theories, in the SENCES model. We were amazed by the holistic, broad and meta-physical perspective and found out we share common challenges in theoretical thinking like how to include a micro and macro-perspective, how to include socio-materiality, how to

operationalise abstract theories. The outcomes of the seminar will be applied in ongoing and new research projects engaged with the much-needed transition towards sustainability in Chinese cities. Indirectly and ultimately, this seminar also hopes to contribute to the well-being of urban dwellers, as current environmental problems in the urban nexus are increasingly impacting on the daily lives of city residents.

4. Tips & tricks



SENCES model

It is a great opportunity to reach out to PhD alumni of our department in PhD study trip to make the connections stronger building on an over 15-year research collaboration between Wageningen University and different Chinese universities and research institutes.

SATURDAY MAY 12: XINFADI MARKET

1. General objectives of the day

The theme of this day is “Bridging Wageningen urban nexus research to the Chinese context”. Leading question is how to make the connection between research and implementation in formal and informal food markets and to experience the Chinese Urban Nexus from the inside out. XinFaDi Wholesale market is in the Top-100 famous brands in China. This company is internationally known because its wholesale development, innovation and local engagement. The Xinfadi wholesale market is the largest wholesale of Beijing. This is a high-respected organisation and interesting place to visit for food distribution, mostly fruit and vegetables, as it contains different outlets of food products retailing in China. The format included a side visit to a very large impressive wholesale where we got some guidance from the Management. The overall purpose of these programs is to support the uptake of sustainability standards by governments, companies and consumers. The Xinfadi is partnering with local and national governments, private companies, publicly-held corporations and other non-profits.



2. Report on contents

We visited the XinFaDi district as part of a guided tour. Talking to the manager of the wholesale gave us the opportunity to learn more about the problems and opportunities

of feeding a megacity. We asked questions about the origin of the food and the geographical location of the food production. By having this look-and-see, we developed a sense of urgency of the driving forces of the consumers and institutions (in health, food quality, good life, price, traditional ways of living, sustainability concerns) when they buy food. Besides this, it was very nice to do some small interviews with consumers and retailers, management on the spot. The tour lasted 3 hours, where we visited the most remarkable spots, such as: informal vegetable market, aquaculture market, Russian products market. The first group are the retailers in the formal wet market who have fixed stands and fixed operation tax to the government. The second group are informal street market, handlers, who are rather mobile and do not pay taxes. Before 2009 this last group was forbidden. At the end of the walking tour, we had a 40 min. Q&A where the tour guide showed a booklet and told us a little bit about their experience, since the wholesale was started. He emphasized history, facts, figures, identity, mission and destinations.

3. Learning outcomes & conclusions

It was a nice opportunity to visit one of the iconic food wholesales in China. During the tour, it was possible to perceive that the concrete operationalization of “urban nexus” ideas does not necessarily require complex engineering or big constructions. On a local level, simple actions, such as the improvement of isolation conditions of farmers, may bring big benefits to the environment. In addition, the political willingness and the local participation, have made this area a very unique “urban food ecosystem”. It was also very interesting to get to know the management experience of the tour guides, since he was working for the company since the 90’s. Systematically comparing and ranking value chains, and making such comparisons insightful and valuable to their audience, is a delicate task sometimes involving trade-offs between accuracy and insightfulness. We have all been impressed by the size of the company, started in 1988 with 50 employees but nowadays 7000 employees with a turnover of 18 billion RMB and 10.000 trucks on a daily basis with 4,7 km². Although food management is often seen as technical solutions, objective and based on robust science, choices made in the development of labels and certificates are also based on normative, political, and practical considerations and trade-offs. Involving industry and into the ‘comparison-process’ presents another challenge to researchers and project developers who work on making food safety more transparent. Alita: *“This was very helpful in setting up my research about I experienced it as very valuable and intensive. You learn a lot in such a short time”*.

4. Tips & tricks

- A group interview session can be an effective way for people from diverse backgrounds to get introduced to a topic like food management. Careful timing is however important to make sure the session stays dynamic.
- Starting this day with local travelling at 7:00 and being sharp throughout the day was a challenge



MONDAY MAY 14: TSINGHUA UNIVERSITY

1. General objectives of the day

On this day we held joint workshop on climate change with School of Environment, Tsinghua University (THU). Founded in 1911, Tsinghua University is one of the best and most prestigious research universities in China. It has 20 schools and 57 departments covering a broad range of subjects that include science, engineering, arts and literature, social sciences, law, medicine; and offers 51 bachelor degree programs, 139 master degree programs, and 107 PhD programs. Notable alumnae include current leader Xi Jinping and former leader Hu Jintao. With this background, the objective of the workshop was to have an exchange on climate-related researches between those conducted by PhDs at Environmental Policy Group WUR and School of Environment THU.



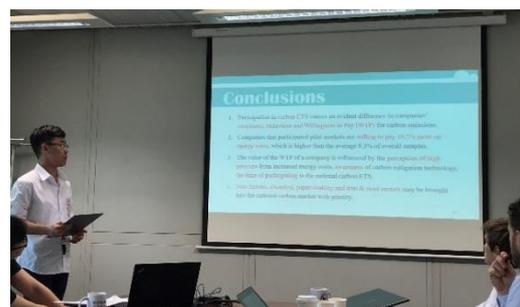
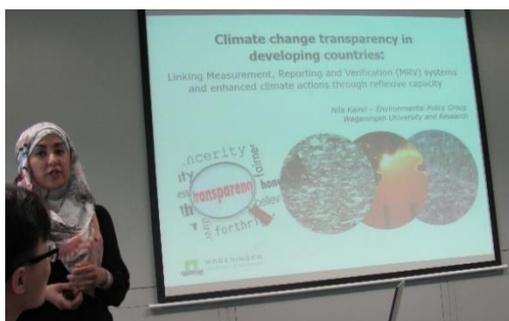
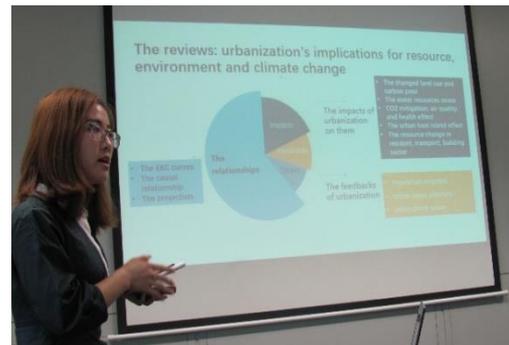
2. Report on contents

The workshop was taking format of presentations by PhDs from both institutions and some rooms for question and answer. The presentations were divided into three themes which are climate change and energy, climate policy, and climate impacts. On the fourth session we had a mock UN Framework Convention on Climate Change (UNFCCC) negotiation simulation. The event started with a welcoming speech by Professor Wenjia Cai from THU and a lecture by Professor Simon Bush from ENP WUR on Climate practices, flows, and governance.

We then began with the first session on climate change and energy, with Nie Yaoyu from THU presenting his research on bioenergy potentials in China, followed by Ding Qun on household energy consumption in China. Frank de Feijter from ENP continued with presenting his research on urban retrofitting and the effective governance of civil society and market, and then Robin Smale closed the first session with a presentation on role of householder practices in greener smart grids. Second session on climate policy was started by Zhao Yibing from THU who was presenting his research on companies' willingness to pay for carbon emissions. Next was Guo Fang's presentation on urbanization process and implications for resource, environment and climate change, followed by Chen Huadong with his research on uncertainty analysis for long-term

carbon transition in China's power sector. This second session was ended with presentation by Nila Kamil from ENP WUR about her research on multiple-level analysis on climate change transparency framework in developing countries.

In the third session we had Hui Jingxuan presenting his research on future health co-benefits in shared socio-economic pathways, followed by presentation by Li Jianli regarding impact of hurricane disaster on economic system. The next presenter was Jillian Student whose research was about dynamic vulnerability toward climate change on the Caribbean tourism industry, and lastly we had Sayel Cortes explaining his research on Transnational City Networks in the climate regime.



As mentioned, for the fourth session, we had an exciting international climate negotiation simulation. Several countries and group of countries who play significant roles in the UNFCCC rounds were chosen as the participants in the negotiation, and participants (both PhDs and Professors) were assigned as representatives of these countries. The countries are United States of America, Australia, Saudi Arabia, Nicaragua, China, India, France, EU, and Fiji. Participants were given reversed role (Chinese counterparts were acting as US, EU, France and Australia; while Dutch

participants were representing countries from the global south), conflicting positions and stances toward issues like mitigation, transparency, and climate finance, of which they must reach an agreement at the end. Although the negotiation did not result in an agreed outcome, we had an exciting time with all participants embracing the role-play and negotiating enthusiastically! The workshop was then ended with a closing speech by Professor Can Wang, the Head of Tsinghua School of Environment.



Negotiation simulation

3. Learning outcomes & conclusions

It was a really valuable opportunity to have this joint workshop with one of the best universities in China. Although the theme of the day was not directly linked to the grand theme of urban nexus, we touched upon the aspects of water, energy and food individually through lens of climate change. The exchange of presentations has led to thought-provoking questions directed to PhDs from both institutions, since we had similar issues of interest but looking at them with different perspective and using different theories and methodologies. It was also interesting to notice that most of the research conducted by our Chinese colleagues is of quantitative design, as opposed to ours which are mostly qualitative. Finally on the negotiation simulation we acknowledged the difficulties faced in an international process, and that has led to decades-long negotiation rounds.

4. Tips & tricks

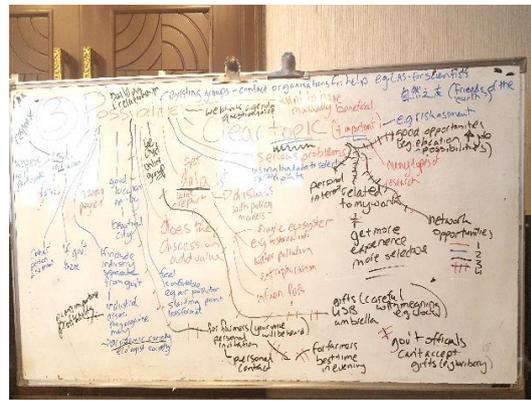
In a workshop with series of presentations and a negotiation simulation like this, it is crucial to keep the time as scheduled. Still, flexibility is needed to accommodate fruitful discussions. We were faced by an unexpected challenging situation that was that air circulation in the room was pretty bad, what with the warm temperature, closed windows and non-functioning air conditioner. This has affected performance and concentration of some of participants. Perhaps it is better to inform the host institution in advance regarding to avoid this situation from happening in the future.



TUESDAY MAY 15: CHINESE ACADEMY OF SCIENCE

1. General objectives of the day

On Tuesday May 15th, we organized a workshop with the intention to explore what research methods work in the Chinese context and how we can utilise this knowledge in future joint research proposals. In our research proposals we include several qualitative methods of research to answer typical research questions that start with “how” and “why”. Those methods of research include semi-structured interviews (with academic experts, governmental policy makers, business, NGO’s but also citizens, consumers, users); participant observation, focus groups, shadowing. In addition, in our joint proposals with China we tend to include those methods without much consultations with our Chinese partners, leading to considerable gaps between what is promised to funders in research proposals and what is realised in the fieldwork in China.



2. Report on contents

The mini-symposium was titled *Qualitative Social Scientific Research Methods in China: Challenges and Opportunities* and organized in collaboration with the Chinese Academy of Sciences (CAS). Bas van Vliet chaired the mini-symposium. Prof. Lu (CAS) presented about the science-policy interface in China, and in particular the role of the CAS within it. Dr. Ingrid Boas and Dr. Guizhen presented their research on digital media use in the context of natural disasters in China. Frank de Feijter shared his experience with conducting interviews with householders in Beijing and Mianyang. In the second half of

the workshop, we discussed doing qualitative research in China (and beyond) in a world café setting. At four tables, insights were exchanged between PhDs of CAS and the WUR PhDs regarding their experience doing expert interviews, site visits, consumer interviews, focus groups, and other qualitative methodologies.

- 9:00-9:15: introductions (Bas van Vliet)
- 9:15-10:30: three presentations:
 - by prof. Lu of CAS (on how science supports policy-making in the Chinese context)
 - by Frank de Feijter (on his research on urban retrofitting in China)
 - by Ingrid Boas & Guizhen (on their KNAW/CAS project on E-participation in risk governance in urban coastal China)
- 10:30-11:00: break
- 11:00-12:30: Group discussions at four tables, with the participants rotating
 - Qualitative interviews with governmental Policy makers/Business/Academic experts in China: do's and don'ts in sampling, recruitment, and questioning
 - Qualitative interviews with consumer/ User in China: do's and don'ts in sampling, recruitment, and questioning
 - Possibilities for organising group discussions, workshops, focus groups in China
 - Site visits, participant observation and informal communications
- 12:15-12:30: Plenary: collecting the outcomes (Bas van Vliet)

3. Learning outcomes & conclusions

Some recurring conclusions were that building trust was crucial, as well as having local or embedded contacts, being clear and concise in formulating questions, and maintaining relations on the longer term. The interactive format, with the participants moving from table to table, ensured that lots of exchange occurred.

4. Tips & tricks

- Having an interactive format for a workshop, where participants are divided in mixed groups and physically move around, is a great way to break the ice and learn from each other.
- While China definitively has unique written and unwritten rules for conducting qualitative research (related to local customs, hierarchies, academic culture and more), in fact the rule of common sense remain the most important: for example, keep interviews and surveys clear and simple, and develop relationships with persons in local governments, businesses and other organizations to help you with getting access.

Nanjing

WEDNESDAY MAY 16: NANJING FOREST UNIVERSITY

1. General objectives of the day

The main objective of this day was to have a nature-outdoor experience and Nanjing was the perfect location.



2. Report on contents

We began this day, with an introductory session and scientific talks. Two PhDs from NFU (Faculty of Economics and Management) presented their research about economic mechanisms for small farmers in China, and the changes in consumption patterns based on internet and electronic devices. After the presentations, we headed towards the Langya Mountain National Park, located in Chuzhou city, approximately 2 hours away from Nanjing. On our way to the Park, we had a glimpse of the large Yangtze river, crossing over one of the four bridges along Nanjing city.

3. Learning outcomes & conclusions

We spent the afternoon walking through the park, being amazed by the beautiful nature and by the traditional architectonic designs. Throughout this day, we were guided by ENP alumna Dr. Jia Li alongside by a park's tour guide. Despite the very humid and hot weather, our tour guides were very enthusiastic, translating and telling us as many details as possible about the sculptures and traditional architecture. We were also entertained by the "ancient anecdotes" of Chinese poets, that used to write when they were drunk. The Park preserves natural and cultural heritage, where plum trees and its

tropical vegetation together with the Langya Temple (Buddhist temple) and the Zuiwong (Old Drunkard) Pavilion, are the main scenic treasures of the mountain.

On our way to Langya Mountain National Park, we passed by rural areas, that according to our guides, “are less developed”. One of the members of our group asked “what do you mean with less developed”? The answer referred to the lack of tall buildings (more than 3 stories) in comparison with the “developed urban areas”.

4. Tips & tricks

National Parks in China are totally recommended to visit. Parks preserve natural and cultural heritage, providing a very peaceful environment in an urban context.



THURSDAY MAY 17: NANJING AGRICULTURAL UNIVERSITY

1. General objectives of the day

The focus of this day was to explore the different methodological approaches to the (urban) nexus using different schools of thought. The Environmental Policy Group has a policy/social science background to contextualise the nexus while the Nanjing Agricultural University (NAU) representatives have experience in framing the nexus from an economic and institutional modelling point of view to quantify the nexus. NAU post-docs participated in this full day event along with two professors who attended some of the sessions.

2. Report on contents (presentations)

The intention of the days was to have it as interactive as possible. Thus, three main formats of engagement were used: PowerPoint presentations, carousel sessions, and a serious game session. From ENP, Anke presented her work on how to include different cultural backgrounds in access to a healthy and sustainable food system in Almere and Alita presented his proposal on institutional arrangements of safe food supply in China. From NAU, Rao Fangping shared the challenges of land tenure system for farmers and food systems as it transitions from informal types to a more formalised and bureaucratic system while Lan Zhang shared the dilemmas related to subletting farm land to improve productivity and income. All of these presentations hinted at the role of trust of stakeholders in the emerging systems.



For the carousel sessions, four people lead the four different themes we explored (the group was split in two and the sessions were run in parallel). Pamela and Anke represented ENP in these sessions. Anke asked participants to draw the food system. Pamela led a stakeholder analysis session to identify key stakeholders in regards to food safety of vegetables in the Nanjing region. Drawing was seen as a useful way to help communicate different perspectives. The hosts from China also included drawing in their carousel sessions; we drew and discussed how we view the nexus and we drew and discussed food-system related challenges in our own countries.



Jillian lead a simulation session with Pamela assisting with observing and noting key changes during the session. The Chinese and ENP participants were split up into mixed mini-groups and had the roles of either one of the harvester clans or the conservation board who had the duty of preserving nature. The harvesters' goal was to harvest at least enough to support their clan and possibly to have some excess to save for the future. The harvesters and conservation board faced the challenges of competition, common pool resources, ecological change, uncertainty, and scarcity. In this game, they could decide where they would harvest (harvesters) or set up protected areas (conservation board), how they would respond individually to the actions of (other) harvesters, the changes to the natural resources, the recommendations of the conservation board, as well as to what extent they worked together.



3. Learning outcomes & conclusions

One of the main outcomes that came out of this day, was not the specific methodologies we apply, but rather having the opportunity to explore together our different perspectives of how to frame food system related problems. The carousel, in particular, provided a platform to talk about how we each view these concepts of food systems, the nexus, stakeholders, and food challenges and help us reveal some of our assumptions.

The game introduced the NAU post-docs and some of the ENP PhDs to a new methodology to looking at the nexus. It further, helped to illustrate that though the idea for food production systems to work together and with others systems, in practice ongoing collaboration and trust is difficult to achieve even among a small number of people who are working on sustainability issues in their daily life.

4. Tips & tricks

- There were a number of consultations with NAU before our workshop date there and our intention to make it interactive. Nonetheless, it was not clear to them that there were only be a couple of presentations and the rest would be done in different formats. The format of the day was quite new to the PhDs from Nanjing. Once we realised this, we together thought of a way to ease them into a new format by getting the ENP PhDs to go first so that they could have the chance to experience a carousel session and come up with something they could introduce. In the end, people responded positively to the interactive sessions and the NAU participants came up with great topics for us to consider together. In summary, when diverging from the standard workshop style of PowerPoint presentations or sharing methods that are not surveys, flexibility along with creating an environment where people feel safe to experiment with new formats are key.
- Visualisation activities, such as drawing, are helpful for igniting group conversation and can help enable people to participate and express themselves even if there are language barriers.
- When considering improvements on environmental change, nexus thinking can help us to think beyond the problem at hand. In a number of projects that we learned about on our trip, we were told about new plans that were only trying to innovate on one aspect, when there were opportunities to incorporate others (for example a new food facility could incorporate solar panels in their design to lower their reliance on external power facilities).
- Along with the workshop, dinner provided another opportunity to share each other. However, as there is only one menu provided and there is typically a lot of discussion among hosts about the best combinations of dishes, it's wise to know of potential drinks you would like to drink, so that you can order it while the ultimate dinner is being debated upon.



Shanghai

FRIDAY MAY 18: CHINA ACADEMY OF URBAN PLANNING AND DESIGN

1. General objectives of the day

- To learn about China's urban planning policies and policy discourses in past, present and future
- To understand about the planning process in China and the role of different political actors within it
- To know more about infrastructure and water planning in China
- To learn about some main challenges in Chinese spatial planning



2. Report on contents

On Thursday May 18th, we visited the China Academy of Urban Planning & Design (CAUPD). The China Academy of Urban Planning and Design is positioned directly under China's Ministry of Construction, the entity that oversees all urban development in the country, and is China's leading planning policy advisor. It is a national research and information centre that is involved in the field of urban planning and architectural design. The main CAUPD office is in Beijing, but we visited their local branch in Shanghai and received a warm welcome. The International Relations officer especially flew in from Beijing to welcome our group.

We kicked off with a short introduction on ENP, after which our colleague Frank gave an historical overview of urban planning in the Netherlands. He explained about the various stages of planning policies in the Netherlands over time, and particularly elaborated on the 'Room for the River' project in Nijmegen. This triggered many questions from the audience, who were impressed with Dutch water management and were very interested in its application to the Chinese context. Sayel continued with a short presentation of his research on transnational city networks, zooming in on the role non-governmental bodies could play in connecting different cities.

Next, Liu Shiguang from the CAUPD presented the work of their team on Sponge City. Sponge City is a pilot project conceived by the Chinese central government aimed at

alleviating urban waterlogging, reducing urban runoff pollution, saving water and improving the urban ecological environment. This project is related to the new 'ecological civilization' paradigm that was introduced by president Xi Jinping at last year's National Congress of the Communist Party, which promotes green infrastructure and ecological values in development.

After his presentation, we discussed differences in stages of urban planning between the Netherlands and China, as well as the obvious differences in political situation, scale and focus. There was a lively discussion with lots of interest from both sides to learn from each other's different perspectives. The afternoon was concluded by a site visit to a multi-functional area (mall / food court / business area / airport) that was developed by the CAUPD as their first project, where we had dinner together.



3. Learning outcomes & conclusions

The visit to the CAUPD was very interesting in illustrating particularly the similarities and differences between planning policy paradigms in China and the Netherlands. We could see that the Netherlands is in a different stage than China, but that this also offers many opportunities for China not to make the same mistakes that we made, taking our experiences along. As for the process of planning, it became very clear that the urban sprawl works out very differently in China, on account of the differences in political system and stakeholders included. This also offers different possibilities for the kind of ecological transition that we all face: in China it might be much easier for the government to make decisions in favour of ecological civilization than in Europe, as in the latter case, many different stakeholders need to agree before action can be undertaken. Moreover, the management level is also different in China: the central government decides the country-wide course in terms of planning, with cities receiving their budgets mostly from the central government rather than from the local citizens directly, which marks a difference in the planning process as well. Finally, we learned a

lot about water planning in China through the CAUPD's explanation of their work on Sponge City.

4. Tips & tricks

Definitely make sure to include a visit to a non-academic institution on a PhD trip: it really adds to hear another, more practical perspective!



MONDAY 21: SHANGHAI UNIVERSITY

1. General objectives of the day

During this day, the main objective from both parties, Shanghai University and Wageningen University, was to exchange knowledge, methodologies, and theoretical concepts on sustainable consumption research. Additionally, the objective was to understand two different cultures – China and Holland primarily – in their commitments towards sustainable development. In this context, students from both universities presented their research approaches towards sustainable practices of consumption.

2. Report on contents

A conference day was organized with the theme: Sustainable Consumption: Global Issues and Local Efforts. The day started with an introduction to Shanghai University by Prof. Dunfu Zhang. He told us that the school of Sociology and Political Science was recently established in the 2010. This research department integrates different academic and research disciplines as for example Sociology and Anthropology. Moreover, this department also integrates other institutions and organizations beyond the domains of the university, as for example: Research Center of China, Shanghai Research Center of Social Science Survey, Shanghai Research Center of Social Development, and more.

Following the introduction, 3 sessions with presentations by PhDs from Shanghai University's School of Social and Political Science and Wageningen UR were organized, in which the following presentations were given:

- Conceptualizing Cardenizational Framework to Reconfigure Energy Consumption Practices in Beijing: A Multilevel Perspective
- Energy efficient housing through improved interaction? About the role of householders and providers in urban housing estate retrofitting in the Netherlands and China
- Vulnerability is dynamic: Enhancing adaptive governance to climate change for Caribbean tourism through interactive modelling
- Climate change transparency in developing countries: Linking Measurement, Reporting and Verification (MRV) systems and enhanced climate actions through reflexive capacity
- Household energy consumption and sustainable development. Consumer habits in Shanghai
- The nexus between water, energy and food in cities: towards conceptualizing socio-material interconnections
- Healthy and sustainable food, inclusive access, practice theory, consumption practices

- Product sustainability and brand citizenship of fast moving consumer goods (FMCG) consumer attitude towards green products in Pakistan
- When social practices meet smart grids: Flexibility, grid management, and domestic consumption in The Netherlands
- Rethinking globalization and consumption: university students' perspectives towards Fongkongs versus western brands. A case of Gaborone and Shanghai
- Disentangling discourses and socio-ecological practices in Northern Patagonia, Chile: implications for national and regional policy-making
- Steady-state economy and obstacles on the way of its implementation
- A framework to understand the diversity in the relations within Transnational Municipal Networks

3. Learning outcomes & conclusions

One of the major conclusions of this day was that between different cultures – The Netherlands, Botswana, and China – sustainable consumption is also a matter of aspirational beliefs and social status premises. For example, in the case of Fongkongs (fake clothing and accessories) consumed in Botswana, these products reflect the need of specific clothing products that mean a step up in social class for consumers. Another example is food waste in practices of eating out in China. In this culture it is appreciated to leave a considerable quantity of leftovers on the table as a symbol of social status. In this context, the consumption rationalities of these cultures support those behaviors; however, sustainably speaking those rationalities do not go along well with food sustainability.



4. Tips & tricks

During this day we attended 13 presentations and held 13 discussions plus a general and concluding discussion. Although content-wise we were exposed to a large amount of knowledge and insights, the workload was high for one day. This situation reflected on the level of attention and retention of content. What I recommend is to limit, for further visits and visitors, the amount of presentations and discussions per day. Too much information and too many presentations do not necessarily mean a better outcome; it might be the case that less ambitious goals could provide more quality of discussions and knowledge transfer between participants.

Conclusion

Our PhD trip to China was fruitful on many fronts: theoretically, empirically, culturally and in terms of our network. In this final section, we will take you through our main conclusions accordingly, taking into account the objectives outlined in the introduction. We can conclude that we have successfully met our objectives, which we will elaborate on here.

First of all, throughout the PhD trip we expanded our theoretical understanding of the concept of the urban nexus. Before embarking upon our journey, this was merely a vague and abstract concept to most of us. Over the course of the trip, we learned more about the value of an urban nexus approach to urban issues through presentations from our own team and from the Chinese side. We saw how integrating water, energy and food problems by connecting them analytically can be useful for understanding urban complexity. The concept of urban nexus also turned out to be a good umbrella term for our PhD trip, building bridges between each of our research topics.

On the Chinese side, it was interesting to note that currently no Chinese word exists for the concept of nexus. Water, energy and food policy is typically determined in different 'silo's', with little interaction occurring between the domains; this was the case at the China Academy of Urban Planning and Design, for example. Still, especially at Renmin University, two Chinese scholars did make an effort to reflect on the idea. One of them did this by focusing mostly on the water-energy nexus, and the other one reinterpreted an old study on eco-tourism in light of nexus thinking. Both of them mentioned that this way of thinking was new for them and inspiring. In this sense, we made a contribution in being messengers of the nexus-thinking and hopefully theoretically contributing to their discussions.

Secondly, we also expanded our empirical understanding of the urban nexus by visiting Chinese megacities. The sheer scale and challenges surrounding water, energy and food provision, consumption and waste in such cities were overwhelming. How to feed, heat and cool such enormous amounts of people in a very condensed space was a question which became very immediate to us during our stay in Beijing and Shanghai especially. We have seen how both innovative solutions and policies and old and known problems exist in these mega cities. These experiences enriched our understanding of problems surrounding urbanisation and the urgency of the environmental pressures resulting from these massive demands, inspiring us in our tasks as researchers on topics related to the urban nexus.

A great example here was our visit to the Xinfadi wholesale market, which was a very clear illustration of the incredible scale of consumption taking place in a big city like Beijing: a terrain of 4,7 km² with 7000 employees and a turnover of 18 billion RMB (2.3 billion EUR) and 10.000 trucks on a daily basis. The amount of food present was mind blowing, and upon realizing that for all of this food, water had been needed for

production and energy for transportation, the three elements of water/energy/food seemed once more like an intuitive and useful analytical combination.

Thirdly, our trip was successful in terms of the network we strengthened and established. One of the reasons for going on this PhD trip to China had been to build upon the existing ENP alumni network in China. We have profited a lot from this network, gaining access to universities through these contacts. Our trip was useful for reconnecting with these alumni, as well as presenting a new generation of researchers to them. For ENP as a group, our presence as the PhD delegation was valuable to show our continuing collective interest as a group in working with Chinese institutions under a new chair group holder (prof. Simon Bush). We will most likely welcome one visiting scholar from Renmin University and one PhD candidate from Renmin University at ENP in the near future. For us as PhDs it was also useful, as some of us managed to establish some preliminary contacts to build on in the future for further research opportunities.

Finally, we have learned a lot about China in general through this trip. When it comes to academia in China, we have observed that it is a challenge to be critical, as scientists are supposed to be, in light of the political climate. This made us reflect on the status of science in China and its future, and on how different the science-policy interface is in China. Similarly, politics are present in science in the sense that methodology in social science tends to be exclusively quantitative: qualitative interviews are unheard of. This renders the position of the social scientist in China somewhat complicated, as inquiring into individual (dissenting) experiences or opinions is not generally appreciated. We have also learned that the role of (especially international) NGOs has become increasingly difficult, with growing governmental control and regulations. Finally, we realize that by visiting three (albeit very different) Chinese megacities we have only experienced a small and wealthy part of China; the environmental networks and flows which sustain these cities stretch far beyond the urban centres.

We would like to once more thank all the sponsors that have made this trip possible. Thanks to you we have had an unforgettable and valuable trip, in which we have learned as academics and bonded as colleagues. 謝謝！

Annex 1: Participants

Participant	Topic	Chair group	Graduate School	Nationality
Anke Brons	Inclusive strategies to Feeding the City	ENP	WASS	Dutch
Frank de Feijter	Energy retrofitting practices	ENP	WIMEK	Dutch
Jillian Student	Adaptive governance of vulnerabilities in tourism	ENP/ESA	WIMEK	Canadian /Dutch
Moises Covarrubias Perez	Urban nexus governance	ENP	WIMEK	Mexican
Pamela Bachmann Vargas	Discourses, tourism practices, marine governance	ENP	WASS	Chilean
Robin Smale	Smart grids and energy practices	ENP	WIMEK	Dutch
Nila Kamil	Climate transparency governance	ENP	WIMEK	Indonesian
Sayel Cortes	Joined-up governance for low-carbon cities	ENP	WASS	Mexican
A Lita	Sustainable food provisioning strategies	ENP	WASS	Chinese

Annex 2: Schedule

Date (May)	Time	City	Location/Organization	Activity
Wednesday 9	Arrival in Beijing			
Thursday 10	Morning Afternoon	Beijing	World Resources Institute	Urban Nexus Seminar/Workshop I 'The implementation'
Friday 11	Morning Afternoon	Beijing	Renmin University	Urban Nexus Seminar/Workshop II 'The theory'
Saturday 12	Afternoon Evening	Beijing	WUR-China office	WUR Alumni day
Monday 14	Morning Afternoon	Beijing	Tsinghua University	Climate Seminar
Tuesday 15	Morning	Beijing	Chinese Academy of Science	Lectures and workshops
	Afternoon	Beijing-Nanjing		Travel from Beijing to Nanjing (3-4 hours)
Wednesday 16	Morning Afternoon	Nanjing	Nanjing Forest University	Fieldtrip / Outdoor activity
Thursday 17	Morning Afternoon	Nanjing	Nanjing Agricultural University	Urban Nexus Seminar/Workshop III 'The methods'
Friday 18	Morning Afternoon	Nanjing-Shanghai		Travel from Nanjing - Shanghai (1-2 hours)
Monday 21	Morning Afternoon	Shanghai	Shanghai University	Lectures and workshops
Tuesday 22	Departure to Amsterdam			